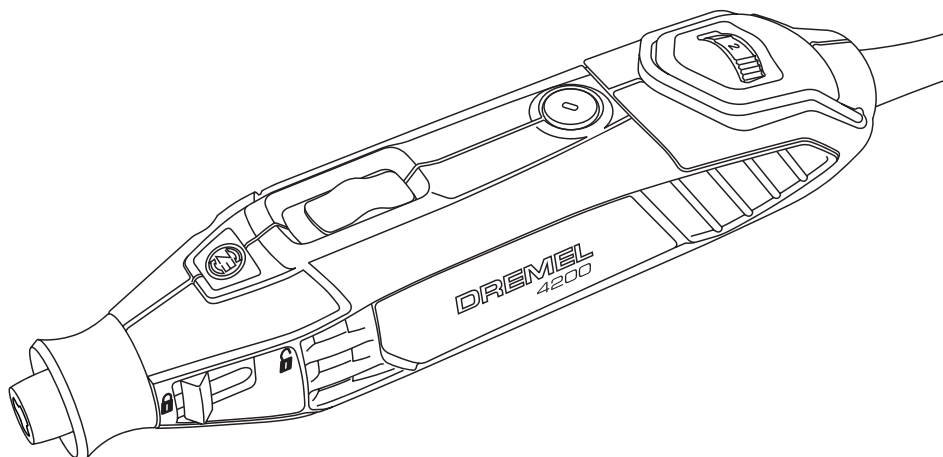


# DREMEL® 4200

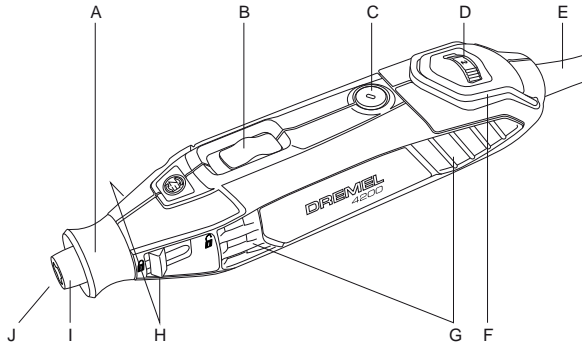


<b>GB</b>	Original instructions	14	<b>NO</b>	Oversettelse av originalinstruksjonene	49
<b>DE</b>	Übersetzung der Originalbedienungsanleitung	18	<b>FI</b>	Käännös alkuperäisistä ohjeista	53
<b>FR</b>	Traduction de la notice originale	23	<b>ET</b>	Algsete juhiste tõlge	58
<b>IT</b>	Traduzione delle istruzioni originali	29	<b>LT</b>	Originali • instrukcij • vertimas	63
<b>NL</b>	Vertaling van de originele gebruiksaanwijzing	34	<b>LV</b>	Ori•in•o•s lietošanas pam•c•bas tulkojums	68
<b>DA</b>	Oversættelse af betjeningsvejledning	39	<b>AR</b>	ترجمة التعليمات الأصلية	١٢
<b>SV</b>	Översättning av originalinstruktioner	44			

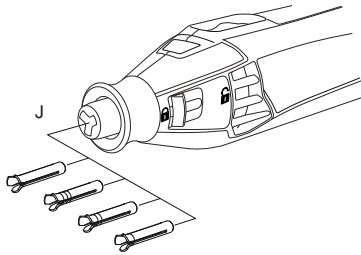
WEU

**Dremel**  
**The Netherlands**

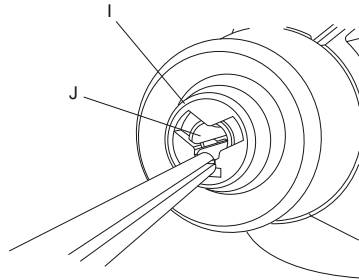
1



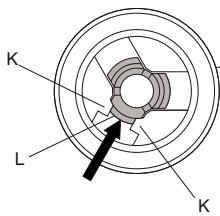
2



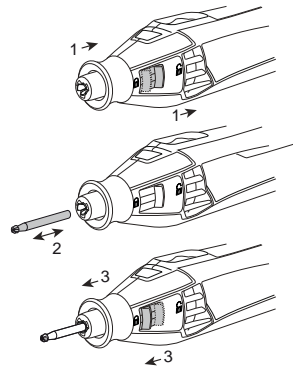
3



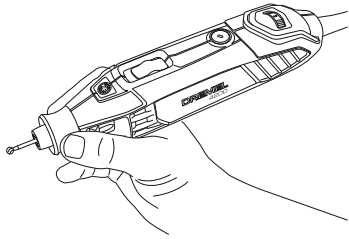
4



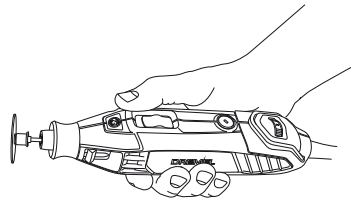
5



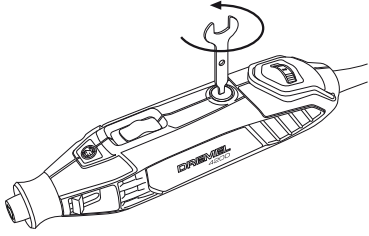
6



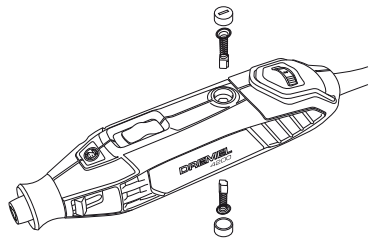
7

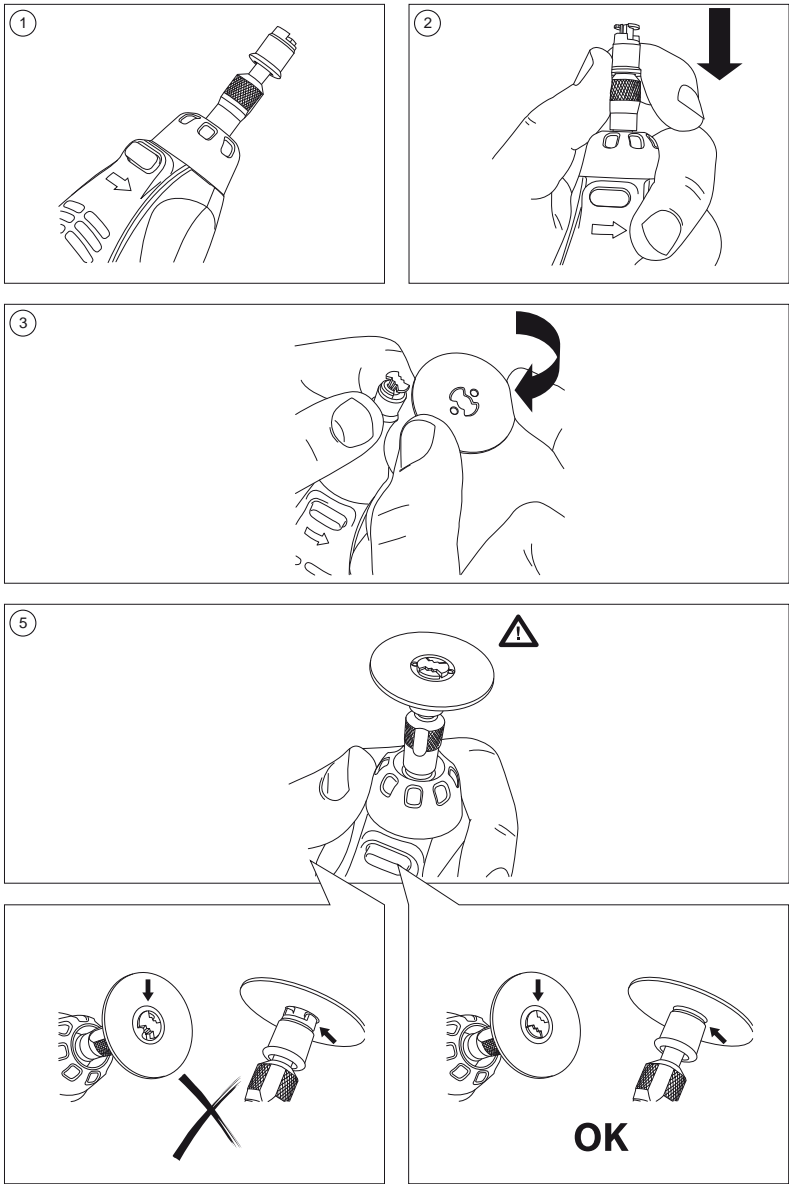


8



9





EZ SpeedClic™

Figure 10: EZ SpeedClic™

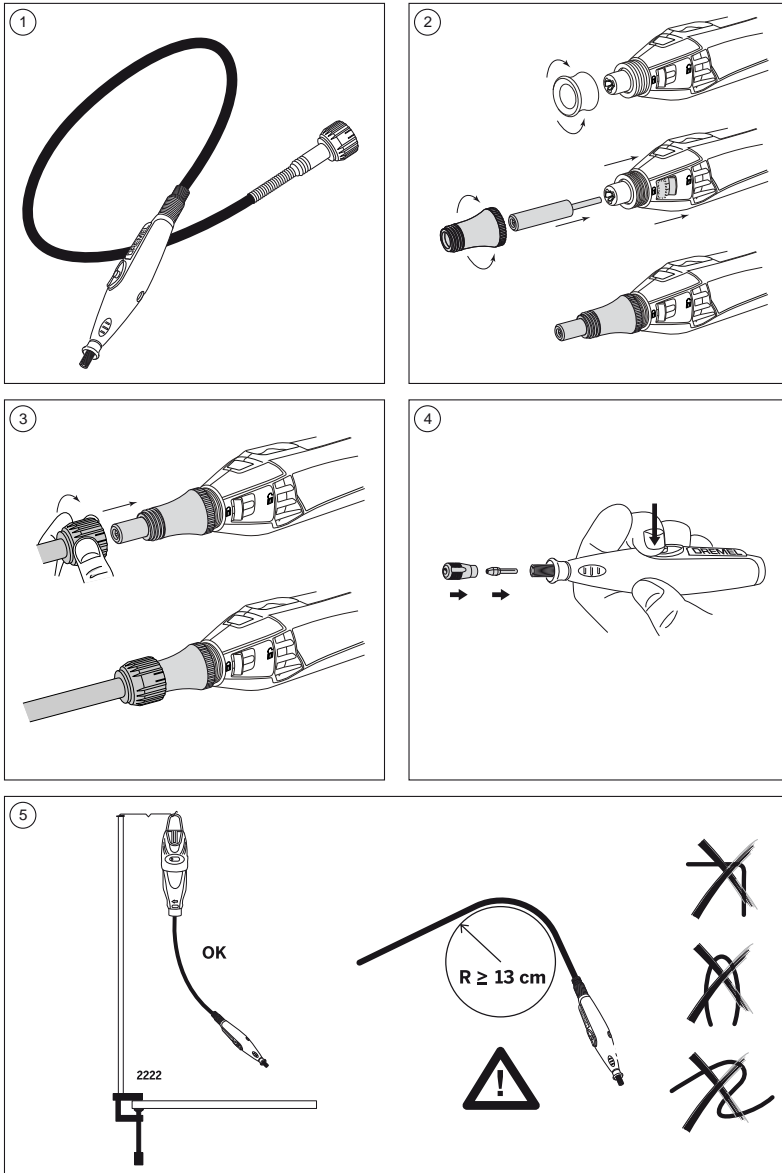


Figure 11: Attachment 225

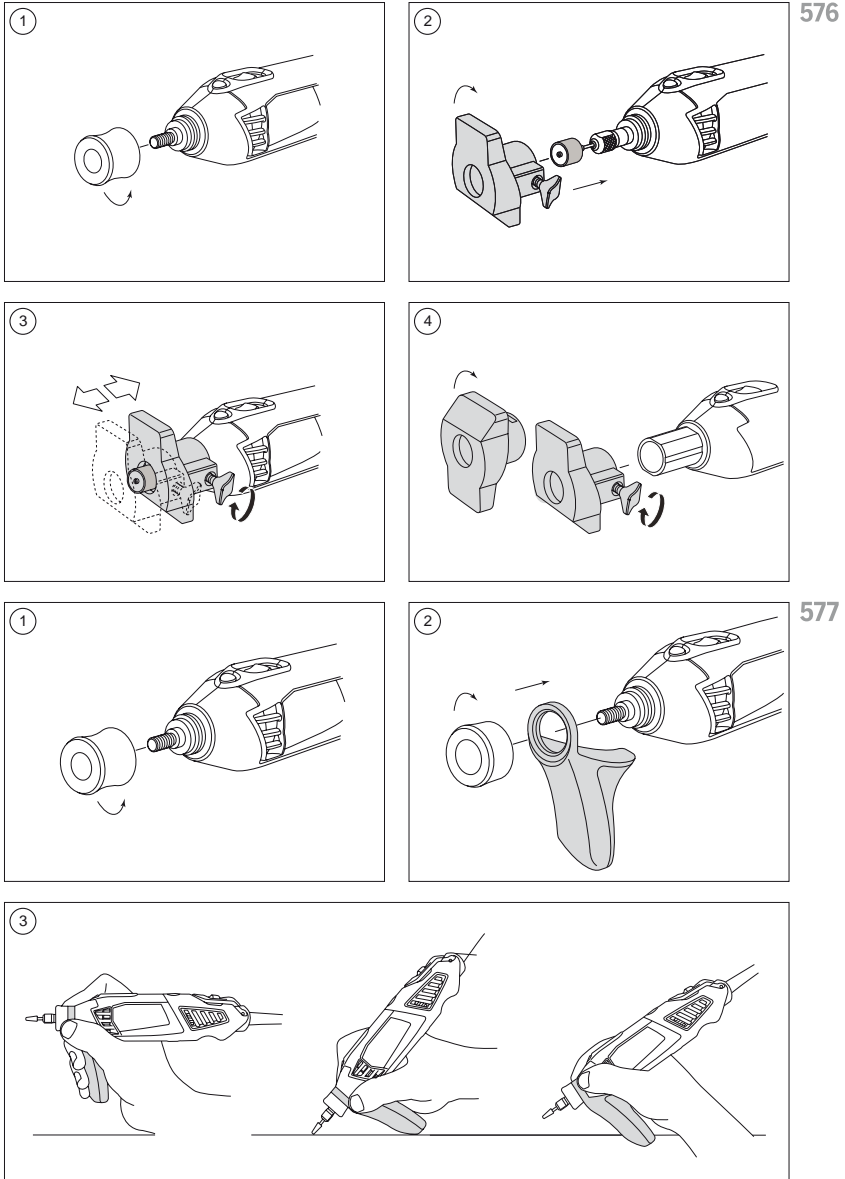


Figure 12: Attachment 576 / 577

565  
566

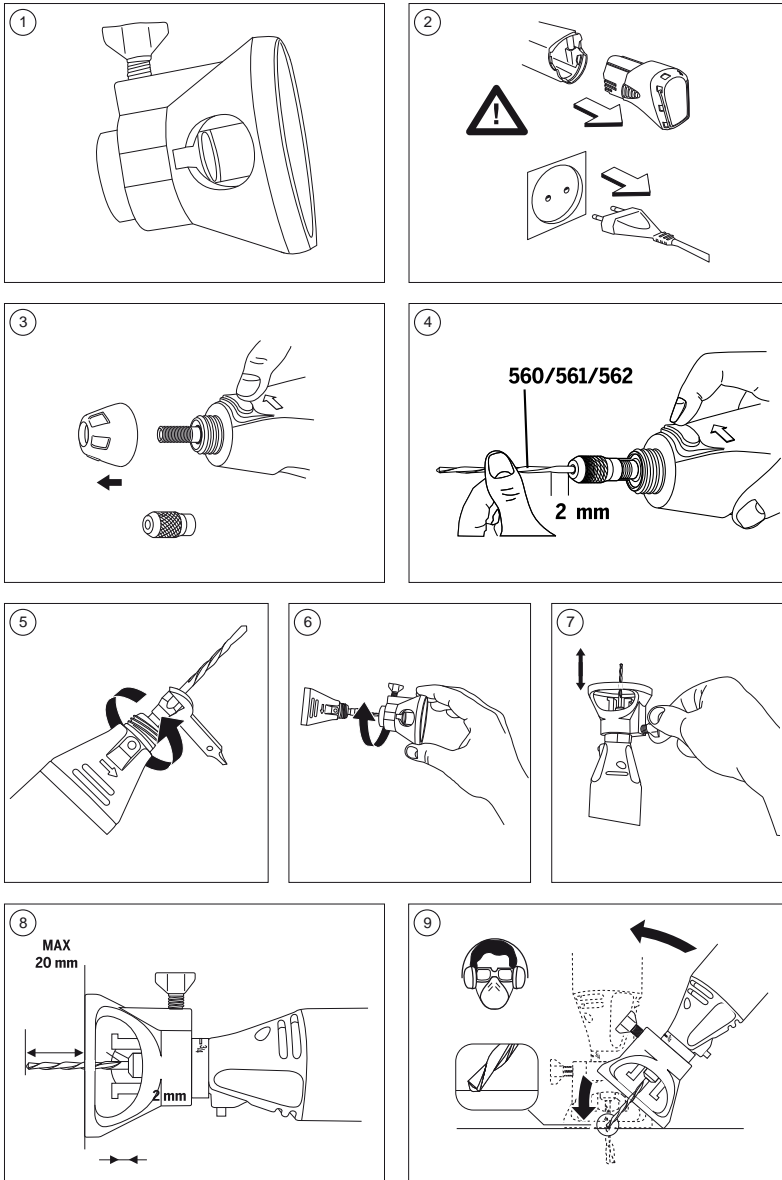


Figure 13: Attachment 565 / 566

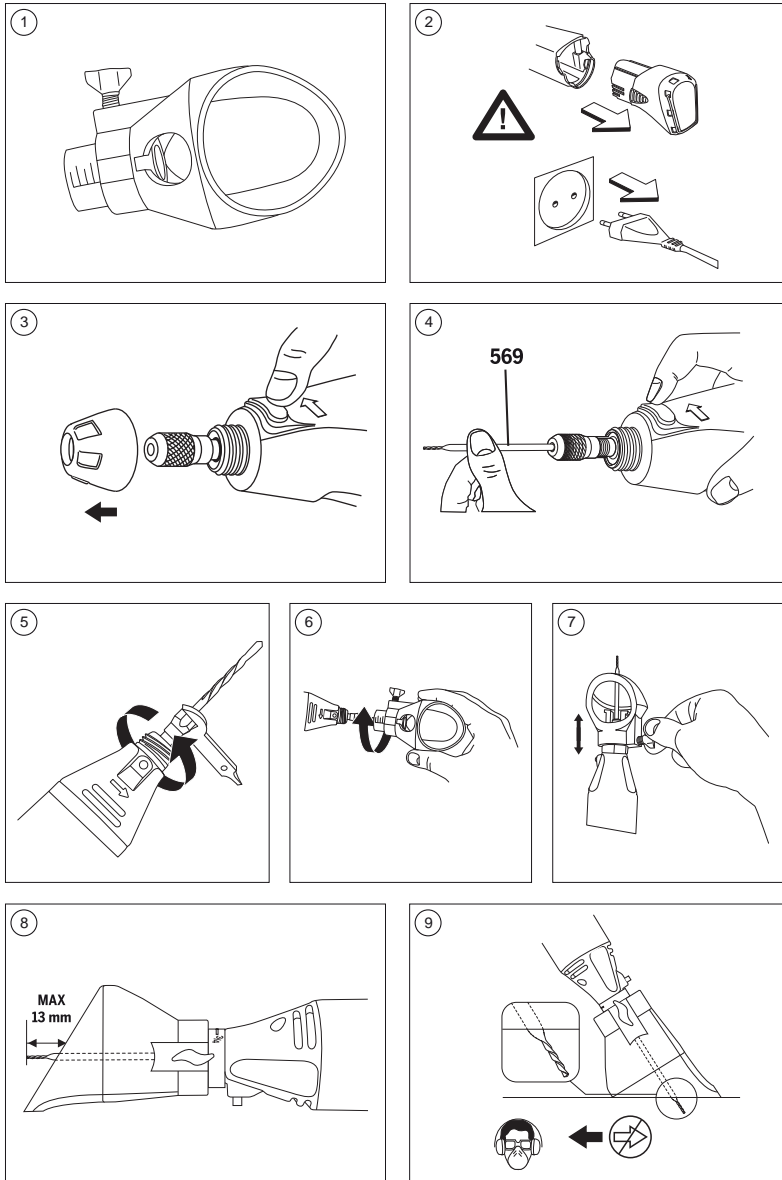


Figure 14: Attachment 568



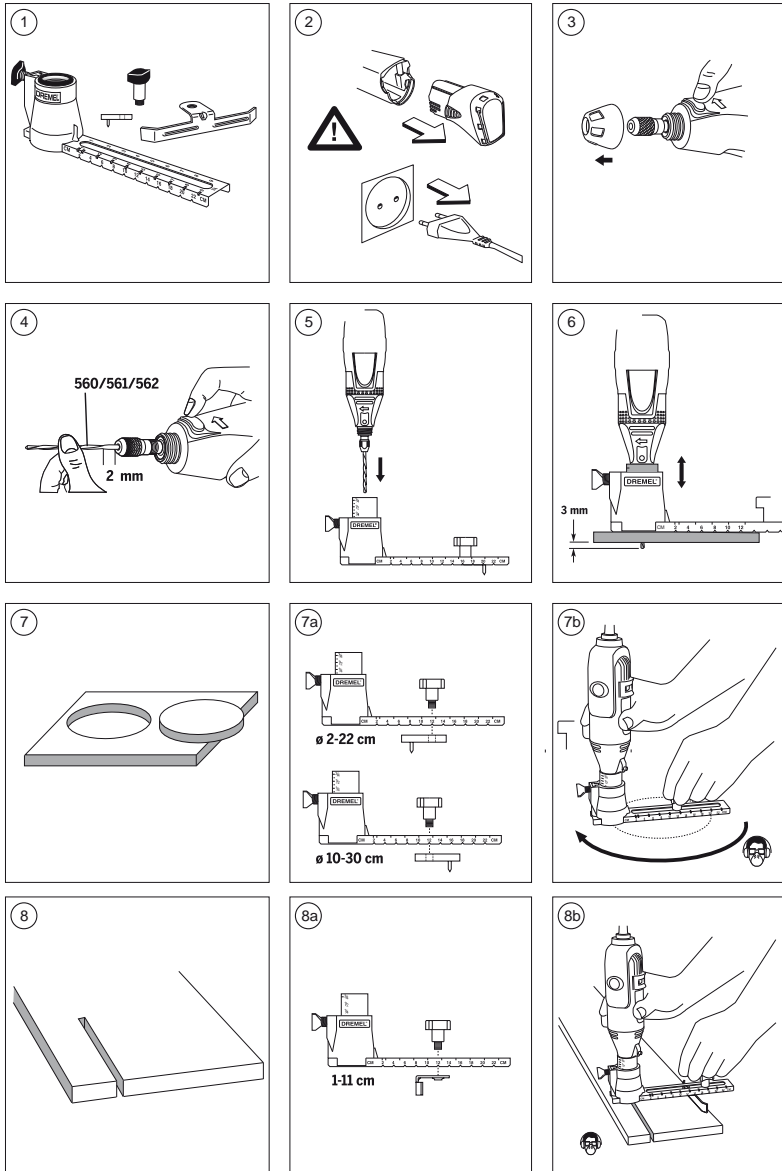


Figure 15: Attachment 678

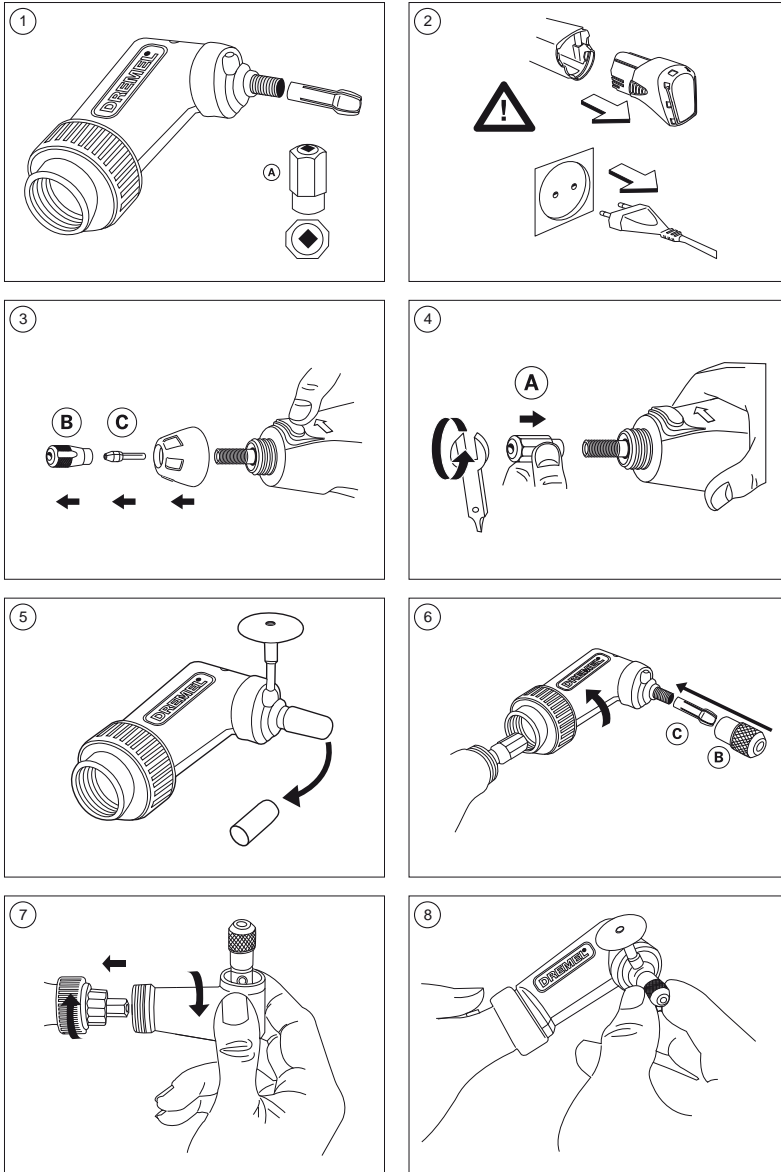
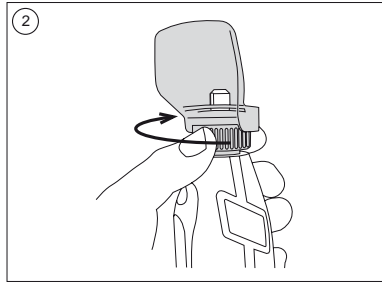
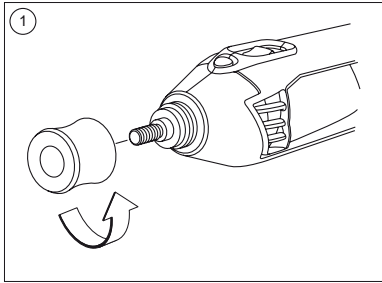


Figure 16: Attachment 575



550

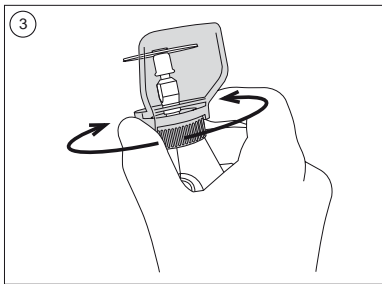


Figure 17: Attachment 550

## INTRODUCTION

Thank you for purchasing the Dremel multitool that gives you an ultimate performance when working on detailed and intricate tasks. This product was designed for the many Dremel users who passionately use their multitool daily and with their wishes and specifications in mind. You will appreciate the many applications that this multitool can easily handle.

## GENERAL DESCRIPTION

The Dremel multitool is a high quality precision tool that allows you to perform a large variety of tasks. This multitool is intended to function as a grinder, carver, engraver, sander, wire brush, cleaner/polisher or cut-off tool. Refer to our online catalogue for the wide range of original Dremel accessories and attachments you can use.

The Dremel 4200 is the FIRST multitool that easily changes accessories without using a wrench. It uses a fully integrated lever mechanism that clamps the accessory. In addition, this multitool is equipped with a high performance motor with electronic feedback that allows the tool to maintain its speed under load conditions. It also provides a "soft start", which will reduce the stresses in case of a high torque start.

## CONSTRUCTION

Refer to figure 1.

- Housing cap
- On/Off switch
- Brush cover
- Variable speed dial
- Power cord
- Hanger
- Ventilation openings
- EZ Change levers
- EZ Change chuck
- Collet

## USED SYMBOLS



READ THESE INSTRUCTIONS



WARNING



USE HEARING PROTECTION



USE EYE PROTECTION



USE A DUST MASK



CLASS II CONSTRUCTED



## GENERAL POWER TOOL SAFETY WARNINGS

### **WARNING** GENERAL

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

**b. 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.

### **WARNING** WORK AREA SAFETY

- Keep work area clean and well lit.** Cluttered and 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.

### **WARNING** ELECTRICAL SAFETY

- Power tool plug 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 tangled 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 (ELCB) protected supply.** Use of an earth leakage circuit breaker reduces the risk of electric shock.

### **WARNING** 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 jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery 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 these devices can reduce dust related hazards.

### **WARNING** 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.

- d. 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.*
- 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 caused by poorly maintained power tools.*
- 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 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.*

#### **WARNING** SERVICE

- a. 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.*



## MULTITOOL SAFETY WARNINGS

#### **WARNING** SAFETY WARNINGS COMMON FOR GRINDING, SANDING, WIRE BRUSHING, POLISHING, CARVING OR ABRASIVE CUTTING-OFF OPERATIONS

- a. This power tool is intended to function as a grinder, sander, wire brush, polisher, carving or cut-off tool. 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.*
- b. 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.*
- c. The rated speed of the grinding accessories must be at least equal to the maximum speed marked on the power tool. *Grinding accessories running faster than their rated speed can break and fly apart.*
- d. 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 controlled.*
- e. The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool. *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.*
- f. Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck. *If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.*
- g. Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excess wear, wire brush for loose or cracked wires. If 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.*
- h. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop 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*

*filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.*

- i. Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. *Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.*
- j. Hold 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.*
- k. Always hold the tool firmly in your hand(s) during the start-up. *The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.*
- l. Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in the other hand while in use. *Clamping a small workpiece allows you to use your hand(s) to control the tool. Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the bit to bind or jump toward you.*
- m. 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.*
- n. 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.*
- o. After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment devices are securely tightened. *Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.*
- p. 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.*
- q. 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.*
- r. Do not operate the power tool near flammable materials. *Sparks could ignite these materials.*
- s. Do not use accessories that require liquid coolants. *Using water or other liquid coolants may result in electrocution or shock.*
- t. Use completely unrolled and safe extension cords with a capacity of 5 Amps at least.

#### **WARNING** KICKBACK AND RELATED WARNINGS

Kickback is a sudden reaction to a pinched or snagged rotating wheel, sanding band, 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. 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 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. *The operator can control kickback forces, if proper precautions are taken.*
- b. 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.*
- c. Do not attach a toothed saw blade. *Such blades create frequent kickback and loss of control.*
- d. Always feed the bit into the material in the same direction as the cutting edge is exiting from the material (which is the same direction as the chips are thrown). *Feeding the tool in the wrong*

direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this feed.

**e. When using rotary files, cut-off wheels, high-speed cutters or tungsten carbide cutters, always have the work securely clamped.** These wheels will grab if they become slightly canted in the groove, and can kickback. When a cut-off wheel grabs, the wheel itself usually breaks. When a rotary file, high-speed cutter or tungsten carbide cutter grabs, it may jump from the groove and you could lose control of the tool.

#### **⚠ WARNING SAFETY WARNINGS SPECIFIC FOR GRINDING AND ABRASIVE CUTTING-OFF OPERATIONS**

**a. Use only wheel types that are recommended for your power tool and only for recommended applications. For example: do not grind with the side of a cut-off wheel.** Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

**b. For threaded abrasive cones and plugs use only undamaged wheel mandrels with an unrelieved shoulder flange that are of correct size and length.** Proper mandrels will reduce the possibility of breakage.

**c. Do not "jam" a cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut.** Overstressing the wheel increases the loading and susceptibility to twisting or snagging of the wheel in the cut and the possibility of kickback or wheel breakage.

**d. Do not position your hand in line with and behind the rotating wheel.** When the wheel, at the point of operation, is moving away from your hand, the possible kickback may propel the spinning wheel and the power tool directly at you.

**e. When wheel is pinched, snagged or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur.** Investigate and take corrective action to eliminate the cause of wheel pinching or snagging.

**f. Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut.** The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

**g. Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback.** Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

**h. Use extra caution when making a "pocket cut" into existing walls or other blind areas.** The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

#### **⚠ WARNING SAFETY WARNINGS SPECIFIC FOR WIRE BRUSHING OPERATIONS**

**a. Be aware that wire bristles are thrown 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. Allow brushes to run at operating speed for at least one minute before using them. During this time no one is to stand in front or in line with the brush.** Loose bristles or wires will be discharged during the run-in time.

**c. Direct the discharge of the spinning wire brush away from you.** Small particles and tiny wire fragments may be discharged at high velocity during the use of these brushes and may become imbedded in your skin.

## PREPARATION



Always unplug the tool from the power source before you make any adjustments, change accessories, service, clean, etc. This reduces the risk of starting the tool accidentally.

## FIRST USE

The carbon brushes in your tool have been engineered for many hours of dependable service. To prepare the brushes for use, run the tool at full speed for 5 minutes under no load. This will properly "seat" the brushes, and extend the life of the tool.

## CHANGING COLLETS

Four different size collets are available for your multitool, to accommodate different shank sizes. Always use the collet which matches the shank size of the accessory you plan to use. Never force a larger diameter shank into a collet. Collet sizes can be identified by the rings on the back end of the collet. Refer to figure 2.

- 3.2mm / 1/8" Collet with no rings
- 2.4mm / 3/32" Collet with three rings (not included)
- 1.6mm / 1/16" Collet with two rings (not included)
- 0.8mm / 1/32" Collet with one ring (not included)



Use 4200 specific collets only. You can order the collets through the Dremel Service Center or go to [www.dremel.com](http://www.dremel.com).

1. Remove a collet (J) from the EZ Change™ chuck (I). Refer to figure 3 and 4.
  - a. Use needle nose pliers to lightly depress the finger (L) of the collet until it is clear of the detent feature (K).
  - b. Pull and hold both EZ Change™ levers to the back (unlock).
  - c. Pull the collet free from the chuck.
  - d. Release the EZ Change™ levers.
2. Install a new collet by inserting the narrow end of the new collet completely into the EZ Change™ chuck.



The fingers (L) of the collet must be aligned with the detents (K) of the EZ Change™ chuck to be fully inserted.

## CHANGING ACCESSORIES

Your Dremel 4200 is equipped with the EZ Change™ mechanism. It allows you to quickly and easily change accessories without the use of a wrench.



Use only Dremel tested, high performance accessories! You can order accessories through the Dremel Service Center or go to [www.dremel.com](http://www.dremel.com).



Use the EZ SpeedClic to easily install and remove EZ SpeedClic accessories. Refer to figure 10.



Do not operate the EZ Change™ levers while the multitool is running as the bit may be ejected.

1. Remove an accessory. Refer to figure 5.
  - a. Pull and hold both EZ Change™ levers to the back (1) as far as they will go.
  - b. Remove the accessory (2).
2. Install an accessory. Refer to figure 5.
  - a. Pull and hold both EZ Change™ levers to the back (1) as far as they will go.
  - b. Insert the accessory into the collet as far as possible (2) to minimize runout and unbalance.
  - c. Release the EZ Change™ levers (3).
  - d. Press the EZ Change™ levers to the front (lock) to fully secure the bit.



Make sure the accessory is properly secured. Loose accessories can unexpectedly shift or eject, causing loss of control. Always use the collet which matches the shank size of the accessory you plan to use.



If slipping of the accessory occurs, while in use, the tool needs service.

- e. Position yourself and bystanders away from the plane of the rotating accessory and run the multitool at maximum no load speed for one minute. Damaged accessories should break apart during this test time.

- i** You can tell by the sound and feel if your accessory is running in balance. To true up or balance an accessory, slightly pull back the EZ Change™ levers and give the accessory a 1/4 turn. Release the levers and run the tool. Continue adjusting like this until best balance is achieved.

## USING ATTACHMENTS

Your Dremel 4200 can be equipped with different attachments that expand the functionality of your tool.

- i** Not all attachments listed below are included in your kit. Use only Dremel tested, high performance attachments! You can order attachments through the Dremel Service Center or go to [www.dremel.com](http://www.dremel.com) for attachment and accessory compatibility.

1. Use the Flexible Shaft (225) for precise, detailed work or hard to reach places. Refer to figure 11.
- i** For optimum performance allow your new Flexshaft to run at high speed on your multitool in a vertical position for 2 minutes before use.
2. Use the Dremel Shaping Platform (576) to sand and grind at perfect 90 and 45 degree angles. Refer to figure 12.
3. Use the Dremel Detailer's Grip (577) to have even better control of your Multitool. Refer to figure 12.
4. Use the Multipurpose Cutting Kit (565/566) for controlled cutting in a variety of materials. Refer to figure 13.
5. Use the Wall & Floor Grout Removal Kit (568) for removing grout between wall and floor tiles. Refer to figure 14.
6. Use the Line & Circle Cutter (678) to make perfect holes and straight cuts. Refer to figure 15.
7. Use the Right Angle Attachment (575) to use accessories in right angle for hard to reach places. Refer to figure 16.
8. Use the Comfort Guard Attachment to protect you from dust and sparks. Refer to figure 17.

## OPERATION

- i** Practice on scrap material first to see how the tool performs.
- i** Your multitool performs best by allowing the tool, along with the correct Dremel accessory, attachment and speed, to do the work for you. Lower the spinning accessory gently to the work surface and allow it to touch the point at which you want to begin. Concentrate on guiding the tool over the work using very little pressure. Increasing pressure on the tool is not the answer when it is not performing properly. Try a different accessory or speed setting to achieve the desired result.

- i** Usually it is better to make a series of passes with the tool rather than to do the entire job with one pass. A gentle touch gives the best control and reduces the chance of error.

## HOLDING THE TOOL

The design of the tool is symmetrical and contains plenty of soft grip. The tool can be held comfortably in many positions.

- !** Always hold the tool away from your face. Accessories can damage during operation and can fly apart as they come up to speed.
- !** When you hold the tool, do not cover the ventilation openings with your hand. Blocking the ventilation openings can cause the motor to overheat.
1. Get the "feel" of the tool before using it by holding it in your hand and feeling its weight and balance.
  2. Grip the tool like a pencil between your thumb and forefinger for the best control in close work. Refer to figure 6.
  3. Use the "golf" grip for heavier operations such as grinding or cutting. Refer to figure 7.

## POWERING THE TOOL

The tool is turned "ON" and "OFF" by the On/Off switch on the top side of the motor housing.

1. Insert the power plug into the socket.
2. Turn the tool "ON" by sliding the On/Off switch forward.
3. Turn the tool "OFF" by sliding the On/Off switch backward.

- !** **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.

## SETTING THE RIGHT SPEED

Your tool is equipped with a variable speed dial. You can adjust the speed during operation by pre-setting the dial on or between any one of the settings.

Switch Setting	Speed Range (/min)	Qualification
5	5,000	Low speed
10	10,000	
15	15,000	
20	20,000	High speed
25	25,000	
30	30,000	
33	33,000	

- !** Refer to the Technical Specifications of the accessory (on-line or on package) for the Maximum Speed. Do not use high speed when using wire brushes. At high speed, wires can discharge from the holder.

1. Use a low speed (15,000 /min or less) when:
  - a. Polishing, buffing and cleaning with a wire brush.
  - b. Polishing with felt polishing accessories.
  - c. Working with materials that can be damaged by high-speed generated heat. Some materials burn or melt at low temperatures.
2. Use higher speeds for hardwoods, metals and glass and for drilling, carving, cutting, routing and shaping.

- i** If a high speed steel cutter starts to vibrate, it usually indicates that it is running too slow.

3. Aluminium, copper alloys, lead alloys, zinc alloys and tin may be cut at various speeds, depending on the type of cutting.

- i** Use a paraffin or other suitable lubricant (not water) on the cutter to prevent the material from adhering to the cutter teeth.

## MAINTENANCE AND REPAIR

- !** Always unplug the tool from the power source before you make any adjustments, change accessories, service, clean, etc. This reduces the risk of starting the tool accidentally.

- !** Have your power tool serviced by a qualified repair person who uses only identical replacement parts. We recommend that all tool service be performed by a Dremel Service Centre. This will ensure the safety of the tool. Maintenance performed by unauthorized personnel can result in incorrect connection of internal wiring and components which can cause serious hazard.

- i** You can only inspect and replace the carbon brushes. There are no other serviceable parts inside the tool.

## CLEANING

1. Clean ventilation openings, switch and levers of the tool with compressed dry air.
- !** Do not clean the tool by inserting pointed objects through an opening.
- !** Wear safety goggles to protect your eyes.
2. Clean the surface of the tool with a damp cloth.



Do not clean the tool with cleaning agents and solvents, such as gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia. They can cause damage to the plastic parts.

### MAINTAINING THE CARBON BRUSHES

To maintain peak efficiency of the motor, inspect the brushes for wear every 40-50 hours of use. Also inspect the brushes when the tool runs erratically, loses power, or makes unusual noises.



Using the tool with worn brushes will permanently damage the motor. Use only original Dremel replacement brushes.

1. Unplug the tool and place it on a clean surface.
2. Remove the two brush caps with the tool wrench as a screwdriver. Refer to figure 8.
3. Remove the two brushes from the tool by pulling the springs that are attached. Refer to figure 9.
4. Inspect both brushes. If a brush is less than 3mm long and/or the surface of the brush is rough or pitted, replace the carbon brush by a new one.
  - a. Remove the spring from the brush.
  - b. Throw away the old brush and place the spring on a new brush.



If one brush is worn, you should replace both brushes for better performance of your tool.

5. Place the carbon brushes (with spring) back into the tool. There is only one way the brush will fit back into the tool.
6. Replace the brush caps by turning the caps clockwise. To tighten, use the wrench, but do not over tighten!
7. Refer to First use to start using the tool again.

## SERVICE AND WARRANTY

NO USER SERVICEABLE PARTS INSIDE. This DREMEL product is guaranteed in accordance with statutory/country-specific regulations. Damage due to normal wear and tear, overload, improper handling or lack of reasonable maintenance and care are excluded from the warranty. In case of a complaint, send the undismantled tool or charger and proof of purchase to your dealer.

### CONTACT DREMEL

For more information on the Dremel product range, support and hotline, go to [www.dremel.com](http://www.dremel.com).

Dremel Europe, P.O. Box 3267, 4800 DG Breda, The Netherlands

## ENVIRONMENT

### DISPOSAL


The machine, accessories and packaging should be sorted for environmental-friendly recycling.

### ONLY FOR EC COUNTRIES



Do not dispose of power tools with household waste! According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national law, power tools that are no longer usable must be collected separately and disposed of in an environmentally-correct manner.

## GENERAL SPECIFICATIONS

Voltage Rating	230-240 V, 50-60 Hz
Related Power	175 W
Rated Speed (n)	33,000 /min
Collet Capacity	0.8 mm, 1.6 mm, 2.4 mm, 3.2 mm
 Class II construction	Double insulated construction tools

## ÜBERSETZUNG DER ORIGINALBEDIENUNGSANLEITUNG

### EINFÜHRUNG

Wir freuen uns, dass Sie sich für das Multifunktionswerkzeug von Dremel entschieden haben – denn dieses Gerät bietet eine ultimative Leistung für besonders feine und detaillierte Arbeiten. Bei der Entwicklung wurden die Wünsche und Anforderungen der zahlreichen Dremel-Nutzer berücksichtigt, die ihr Multifunktionswerkzeug täglich mit großer Leidenschaft verwenden. Sie werden begeistert sein, wie viele Anwendungen das Gerät problemlos meistert!

### ALLGEMEINE BESCHREIBUNG

Das Multifunktionswerkzeug von Dremel ist ein hochpräzises Werkzeug zur Durchführung von zahlreichen verschiedenen Anwendungen. Es kann als Schleifer, Fräser, Gravierer, Sandpapierschleifer, Drahtbürste, Reiniger/Polierer und Trennschleifmaschine verwendet werden. Eine Übersicht über die vielen zugehörigen Original-Zubehörteile und -Vorsatzgeräte von Dremel finden Sie in unserem Online-Katalog.

Der Dremel 4200 ist das erste Multifunktionswerkzeug, bei dem das Zubehör ganz einfach ohne Spannzangenschlüssel aufgezogen werden kann. Möglich macht dies ein integrierter Hebelmechanismus, mit dem das Zubehör fixiert wird. Zudem ist das Gerät mit einem Hochleistungsmotor mit elektronischer Drehzahlregelung ausgestattet, das die Drehzahl bei erhöhter Belastung konstant hält. Darüber hinaus bietet es einen „sanften“ Anlauf, der die Belastung bei einem Anlauf mit großem Drehmoment verringert.

### AUFBAU

- Siehe Abbildung 1.
- a. Gehäusekappe
  - b. Ein-/Aus-Schalter
  - c. Bürstenabdeckung
  - d. Drehzahlwahlschalter
  - e. Netzkabel
  - f. Aufhängevorrichtung
  - g. Lüftungsschlitze
  - h. EZ Change-Hebel
  - i. EZ Change-Futter
  - j. Spannzange

### VERWENDETE SYMBOLE



LESEN SIE DIESE ANWEISUNGEN



WARNUNG



TRAGEN SIE GEHÖRSCHUTZ



TRAGEN SIE AUGENSCHUTZ



TRAGEN SIE EINE STAUBMASKE



KLASSE-II-AUSFÜHRUNG