# **VEVOR**®

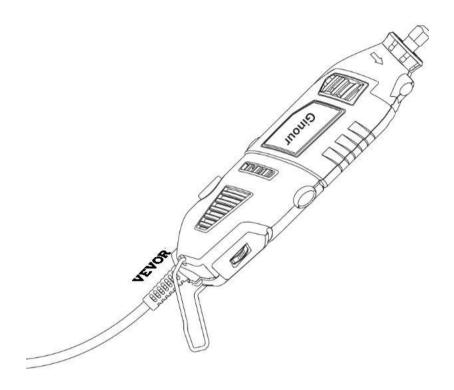
Model:DM-160C

# Mini Grinder

**User Manual** 



# Mini Grinder User Manual



# **NEED HELP? CONTACT US!**

Have product questions? Need technical support? Please feel free to contact us:

CustomerService@vevor.com

This is the original instruction, please read all manual instructions carefully before operating.  $\mbox{VEVOR}\ \mbox{r}$ 

be subject to the product you received. Please forgive us that we won't inform you again if there is any technology or software updates on our product.

# INSTRODUCTION

This ro

and removing rust in tight spaces or inaccessible places. The tool can be used on most metals, glass, wood and ceramics. F

exercising too much pressure. As a guideline, use the tool at low speed for all large accessories, such as polishing for example, and at high speed for smaller accessories such as those used for engraving. For grinding and engraving, hold the tool as if it were a pen.

# **TECHNICAL SPECIFICATIONS**

Available Voltages	220-240V~ 50Hz
Maximum Output	160W
No Load Speed	8,000 - 35,000 rpm
Collet chuck capacity	Max3.2mm dia.

# SAFETY INSTRUCTIONS FOR ALL TOOLS

**WARNING:** When using electric power too adhered to in order to reduce the risk of fire, electric shock and per

# Please Read The Following Carefully:

- 1. KEEP WORK AREA CLEAN. Untid benches and work areas invite injuries.
- 2. CONSIDER WORK AREA ENVIRONMENT. Do not use power tools in damp or wet locations. Do not expose power tools to rain. Keep work areas well lit.
- GUARD AGAINST ELECTRIC SHOCK. Prevent bod contact with gr pipes, refrigerator enclosures.
- KEEP CHILDREN AWAY.All visitors must be kept awa from the work area. Do not let visitors come into contact with the tool or extension cord.
- 5. STORE IDLE TOOLS. When not in use, tools must be stor
- DO NOT FORCE THE TOOL. It will do the job in hand better and safer at the rate for which it was intended.
- 7. USE THE RIGHT TOOL. Do not force a small tool to do the job of a heav -dut dut power tool. Do not use the tool for the purpose it is not intended for.
- 8. DRESS PROPERLY. Do not wear loose clothing or jew Gloves and non-skid footwear are recommended when working outdoors. Wear a protective head cover to contain long hair.

- 9. USE SAFETY GLASSES. Also use a face and a dust mask to guard against dust
- 10. DO NOT ABUSE THE CORD. Never car Keep the cord awa from heat, oil or sharp objects.
- 11. SECURE YOUR WORK. Use clamps or a vice to hold our work in position. It is much safer than using our hand and it frees both hands to operate the tool.
- 12. DO NOT OVERREACH. Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE. Keep tools clean for better and saf for lubricating and changing accessories. K
- 14. DISCONNECT TOOLS. When not in use, befor
- 15. REMOVE ADJSUTING KEYS AND WRENCHES. Have the habit to check and see that ke s and adjusting wrenches are removed from the tool before turning it on.
- 16. AVOID UNINTENTIONAL STARTING. Do not car the switch is off when plugging in.
- 17. OUTDOOR EXTENSION CORDS. When the tool is used outdoors, onl use extension cords intended for use outdoors and so marked.
- 18. STAY ALERT. Watch what ou are doing. Use common sense. Do not operate the tool when ou aretired.
- 19. CHECK DAMAGED PARTS. Before using a tool, protective cover, or other damaged p be carefull checked to ensure that the too alignment of moving p condition that ma affect the tool's operation.
- 20. DO NOT OPERA atmospheres. Motors in these tools normall spark, and the sparks ma ignite fumes.

## **Multifunction Power Too**

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the ON/OFF switch. The tool will run continuousl until the switch is turned to OFF position. The speed can be adjusted while the tool is running.

# **Speed Adjustment**

The multifunction power tool is equipped with speed control. Do not change the speed while the tool is working. The speed switch is located on the rear of the tool. Turn it to increase or reduce speed. Use the tool at low speed for polishing and similar operations, but use higher speed for drilling or cutting action.

- 1. The tool should be unplugged when changing accessories.
- 2. If ou stall the tool, switch it off immediatel .
- Periodicall check the tightness of our collet chuck, especiall during prolonged use of the same acces
- 4. After use, alwa s disconnect our power tool.
- 5. Do no

- 6. Do not leave our tool unattended while switched on.
- 7. Do not use or store our tool in damp or wet conditions.

# **Useful Hints & Tips**

- 1. Your ro cool down.
- 2. To ensure smooth running, the spindle should be oiled periodicall .
- 3. Do not apple too much radial pressure to the acces grinding. Be doing this ou will put a strain on the spindle and adversel affect the precision of the tool.
- 4. Alwa s work with a sensitive touch so as not to impede the efficienc of our mini tool.
- 5. When drilling metal, alwa s mark the drilling point with a center punch first, so that our ro does not slip.
- 6. Alwa s ensure that ou have maximum contact between the acces
- 7. V speed for engraving.

# Placing Accessories Into The Tool

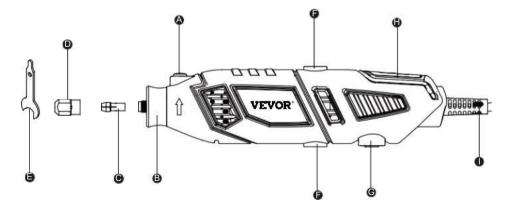
Alwa s switch the tool off first. Hold the locking button at the front of the tool down and undo the collet chuck (anti-clock

the collet nut over the co

shaft contact. Then tighten up the collet nut. (DO NOT USE PLIERS).

# **KNOW YOUR ROTARY TOOL**

Before attempting to use an tool, familiarize ourself with all operating features and safet requirements.



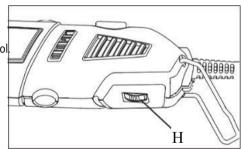
PART	DESCRIPTION			
Α	Shaft lock button			
В	Case Lock			
С	Collet			
D	Collet nut			
E	Collet wrench			
F	Brush cap			
G	On/Off Switch			
Н	Speed control dial			
I	Power cord			

# **FUNCTION DESCRIPTION**

# On / Off Switch

This product has an eas access power **Speed** control switch (H) located at the bottom of the tool

Need to adjust the speed of the work can rotate the G speed switch



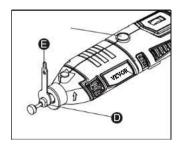
# **Replacing Collets**

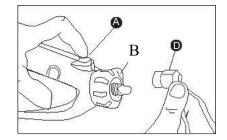
Using collets is the most precise way to hold an acces and maximum pressure, collets stay tight.

- 1. Unplug the ro
- 2. Press and hold the shaft lock button(A), and rotate the shaft with the provided collet wrench (E) until the shaft lock (A) engages the shaft, preven
- 3. With the shaft lock (A) engaged, use the collet wrench (E) to loosen the collet nut (D), if neces
- 4. Remove the collet nut (D) and old collet (C) using the collet wrench (E), if neces

5.

6. Tighten the collet nut with the collet wrench (E).





# **Installing Accessories**



#### WARNING

Do not press the shaft lock button (A) while ro

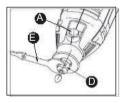
- 1. Unplug the ro
- 2. Press and hold the shaft lock button(A), and rotate the shaft b hand until the shaft lock engages the shaft, prev
- 3. With the shaft lock button engaged, use the collet wrench (E) to loosen the collet nut (D), if neces
- 4.

it is engaged.

5. the collet nut (D) with the provided wrench (E) until the acces Avoid excess tightening of the collet nut (D).

# **Removing Accessories**

- 1. Unplug the ro
- 2. When the shaft lock (A) is engaged, loosen the collet nut (D) with the provided wrench (E).
- 3. Remove the acces



# Using Mandrels

The most common topes of mandrel to use with this tool are the standard mandrel which is used with cuto

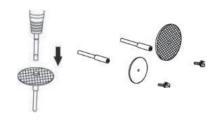
wheels and polishing drums. Drum mandrels are used with sanding drums.

### TO INSTALL:

- 1. Unplug the ro
- 2. Install the mandrel.

# If Using The Standard Mandrel:

- 1. Press and hold the shaft lock button (A).
- 2. into the slot on top of the mandrel and unscrew.
- 3. Remove mandrel screw and washer.
- 4. Place desired acces and align acces
- 5. the acces



NOTE: The mandrel washer should be placed between the mandrel screw and the acces

\* Tighten using provided wrench.

# If Using The Drum Mandrel:

- 1. Align appropriatel sized sanding drum over mandrel and push down to completel cover drum end of mandrel
- on the drum mandrel head to expand the drum and securel hold the sanding drum in place.

# If Using The Screw Mandrel:

- 1. Align the desired acces
- 2. Screw acces



# **Balancing Accessories**

For precision work slight loosen the collet nut and turn the acces

Continue adjusting in this fashion until the best balance is achieved. Replace accessories if the become damaged or unbalanced.

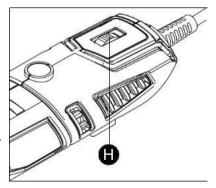
# **Speed Control**

The ro

the ro

To select the right speed for each job, use a practice piece of material.

Va speed to find the best speed for the acces are using and the job to be done. Use the indicator mark above the speed control dial (H) to set the best speed for the job. The speed control dial (H) is numbered from 1to 6. For example, a speed setting of 1 is approximatel 8,000 RPM, and a speed setting of 6 is approximatel 35,000 RPM. Refer to the Speed Dial Settings table to determine the proper speed based on the material being worked and the t pe of acces



# **SPEED SETTING FOR ROTARY ACCESSORIES**

Function	Picture	Description	Soft wood	Hard wood	Plastic	Steel	Aluminum, brass, etc.	Shell, stone	Ceramic	Glass
Polished Deburr	11111111	Grinding wheel	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	/
		Diamond Grinding Needle	/	1	/	,	/	20000- 35000	20000- 35000	20000- 35000
		Sanding band	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	15000- 35000	/
Drilling	11	Drill bits	15000- 35000	15000- 35000	15000- 25000	/	1	1	1	/
Polishing	00	Wool felt wheel	/	/	/	12000- 17000	12000- 17000	12000- 17000	12000- 17000	12000- 17000
	88888	Sanding paper	12000- 20000	12000- 20000	12000- 20000	/	12000- 20000	/	1	/
Cleaning	$\dashv$	Stainless brush	8000- 15000	8000- 15000	8000- 15000	8000- 15000	8000- 15000	I	1	/
Cutting	88888	Cut off wheel	/	1	25000- 35000	25000- 35000	25000- 35000	25000- 35000	1	/
Switch Setting	1	2		3		4		5		5
Speed Range	8000- 11000 RPM	11000-13000RPM		14000-1	14000-16000RPM 17000-		17000-20000RPM 2		22000-28000RPM	

# **RULES OF OPERATING SPEEDS**

The best wa to determine the correct speed for work on an material is to practice for a few minutes on a piece of scrap, even after referring to the Speed Dial Settings tables. You can quicklearn that a slower or faster speed is more effective just be at different speeds.

When working with a scrap piece of plastic

optimum working speed without melting the workpiece.

friction of the tool generates heat and causes the plastic to melt.

Slow-speed operation (15,000 RPM or less) is usuall best for polishing operations using the felt polishing accessories, delicate wood c

speeds to avoid wire discharge from the holder. Allow the tool to do the work for ou when using lower speed settings.

Higher speeds are better for drilling, c

in wood. Hardwoods, metals and glass also require high-speed operation.

#### NOTE:

- 1. Plastic and materials that could melt at low temperatures should be cut at low speeds.
- 2. Soft wood should be cut at high speed.
- 3. Aluminum, tin, copper, lead, and zinc allo s ma be cut at an speed, depending on the t pe of cutting being done. Use paraffin or other suitable lubricants on the cutter to prevent the cut material from adhering to the cutt.

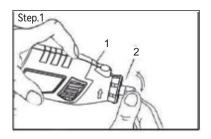
# **CUTTING GUIDE**

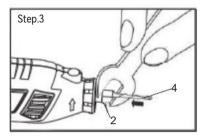
The cutting guide comes completel assembled and read to use on a variet of materials up to 20mm thick. Alwa s hold the tool firml, using a slow stead pressure to guide the tool through our work. The speed of the tool will do the work.

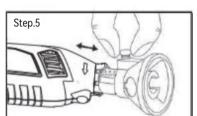
IM PORTANT: Alwa s cut in clockwise direction except when following a template (outlet box), then cut in counter clockwise direction.

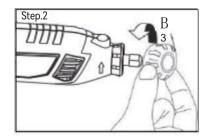
# Installation Instruction Of The Cutting Guide Attachment

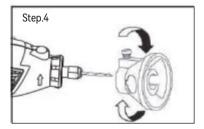
- Step 1 & 2. Remove the collet nut and then the housing cap from the end of our ro
- Step 3. Place the collet nut loosel on the end of the ro Tighten collet nut.
- Step 4. Thread the Cutting Guide Attachment onto the exposed housing threads on the ro
- Step 5. Adjust the attachment to the desired cutting depth.











# **Shield Ro**

The ro

from the user without int

left-hand grip positions and works to deflect debris on a variet of applications, including cutting, sanding, grinding and polishing. The shield can be quickled adjusted into position, provides eas access to the acces

# **Installation Instruction:**

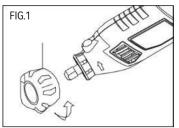
- Step 1. Remove the housing cap A from the end of the tool and set housing cap aside. The original housing cap must be reinstalled when this attach¬ment is not used (Fig.1).
- Step 2. Screw the Shield onto the tool using the lock nut B(Fig.2).
- Step 3. Position the Shield such that it will redirect debris, sparks, and dust awa from the user using the positioning tabs C (Fig.3).

# **Using The Shield Ro**

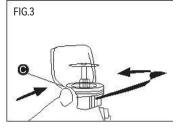
Alwa s turn the tool off before adjusting position, changing acces

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 $\label{eq:maneuverabilit} \mbox{Maneuverabilit} \mbox{ , the Shield can be quickl } \mbox{ positioned and repositioned with a turn to the right or left .} \\ \mbox{To ext}$ 

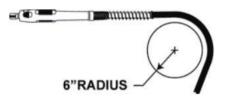






### Flexible Driver Attachment

Safet Rules for Flexible Driver, Do not operate the flexible shaft with a sharp or multiple bends. Ensure that there are no sharp residual bends or kinks in the Flexible Driver before the operation. Over bending the shaft can generate excessive heat on the jacket or hand piece and ma cause the Flexible Driver to disengage from

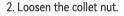


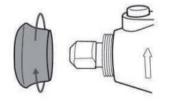
the tool. The minimum recommended bend radius is 6". Alwa s hold the hand piece firml in our hands

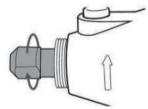
to twist. Not for use with router bits or other large diameters (1" or larger) bits. Large diame-ter bits can cause kickback and loss of control when used with the Flexible Driver. Do not remove end ferrule while tool is running. The cable will become loose from the jacket and will uncontrollable whip or lash around

## INSTALLATION DIAGRAM OF FLEXIBLE DRIVER

1. Remove the shaft collar.



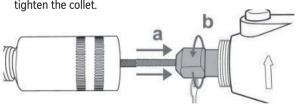




3. Raise the handle end of the flexible shaft &shake gentl until the inner flexible shaft protrudes.

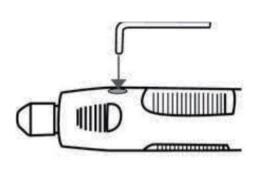


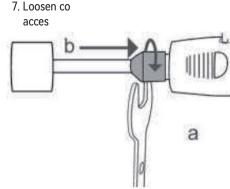
tighten the collet.



5. Screw the flexible shaft fitting collar onto the ro







# **DIRECTIONS FOR USE**

- 1. With small milling cutters / grinding pins: Use a high speed.
- 2. With large milling cutters / grinding pins: Use a low speed.
- 3. Precision work / engraving: Hold the drive unit like a pen.
- 4. Rough work: Hold the drive unit like a hammer.

### TIPS:

- 1. Fx
- 2. You will not finish our work sooner be x cause the drive unit to slow down or stop and will overload the motor.

# **Operating Instructions**

Run-In before Operation For op speed on our ro

# Disengagement of the Flexible Driver

The flexible shaft ma become disengaged if the motor of our ro tool is not elevated.

Higher than the working end of the Flexible Driver.

# Flexible Shaft Lubrication

The Flexible Driver should be lubricated after ev
Unscrew the Flexible Driver assembl from the motor housing. Pull the center
core out of the Flexible Driver assembl . Wipe a v
bearing grease on to the center core and r
damage to tool do not over grease shaft. Too much grease will cause the unit tooverheat.
Reattach the Flexible Driver to the ro



# **CLEANING**

- Keep all safet devices, air vents and the motor housing free o
   Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
- 2. We recommend that ou clean the device immediatel each time ou have finished using it.
- Clean the equipment regular with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic p thedevice.



Read the instruction manual.



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



Compl with the European securit c



This product is subject to the provision of European Directive 2012/19/EC. The s mbol showing a wheelie bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this s mbol. Products marked as such ma not be discarded with normal domestic waste, but must be taken to a collection point for rec cling electrical and electronic devices



EUREP UK LTD UNIT 2264, 100 OCK STREET, ABINGDON OXFORDSHIRE ENGLAND OX14 5DH

FREE MOOD LTD

Address: 2 Hol well Lane, London, England, EC2A 3ET

EC REP

EUREP GmbH Unterlettenweg 1a, 85051 Ingolstadt, German

WAITCHX

Address: 250 bis boulevard Saint-Germain 75007 Paris

Manufacturer: Changzhou W

Add: Niutang Town, Wujin, Jiangsu, 213163



E-mail: CustomerService@vevor.com