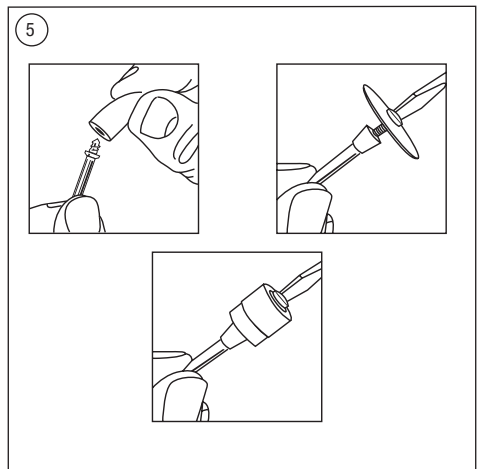
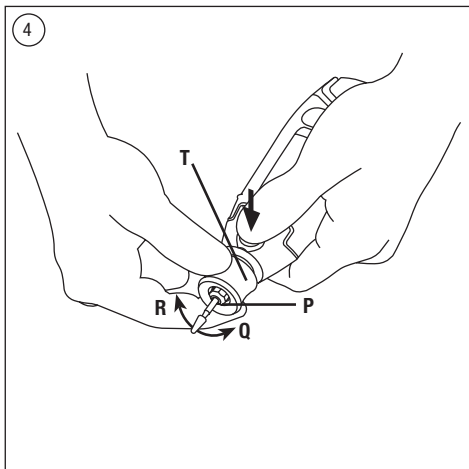
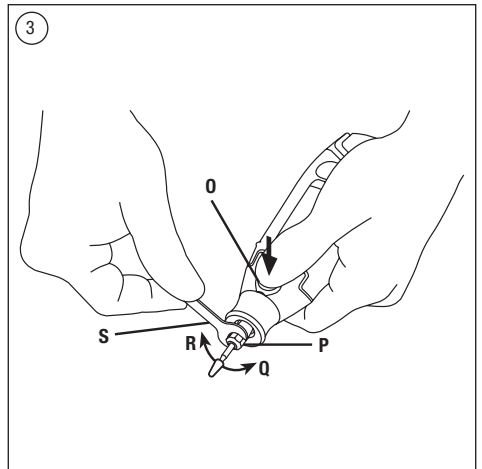
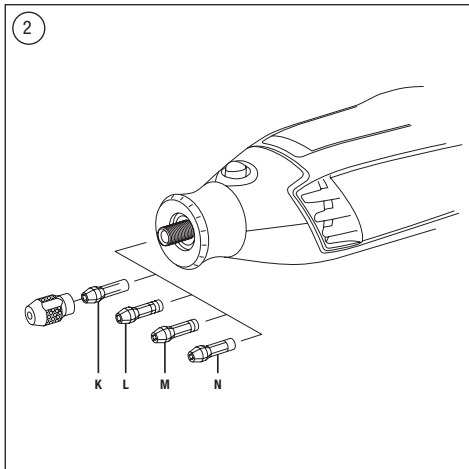
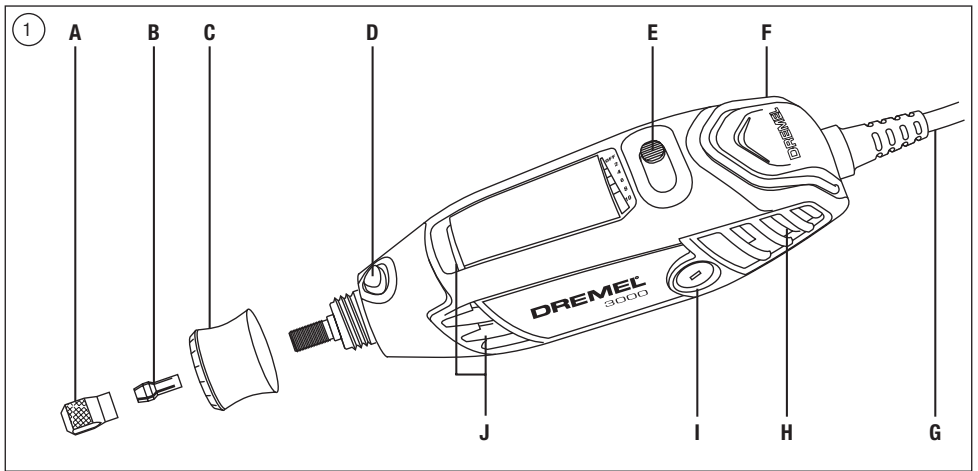


DREMEL® 3000

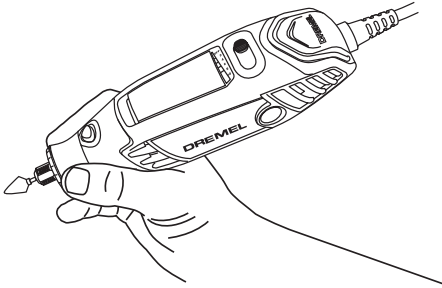


GB	Original instructions	19	NO	Oversettelse av originalinstruksjonene	65
DE	Übersetzung der Originalbedienungsanleitung	25	FI	Käännös alkuperäisistä ohjeista	71
FR	Traduction de la notice originale	32	ET	Algsete juhiste tõlge	78
IT	Traduzione delle istruzioni originali	39	LT	Originalių instrukcijų vertimas	84
NL	Vertaling van de originele gebruiksaanwijzing	46	LV	Orīginālās lietošanas pamācības tulkojums	90
DA	Oversættelse af betjeningsvejledning	53	AR	ترجمة التعليمات الأصلية	٩٨
SV	Översättning av originalinstruktioner	59			

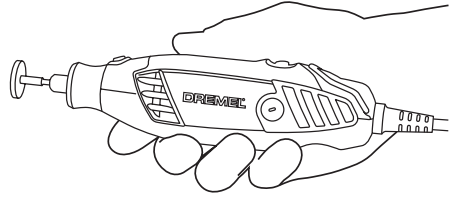
**Dremel Europe
The Netherlands**



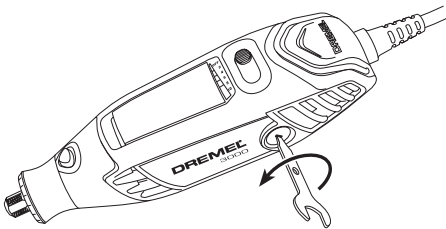
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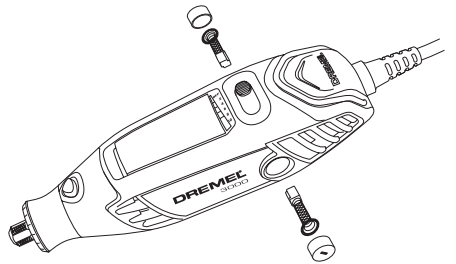
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8



9





Max RPM



105	35.000		■	■			■				
106	35.000		■	■			■				
107	35.000		■	■			■				
108	35.000		■	■			■				
110	35.000		■	■			■				
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113	35.000		■	■			■				
114	30.000		■	■			■				
115	30.000		■	■			■				
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125	30.000		■	■			■				
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144	30.000		■	■			■				
191	30.000		■	■			■				
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193	30.000		■	■			■				
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196	30.000		■	■			■				
199	30.000		■	■			■				
403	15.000						■	■	■	■	■
404	15.000						■	■	■	■	■
405	15.000						■	■	■	■	■
407	35.000		■	■			■	■	■	■	■
408	35.000		■	■			■	■	■	■	■
409	35.000	402	■	■			■	■	■	■	■
414	20.000	401					■	■	■	■	■
420	35.000	402	■	■			■	■	■	■	■
422	20.000	401					■	■	■	■	■
423S	20.000	(SC)402					■	■	■	■	■
425	20.000	402					■	■	■	■	■
426	35.000	402	■	■			■	■	■	■	■
428	15.000						■	■	■	■	■
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430	35.000		■	■			■	■	■	■	■
431	35.000		■	■			■	■	■	■	■
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438	35.000		■	■			■	■	■	■	■
442	15.000						■	■	■	■	■
443	15.000						■	■	■	■	■
453	30.000	1453					■	■	■		
454	30.000	1453					■	■	■		
455	30.000	1453					■	■	■		
457	30.000	1453					■	■	■		
462	30.000						■	■	■		
502	35.000		■	■			■	■	■	■	■
504	35.000		■	■			■	■	■	■	■
511S	20.000	(SC)402	■	■							
512S	20.000	(SC)402	■	■							
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530	15.000						■	■	■	■	■



Max RPM

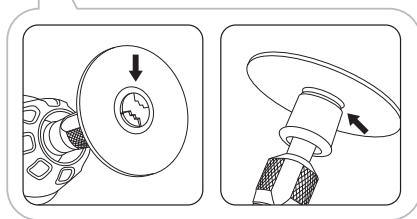
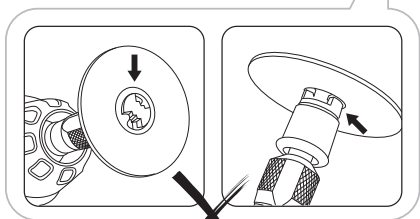
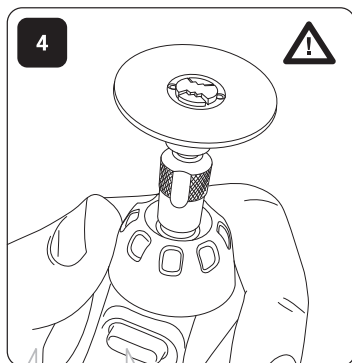
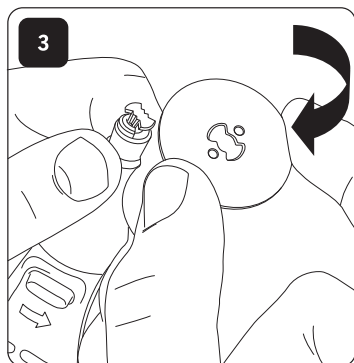
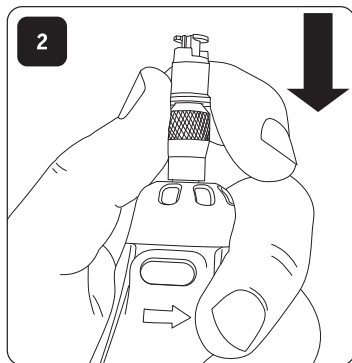
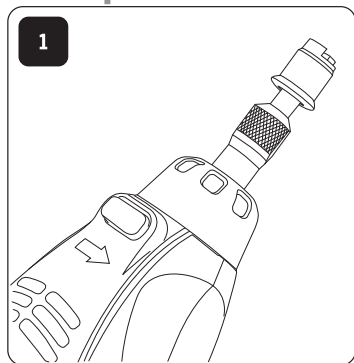


Part Number	Max RPM									
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532	15.000						■	■	■	■
535	15.000								■	■
536	15.000								■	■
537	15.000								■	■
538	20.000						■			
540	35.000	402	■	■			■	■	■	■
542	35.000		■	■	■					
546	35.000	670	■	■						
561	35.000	565	■	■	■					
562	35.000	566								
569	20.000	568								
570	20.000	568								
612	35.000	231/335	■	■						
615	35.000	231/335	■	■						
640	35.000	231/335	■	■						
650	35.000	231/335	■	■						
652	35.000	231/335	■	■						
654	35.000	231/335	■	■						
655	35.000	231/335	■	■						
932	25.000						■	■	■	■
952	25.000						■	■	■	■
953	25.000						■	■	■	■
997	25.000						■	■	■	■
4485	35.000									
4486	35.000									
7103	25.000							■	■	■
7105	25.000							■	■	■
7122	25.000							■	■	■
7134	25.000							■	■	■
7144	25.000							■	■	■
8153	25.000						■	■	■	■
8193	20.000						■	■	■	■
8215	20.000						■	■	■	■
9901	30.000			■			■	■	■	
9903	30.000			■			■	■	■	
9905	30.000			■			■	■	■	
9910	30.000			■			■	■	■	
9911	30.000			■			■	■	■	
9931	35.000		■	■	■			■		
9934	35.000		■	■	■			■		
9936	35.000		■	■	■			■		
83322	25.000									
84922	25.000									
85422	20.000									
85602	20.000									
SC406	35.000	SC402	■	■			■	■	■	■
SC409	35.000	SC402	■	■			■	■	■	■
SC456	35.000	SC402	■	■			■	■	■	■
SC476	35.000	SC402								
SC544	35.000	SC402	■	■	■					
SC545	35.000	SC402								



A series of horizontal lines for writing, with small black squares placed at various intervals to serve as guides for letter placement. The squares are arranged in vertical columns and horizontal rows, creating a grid-like structure for text entry.

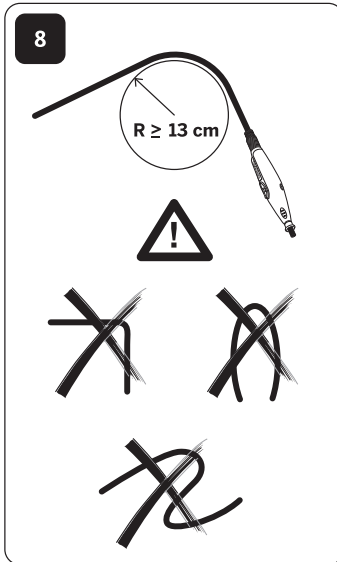
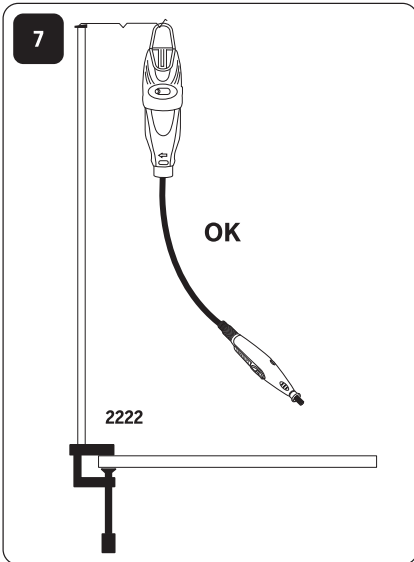
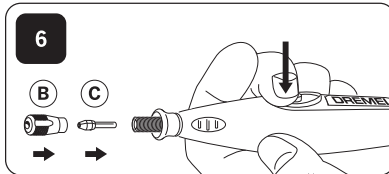
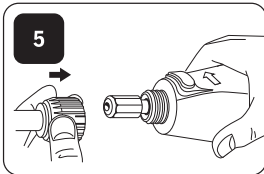
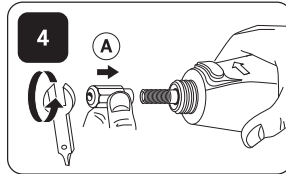
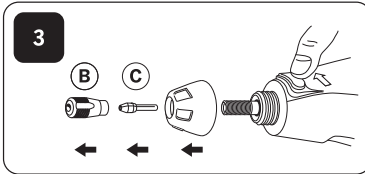
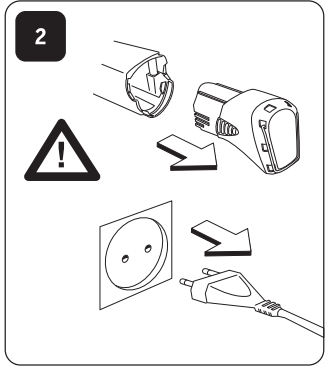
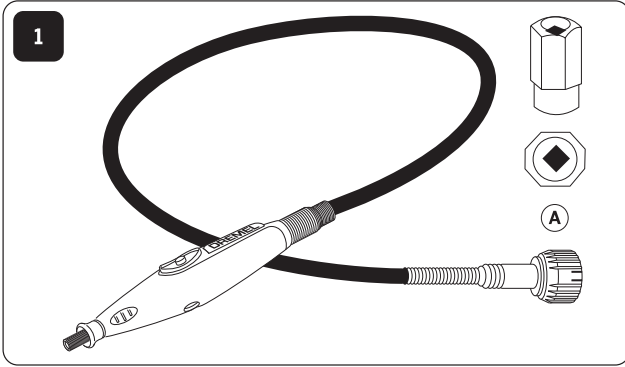
EZ SpeedClic™



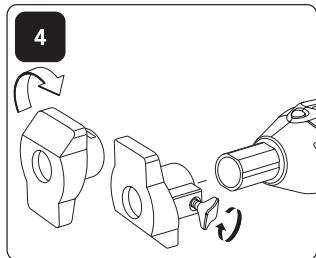
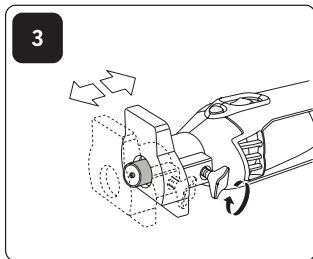
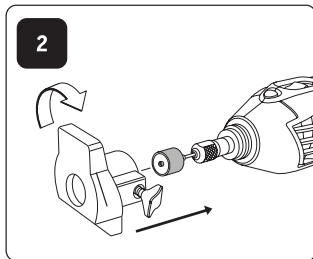
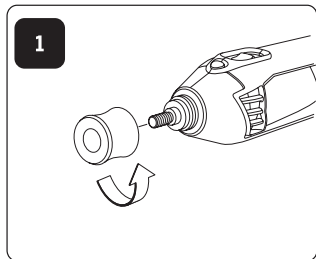
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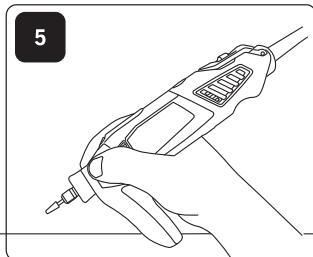
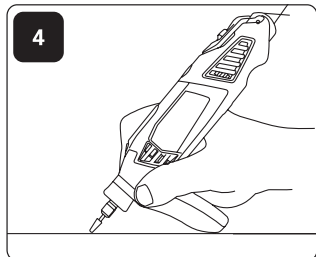
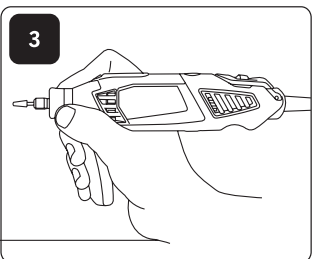
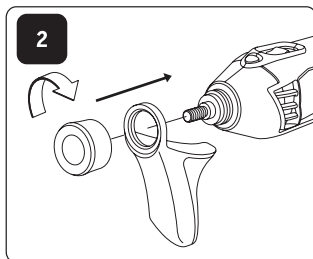
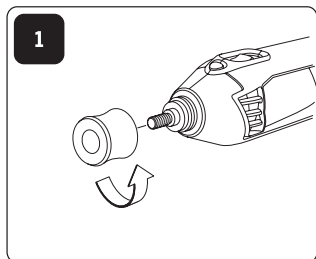
- GB** For optimum performance allow your new Flexshaft to run at high speed on your rotary tool in a vertical position for 2 minutes before use.
- DE** Um die Leistung der biegsamen Welle zu erhöhen, unbedingt vor Erstgebrauch 2 Minuten bei hoher Geschwindigkeit in vertikaler Position laufen lassen, bevor Sie damit arbeiten.
- FR** Pour obtenir les meilleures performances de votre nouvel arbre flexible, il est important de le router en le faisant tourner à vide, à la vitesse maximum, pendant 2 minutes en position verticale.
- IT** Per ottimizzare le performance del vostro nuovo albero flessibile fatelo girare ad alta velocità sul vostro minitensile in posizione verticale per due minuti prima di usarlo.
- NL** Laat uw nieuwe flexibele as voor een optimale prestatie gedurende 2 minuten voor gebruik in verticale positie op hoge snelheid op uw rotatiegereedschap lopen.
- DA** For optimal udnyttelse af den fleksible aksel, anbefales det at den kører ved høj hastighed uden belastning i 2 minutter inden brug.
- SV** Kör det roterande verktyget i hög hastighet med den nya böjliga axeln i lodrät position i två minuter innan du använder det för att få bästa prestanda.
- NO** For å oppnå optimal ytelse bør du før bruk kjøre den fleksible slangen på full hastighet med det roterende verktøyet i loddrett stilling i 2 minutter.
- FI** Parhaan mahdollisen käyttötehon varmistamiseksi anna uuden taipuisan akselin käydä suurella nopeudella korkeanopeuksiseen työkaluun kiinnitettynä pystysuorassa asennossa 2 minuutin ajan ennen käyttöä.
- ET** Optimaalse jõudluse tagamiseks laske oma uuel Flexshaft-seadmel enne kasutamist 2 minutit suurel kiirusel vertikaalasendis töötada.
- LT** Kad veikty optimaliai, prieš pirmąkart naudodami leiskite ant sukamojo įrankio uždegtam „Flexshaft“ dideliu greičiu vertikaliai veikti 2 minutes.
- LV** Lai nodrošinātu optimālu ierīces darbību, divas minūtes pirms lietošanas darbiniet jauno, elastīgo skrūvvrāpstu uz rotošajā rīkā vertikālā stāvoklī.
- AR** للحصول على الأداء الأمثل، اترك موتور Flexshaft الجديد الخاص بك يعمل على سرعة مرتفعة على الأداة الدوارة في وضع عمودي لمدة دقيقتين بعد الاستخدام.



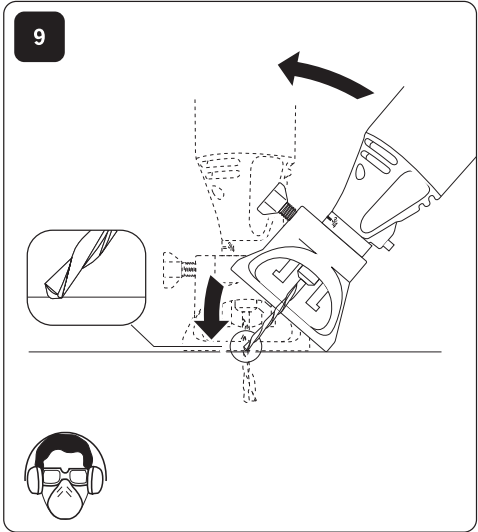
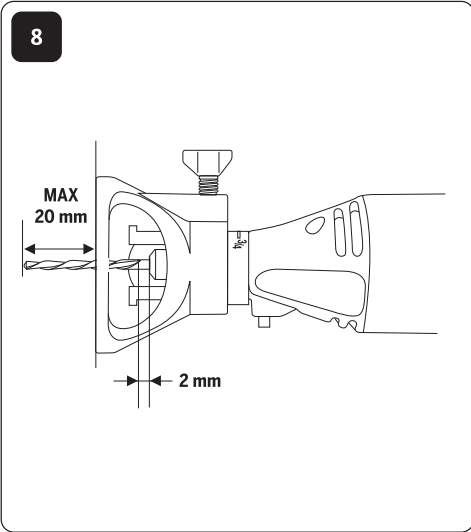
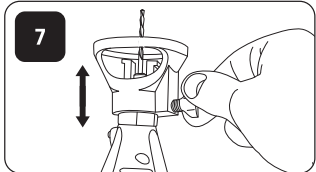
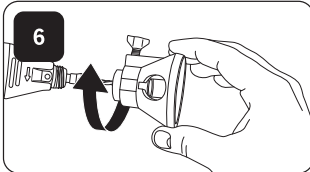
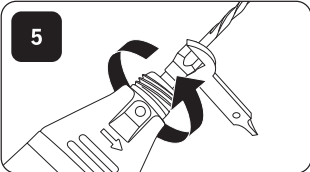
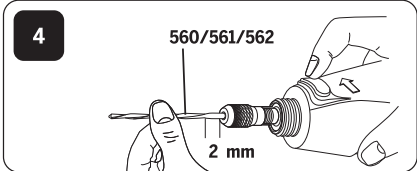
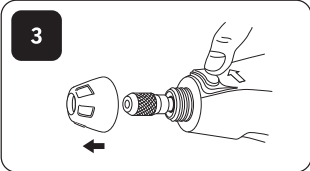
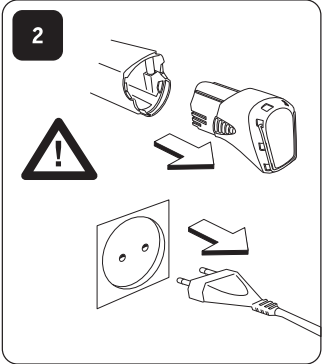
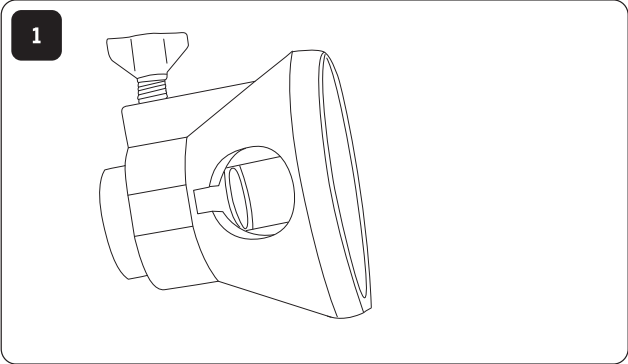
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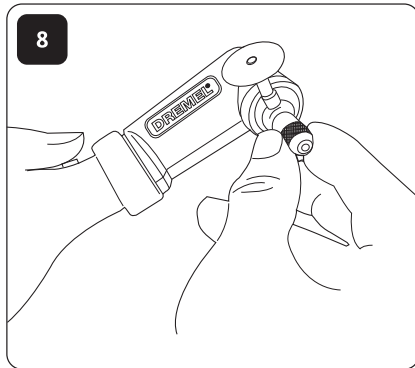
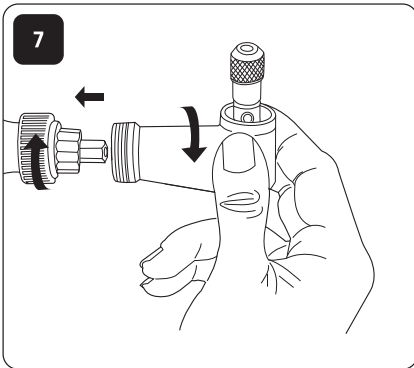
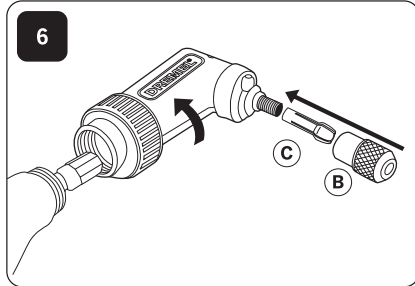
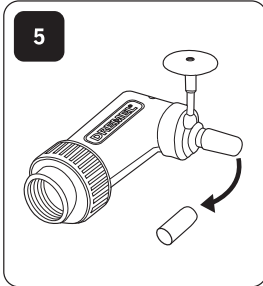
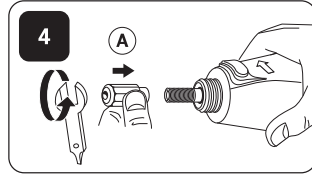
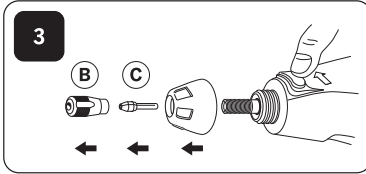
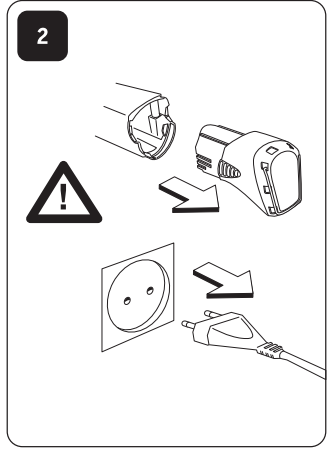
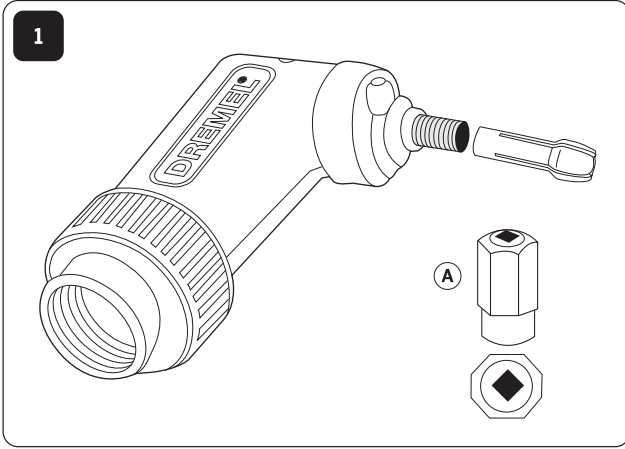


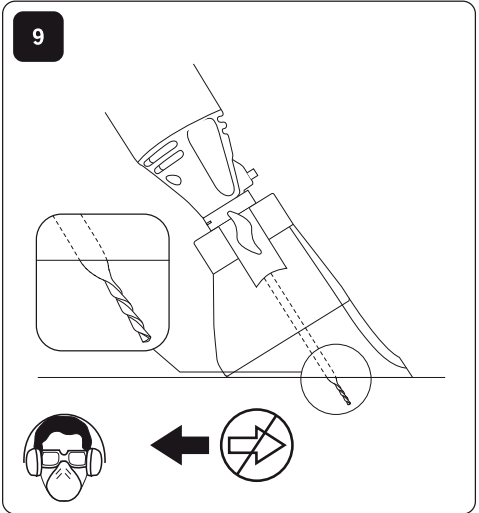
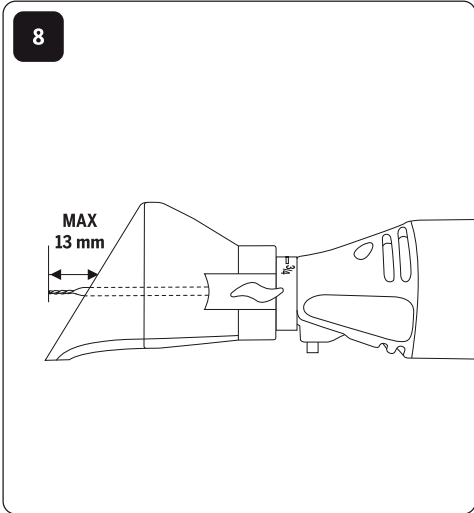
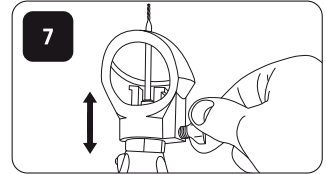
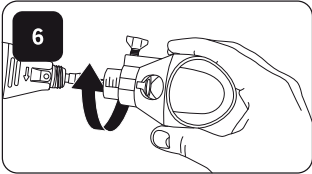
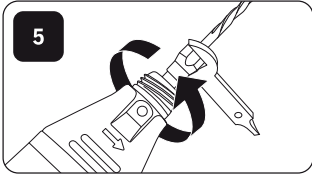
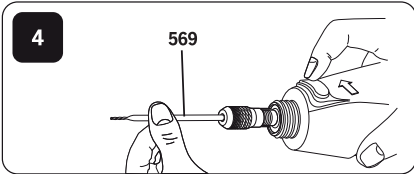
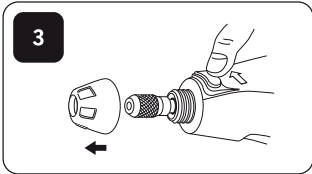
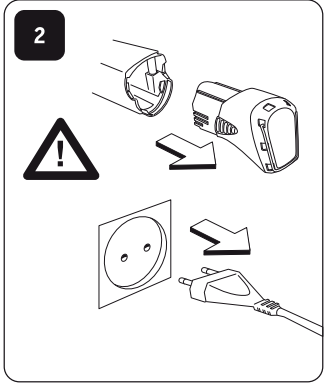
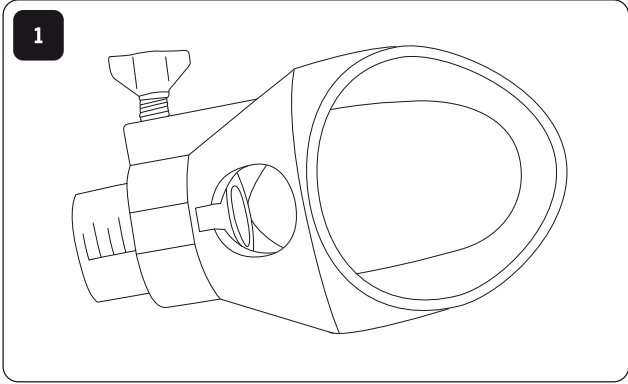
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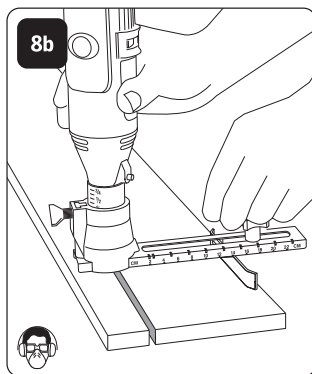
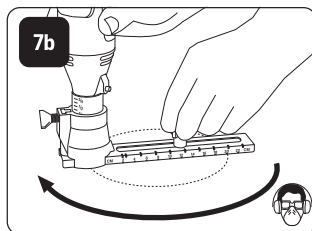
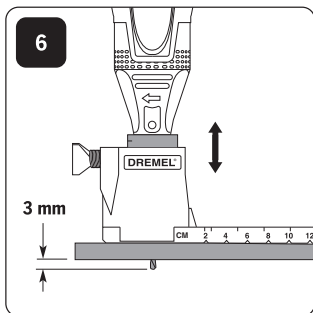
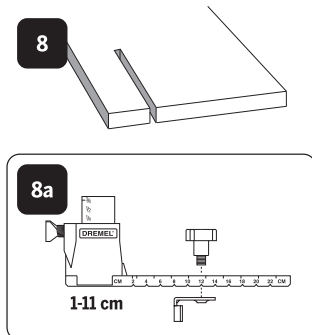
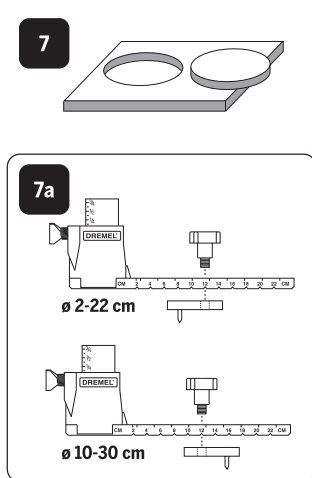
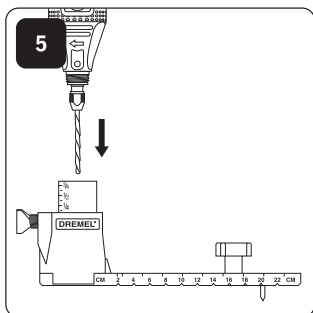
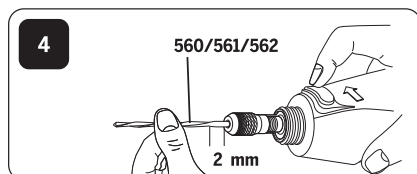
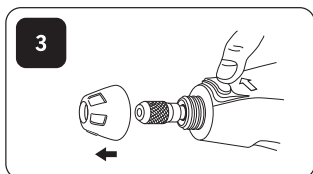
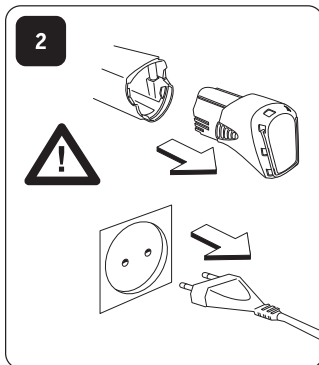
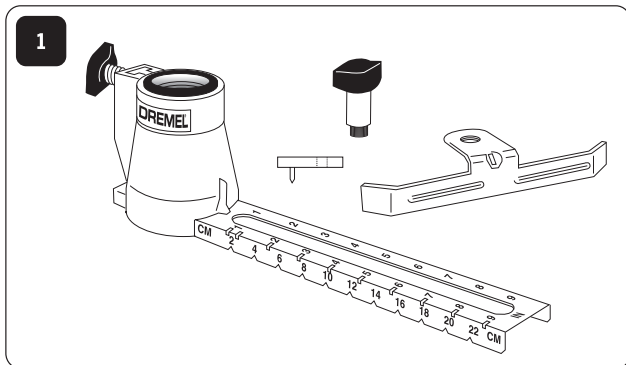


565/566









GB

CE DECLARATION OF CONFORMITY We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents: EN60745, EN55014, in accordance with the provisions of the directives 2004/108/EC, 2006/42/EC.

NOISE/VIBRATION Measured in accordance with EN60745 the sound pressure level of this tool is 77.4 dB(A) and the sound power level 88.4 dB(A) (standard deviation: 3.0 dB), and the vibration * m/s² (hand-arm method).

NOTE: The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another. It may also be used in a preliminary assessment of exposure.

WARNING The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which you use the tool. Make an estimation of the exposure in the actual conditions of use and identify the safety measures for personal protection accordingly (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Technical file at: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

DE

CE KONFORMITÄTSERKLÄRUNG Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den folgenden Normen oder normativen Dokumenten übereinstimmt: EN60745, EN55014, gemäß den Bestimmungen der Richtlinien 2004/108/EC, 2006/42/EC.

GERÄUSCH/VIBRATION Gemessen gemäß EN60745 beträgt der Schalldruckpegel dieses Gerätes 77,4 dB(A) und der Schalleistungspegel 88,4 dB(A) (Standard- abweichung: 3,0 dB), und die Vibration * m/s² (Hand-Arm Methode).

HINWEIS: Der angegebene Schwingungs-Gesamtwert ist entsprechend einem genormten Prüfverfahren gemessen worden und kann für den Vergleich von Werkzeugen miteinander verwendet werden. Er eignet sich auch für eine vorläufige Einschätzung der Schwingungsbelastung.

WARNING In Abhängigkeit von der Art, in der das Werkzeug verwendet wird, kann die Schwingungsemission während der eigentlichen Arbeit von dem angegebenen Gesamtwert abweichen. Um die Exposition unter den tatsächlich Anwendungsbedingungen abzuschätzen und zu bestimmen, welche persönlichen Schutzmaßnahmen erforderlich sind, sollten zusätzlich zu den Bedienungszeiten auch die Zeiten berücksichtigt werden, in denen das Gerät abgeschaltet ist oder im Leerlauf läuft.

Technische Unterlagen bei: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

FR

CE DÉCLARATION DE CONFORMITÉ Nous déclarons sous notre propre responsabilité que ce produit est en conformité avec les normes ou documents normalisés suivants: EN60745, EN55014, conforme aux réglementations 2004/108/EC, 2006/42/EC.

BRUIT/VIBRATION Mesuré selon EN60745 le niveau de la pression sonore de cet outil est 77,4 dB(A) et le niveau de la puissance sonore 88,4 dB(A) (déviations standard: 3,0 dB), et la vibration * m/s² (méthode main-bras).

REMARQUE : La valeur totale des vibrations déclarées, mesurée selon une méthode de test standard, peut être utilisée pour comparer un outil à un autre. Elle peut également être utilisée dans le cadre d'une évaluation préliminaire du degré d'exposition.

ATTENTION L'émission de vibrations lors de l'utilisation de l'outil électroportatif peut différer de la valeur totale déclarée selon la manière dont vous l'utilisez. Estimez l'exposition à ces dernières dans les conditions réelles d'utilisation, qui vous permettra d'identifier les mesures de sécurité à prendre en matière de protection personnelle (en tenant compte de l'ensemble des parties du cycle d'exploitation, telles que le moment où l'outil est éteint et celui où il est en veille, en plus de celui où il est activé).

Dossier technique auprès de: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

IT

CE DICHIARAZIONE DI CONFORMITÀ Dichiariamo, assumendo la piena responsabilità di tale dichiarazione, che il prodotto è conforme alle seguenti normative e ai relativi documenti: EN60745, EN55014 in base alle prescrizioni delle direttive 2004/108/EC, 2006/42/EC.

RUMOROSITÀ/VIBRAZIONE Misurato in conformità al EN60745 il livello di pressione acustica di questo utensile è 77,4 dB(A) ed il livello di potenza acustica 88,4 dB(A) (deviazione standard: 3,0 dB), e la vibrazione * m/s² (metodo mano-braccio).

NOTA: Il valore totale dichiarato di vibrazioni è stato misurato con un metodo di test standard e può essere usato per confrontare un utensile con un altro. Esso può inoltre essere usato per una valutazione preliminare dell'esposizione.

ATTENZIONE L'emissione di vibrazioni durante l'utilizzo dell'elettro utensile può variare dal valore totale dichiarato in base al modo in cui si utilizza l'utensile. Fare una stima dell'esposizione nelle condizioni di utilizzo attuali e, di conseguenza, identificare la misura di sicurezza per la protezione personale (prendendo in considerazione tutte le parti del ciclo di funzionamento come le volte in cui l'utensile viene spento e quando funziona in folle oltre al tempo di azionamento).

Fascicolo tecnico presso: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

NL

CE CONFORMITEITSVERKLARING Wij verklaren, dat dit product voldoet aan de volgende normen of normatieve documenten: EN60745, EN55014, overeenkomstig de bepalingen van de richtlijnen 2004/108/EC, 2006/42/EC.

GELUID/VIBRATIE Gemeten volgens EN60745 bedraagt het geluidsdrukniveau van deze machine 77,4 dB(A) en het geluidsvormogen-niveau 88,4 dB(A) (standaard deviatie: 3,0 dB), en de vibratie * m/s² (hand-arm methode).

OPMERKING: De totaal opgegeven trillingsemissie is gemeten aan de hand van een standaard testmethode en kan worden gebruikt om gereedschap onderling met elkaar te vergelijken. De informatie mag ook worden gebruikt om een voorlopige inschatting van de mate van blootstelling te maken.

LET OP De trillingsemissie tijdens het daadwerkelijke gebruik van het gereedschap kan afwijken van de opgegeven totale waarde. Dit is afhankelijk van de manier waarop u het gereedschap gebruikt. Maak een inschatting van de mate waarin u tijdens daadwerkelijk gebruik aan trillingen wordt blootgesteld en stel aan de hand hiervan de persoonlijke beschermingsmaatregelen vast (waarbij u rekening houdt met alle onderdelen van de bedrijfs-cyclus, waaronder de tijden dat het gereedschap is uitgeschakeld of is ingeschakeld maar niet wordt gebruikt, evenals de blootstellingstijd).

Technisch dossier bij: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

DA

CE KONFORMITETSERKLÆRING Vi erklærer under almindeligt ansvar, at dette produkt er i overensstemmelse med følgende normer eller normative dokumenter: EN60745, EN55014, i henhold til bestemmelserne i direktiverne 2004/108/EC, 2006/42/EC.

STØJ/VIBRATION Måles efter EN60745 er lydtrykniveau af dette værktøj 77,4 dB(A) og lydeffektniveau 88,4 dB(A) (standard deviation: 3,0 dB), og vibrationsniveauet * m/s² (hand-arm metoden).

Bemærk: Den angivne samlede vibrationsemissionsværdi er målt i overensstemmelse med en standardtestmetode og kan bruges til sammenligning af to stykker værktøj. Den kan også bruges i forbindelse med en foreløbig eksponeringsvurdering.

ADVARSEL Under faktisk brug af el-værktøjet kan vibrationsmissionen afvige fra den angivne samlede værdi afhængigt af, hvordan værktøjet bruges. Foretag en eksponeringsvurdering i de omgivelser, hvor værktøjet skal bruges, og tag derefter de nødvendige sikkerhedsforanstaltninger (alle aspekter af arbejdsforløbet skal indgå i vurderingen; også de perioder, hvor værktøjet er slukket eller kører i tomgang).

Teknisk dossier hos: SKIL Europe BV (PT-SEU/PJE), 4825 BD Breda, NL.

[3000]

c1	4.8 m/s²
c2	2.4 m/s²
c3	5.4 m/s²
c4	4.9 m/s²
c5	1.5 m/s²

	[1]	[2]	[3]	[4]	[5]
(GB)	While drilling	While polishing	While wire-brushing	While sanding	Uncertainty (K)
(DE)	Beim Bohren	Beim Polieren	Beim Abbürsten	Beim Sandpapier-schleifen	Unsicherheit (K)
(FR)	Au cours du perçage	Polissage	Brossage	Au cours du ponçage	Incertitude (K)
(IT)	In perforazione	In lucidatura	In spazzolatura	In sabbatura	Non noto (K)
(NL)	Bij het boren	Tijdens het polijsten	Tijdens het bewerken met staalborstel	Bij het schuren	Onzekerheid (K)
(DA)	Under boringen	Ved polering	Ved stålborstning	Under slibningen	Usikkerhed (K)
(SV)	Vid borring	Vid polering	Vid arbeten med stålborste	Vid sandpappersslipning	Osäkerhet (K)
(NO)	Under drilling	Ved polering	Ved stålborstning	Under sliping med sandpapir	Usikkert (K)
(FI)	Porattaessa	Kiillotettaessa	Käytettäessä teräs-harjaa	Hiottaessa	Epävarmuus (K)
(ET)	Puurimisel	Poleerimisel	Terasharjamisel	Lihvimisel	Määramatus (K)
(LT)	Kai gręziama	Poliruojant	Šveičiant vieliniu šepėčiu	Kai šlifuojama	Neaiškumas (K)
(LV)	Urbšanas laikā	Pulējot	Pulējot ar metāla suku	Slipēšanas laikā	Neskaidrības gadījumā (K)
(AR)	أثناء الحفر	أثناء الصقل	أثناء التنظيف بالفرشاة السلكية	أثناء الصنفرة بالرمل	(K) الشك

USED SYMBOLS



READ THESE INSTRUCTIONS



USE HEARING PROTECTION



USE EYE PROTECTION



USE A DUST MASK

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.

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.

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 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 (ELCB) protected supply. Use of an earth leakage circuit breaker reduces the risk of electric shock.

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.

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 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.*

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.*

SAFETY INSTRUCTIONS FOR ALL OPERATIONS

SAFETY WARNINGS THAT ARE COMMON FOR GRINDING, SANDING, WIRE BRUSHING, POLISHING OR ABRASIVE CUTTING OFF OPERATIONS

- a. **This power tool is intended to function as a grinder, sander, wire brush, polisher 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 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.*
- 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 guarded or controlled.*
- e. **The arbour size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool.** *Accessories with arbour holes 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. **Do not use a damaged accessory.** Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad 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.*
- g. **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.*

- h. **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.*
- i. **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 shock the operator.*
- j. **Use clamps or another practical way to secure and support the workpiece to a stable platform.** *Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.*
- k. **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.*
- l. **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.*
- m. **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.*
- n. **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.*
- o. **Do not operate the power tool near flammable materials.** *Sparks could ignite these materials.*
- p. **Do not use accessories that require liquid coolants.** *Using water or other liquid coolants may result in electrocution or shock.*
- q. **Do not work materials containing asbestos** (*asbestos is considered carcinogenic*).
- r. **Take protective measures when during work dust can develop that is harmful to one's health, combustible or explosive** (*some dusts are considered carcinogenic*); wear a dust mask and work with dust/ chip extraction when connectable.

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 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. 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 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 GRINDING AND ABRASIVE CUTTING OFF OPERATIONS

- a. **Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.**
- b. **Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.**
- c. **Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.**
- d. **Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.**

ADDITIONAL SAFETY WARNINGS SPECIFIC FOR ABRASIVE CUTTING OFF OPERATIONS

- a. **Do not "jam" the 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 binding of the wheel in the cut and the possibility of kickback or wheel breakage.**
- b. **Do not position your body in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.**
- c. **When wheel is binding 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 binding.

- d. **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.**
- e. **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.**
- f. **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.**

SAFETY WARNINGS SPECIFIC FOR SANDING OPERATIONS

- a. **Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper. Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc, or kickback.**

SAFETY WARNINGS SPECIFIC FOR POLISHING OPERATIONS

- a. **Do not allow any loose portion of the polishing bonnet or its attachment strings to spin freely. Tuck away or trim any loose attachment strings. Loose and spinning attachment strings can entangle your fingers or snag on the workpiece.**

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. **If the use of a 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.**

MACHINE-SPECIFIC SAFETY WARNINGS

- a. **Use the machine only for dry sanding. Penetration of water into the machine increases the risk of an electric shock.**
- b. **Keep hands away from the sawing range. Do not reach under the workpiece. Contact with the saw blade can lead to injuries.**
- c. **Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance. Contact with electric lines can lead to fire and**

electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.

- d. **When working with the machine, always hold it firmly with both hands and provide for a secure stance.** *The power tool is guided more secure with both hands.*
- e. **Secure the workpiece.** *A workpiece clamped with clamping devices or in a vice is held more secure than by hand.*
- f. **Keep your workplace clean.** *Blends of materials are particularly dangerous. Dust from light alloys can burn or explode.*
- g. **Wear protective gloves when changing application tools/accessories.** *Application tools/accessories become hot after prolonged usage.*
- h. **Do not treat the surface to be worked with solvent-containing fluids.** *Materials being warmed up by the scraping can cause toxic vapours to develop.*
- i. **Exercise extreme caution when handling the scraper.** *The accessory is very sharp; danger of injury.*

⚠ WARNING DO NOT WORK WITH MATERIALS CONTAINING ASBESTOS (ASBESTOS IS CONSIDERED CARCINOGENIC).

⚠ WARNING TAKE PROTECTIVE MEASURES WHEN DURING WORK DUST CAN DEVELOP THAT IS HARMFUL TO ONE'S HEALTH, COMBUSTIBLE OR EXPLOSIVE (SOME DUSTS ARE CONSIDERED CARCINOGENIC); WEAR A DUST MASK AND WORK WITH DUST/ CHIP EXTRACTION WHEN CONNECTABLE.

ENVIRONMENT

DISPOSAL

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


ONLY FOR EC COUNTRIES



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

SPECIFICATIONS

GENERAL SPECIFICATIONS

Voltage Rating	230 V, 50 Hz
Rated Power	130W
Rated Speed	33 000 RPM
Collet Capacity	0.8mm, 1.6mm, 2.4mm, 3.2mm
 Class II construction	Double insulated construction tools

EXTENSION CORDS

Use completely unrolled and safe extension cords with a capacity of 5 Amps.

MOTOR SPECIFICATIONS

This multitool utilizes a variable high speed motor. It is wired for operation on 230 V, 50 Hz. Always check that the supply voltage is the same as the voltage indicated on the nameplate of the tool.

ASSEMBLY

ALWAYS UNPLUG MULTITOOL BEFORE CHANGING ACCESSORIES, CHANGING COLLETS, OR SERVICING THE TOOL.

GENERAL

The Dremel multitool is a high quality precision tool that can be used to perform detailed and intricate tasks. The wide range of Dremel accessories and attachments allow you to perform a large variety of tasks. These include tasks such as sanding, carving and engraving and routing, cutting, cleaning and polishing.

PICTURE 1

- A. Collet nut
- B. Collet
- C. EZ Twist™ integrated wrench/nose cap
- D. Shaft lock button
- E. On/Off switch
- F. Hanger
- G. Cord
- H. Ventilation openings
- I. Brush cover (one on each side)
- J. Ventilation openings

COLLETS

The Dremel accessories available for the multitool come with various shank sizes. Four size collets are available to accommodate the different shank sizes. Collet sizes are identified by the rings on the back of the collet.

PICTURE 2

- K. 3.2 mm Collet without ring (480)
- L. 2.4 mm Collet with three rings (481)
- M. 1.6 mm Collet with two rings (482)
- N. 0.8 mm Collet with one ring (483)

NOTE: Some multitool kits may not include all four collet sizes. Collets are available separately.

Always use the collet which matches the shank size of the accessory you plan to use. Do not force a larger diameter shank into a smaller collet.

CHANGING COLLETS

PICTURE 3

- O. Shaft Lock Button
- P. Collet nut
- Q. To loosen
- R. To tighten
- S. Collet wrench

1. Press the shaft lock button, hold down and rotate the shaft by hand until it engages the shaft. Do not engage the shaft lock button while multitool is running.
2. With the shaft lock button engaged, loosen and remove the collet nut. Use the collet wrench if necessary.
3. Remove the collet by pulling it free from the shaft.
4. Install the appropriate size collet fully into the shaft and reinstall the collet nut finger tight. Do not fully tighten the nut when there is no bit or accessory installed.

CHANGING ACCESSORIES

PICTURE 3/5

1. Press the shaft lock button and rotate the shaft by hand until it engages the shaft lock. *Do not engage the shaft lock button while multitool is running.*
2. With the shaft lock button engaged, loosen (do not remove) the collet nut. Use the collet wrench if necessary.
3. Insert the bit or accessory shank fully into the collet.
4. With the shaft lock button engaged, finger tighten the collet nut until the bit or accessory shank is gripped by the collet.
NOTE: Be sure to read the instructions supplied with your Dremel accessory for further information on its use.

Use only Dremel tested, high performance accessories.

EZ TWIST™ INTEGRATED WRENCH/NOSE CAP

PICTURE 4/5

- T. EZ Twist™ integrated wrench/nose cap

The nose cap of your tool has an integrated wrench allowing you to loosen and tighten the collet nut without the use of the standard collet wrench.

1. Unscrew the nose cap from the tool, line-up the steel insert on inside of the cap with the collet nut.
2. With the shaft lock engaged twist nose cap counter clockwise to loosen the collet nut. Do not engage the shaft lock button while multitool is running.
3. Insert the bit or accessory shank fully into the collet.
4. With the shaft lock engaged twist nose cap clockwise to tighten the collet nut.
5. Screw the nose cap back into its original position.
NOTE: Be sure to read the instructions supplied with your Dremel accessory for further information on its use.

Use only Dremel tested, high performance accessories.

GETTING STARTED

USE

The first step in using the multitool is to get the “feel” of it. Hold it in your hand and feel its weight and balance. Feel the taper of the housing. This taper permits the tool to be grasped much like a pen or pencil. The unique softgrip on the nose allows for added comfort and control during use.

Always hold the tool away from your face. Accessories can be damaged during handling and can fly apart as they come up to speed.

When holding tool, do not cover the ventilation openings with your hand. Blocking the ventilation openings could cause the motor to overheat.

IMPORTANT! Practice on scrap material first to see how the tool's high-speed action performs. Keep in mind that your multitool will perform best by allowing the speed, along with the correct Dremel accessory and attachment, to do the work for you. Do not put pressure on the tool during use, if possible. Instead, lower the spinning accessory lightly 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 from your hand. Allow the accessory to do the work.

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.

For best control in close work, grip the multitool like a pencil between your thumb and forefinger. PICTURE 6

The “golf” grip method is used for heavier operations such as grinding or cutting. PICTURE 7

OPERATING SPEEDS

This tool is a high speed multitool. Its speeds vary from 10000 to 33000 RPM. Adjusting the no. of RPM to your project will give a better end result. To achieve the best results when working with different materials, set the variable speed control to suit the job. To select the right speed for the accessory in use, practice with scrap material first.

The 3000 multitool switch settings are marked on the speed control switch. Refer to the Speed Settings chart on pages 4-7 to help determine the proper speed for the material being worked on and the accessory to use.

Most jobs can be accomplished using the tool at the highest setting. However, certain materials (some plastics and metals) can be damaged by high-speed generated heat and should be worked on at relatively low speeds. Low speed operation (15000 RPM or less) is usually best for polishing operations employing the felt polishing accessories. All brushing applications require lower speeds to avoid wire discharge from the holder. Let the performance of the tool do the work for you when using lower speed settings. Higher speeds are better for hardwoods, metals and glass and for drilling, carving, cutting, routing, shaping and cutting dadoes or rabbets in wood. The settings for approximate RPM's are:

The Settings for Approximate Revolutions Per Minute on Rotary Tool Variable Speed Model 3000.

Switch Setting	Speed Range
1-2	10000-14000 RPM
3-4	15000-19000 RPM
5-6	20000-23000 RPM
7-8	24000-28000 RPM
9-10	29000-33000 RPM

Some guidelines regarding tool speed:

- Plastic and other materials that melt at low temperatures should be cut at low speeds.
- Polishing, buffing and cleaning with a wire brush must be done only at switch setting 1 to prevent damage to the brush and your material.
- Wood should be cut at high speed.
- Iron or steel should be cut at high speed.
- If a high speed steel cutter starts to vibrate, it usually indicates that it is running too slow.
- Aluminium, copper alloys, lead alloys, zinc alloys and tin may be cut at various speeds, depending on the type of cutting being done. Use a paraffin (not water) or other suitable lubricant on the cutter to prevent the cut material from adhering to the cutter teeth.

NOTE: 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.

MAINTENANCE

Preventative maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Dremel Service Facility. To avoid injury from unexpected starting or electrical shock, always remove plug from wall outlet before performing service or cleaning.

CARBON BRUSHES

The 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. To maintain peak efficiency of the motor, examine the brushes for wear every 40-50 hours.

Using the tool with worn brushes will permanently damage the motor. Use only original Dremel replacement brushes. Inspect the multitool brushes after 40-50 hours of use. If the multitool runs erratically, loses power, or makes unusual noises check the brushes for wear and possible replacement. Follow these steps to check/change the multitool brushes:

1. With the power cord unplugged, place the tool on a clean surface. Use the tool wrench as a screwdriver to remove the brush caps. PICTURE 8
2. Remove the brushes from the tool by pulling on the spring that is attached to the carbon brush. If the brush is less than 3mm long and the surface of the brush that touches the

commutator is rough or pitted, the carbon brushes should be replaced. Be sure to check both brushes. PICTURE 9

3. If one brush is worn, you should replace both brushes for better performance of your multitool. Remove the spring from the brush, throw away the old brush and place the spring on a new brush.
4. Place the carbon brush and spring back into the tool, there is only one way the brush will fit back into the tool.
5. Replace the brush caps onto the tool by turning the cap in a clockwise direction. To tighten, use the wrench, but DO NOT OVER TIGHTEN! After replacing the brushes the tool should be run at no load; place it on a clean surface and run it freely at full speed for 5 minutes before loading (or using) the tool. This will allow the brushes to "seat" properly and will give you more hours of life from each set of brushes. This will also extend the life of your tool since the commutator surface will also wear better and longer.

CLEANING THE TOOL

DISCONNECT THE PLUG BEFORE CLEANING

Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

The tool may be cleaned with compressed air. Always wear safety goggles when cleaning tool with compressed air.

There is no need to lubricate the Dremel multitool.

Certain cleaning agents and solvents will damage plastic parts.

Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

Clean the "soft grip" areas of the tool using a damp cloth. Tougher soiled areas may require more than one wipe application to get clean.

SERVICE AND WARRANTY

This DREMEL product is guaranteed in accordance with statutory/country-specific regulations; damage due to normal wear and tear, overload or improper handling will be excluded from the guarantee.

In case of a complaint, send the tool undismantled together with proof of purchase to your dealer.

CONTACT DREMEL

For more information on the Dremel assortment, support and hotline, go to www.dremel.com

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