



USER MANUAL

DIAMOND DRILLING MACHINE

MSW-DDM230 UK

MSW-DDM205 UK

MSW-DDM255 UK



The operation manual must be read carefully.



Never dispose of electrical equipment together with household waste.



This machine conforms to CE declarations.



Safety goggles must be used.



Ear protection must be used.



Safety mask must be used.



Protective footwear must be used.



II protection class machine with double insulation.



Attention! Wear protective gloves.



PLEASE NOTE! The drawings in this manual are for illustration purposes only and in some details may differ from the actual machine.

The original operation manual is in German. Other language versions are translations from German.

I. SAFETY INSTRUCTIONS

1. Keep the work area clean. Cluttered areas can cause injuries.
2. Consider the work area environment before starting to work. Don't expose power tools to rain or wet soil. Don't use power tools in damp or wet locations. The work area should be well secured. Don't use the tool in the presence of flammable liquids or gases. Power tools produce sparks during normal operation or when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzene, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.
3. Provide sufficient protection against electric shock. Prevent body contact with grounded surfaces, for example: pipes, radiators, ranges, refrigerator enclosures.
4. Keep children and third parties away from the work area.
5. Store unused tools. When not in use, tools should be stored in dry and high or locked-up places out of the reach of children.
6. Do not overload the machine! To ensure an optimum performance and the safety of the machine, only use it within the set parameters.
7. Use only suitable tools. Don't use small tools or attachments. Don't use tools for not intended purposes. For example: don't use circular saws for cutting tree limbs or logs
8. Dress appropriately. Do not wear loose clothing or jewellery. They can get caught in the moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use safety glasses. Also use a face or dust mask if the cutting operation is dusty.
10. Do not damage the connection cable. Never carry the tool by the cord or yank the cord to disconnect it from the power source. Keep the cord away from heat and oil sources and sharp edges.
11. Secure the work area. It is recommended to use clamps or a vice for fixation. Please pay special attention to your hands when operating the machine.

12. Do not overreach yourself. Keep proper footing and balance at all times.
13. Hold the machine firmly with both hands. When using the machine, hold it by the handles provided with the machine.
14. Maintain tools with care. Keep tools clean for a better and safer performance. Follow the instructions for changing accessories. Inspect the extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
15. Switch off the machine and disconnect the cable before performing maintenance or changing accessories.
16. Remove adjusting keys and wrenches. Always make sure that keys and adjusting wrenches are removed from the tool before turning it on.
17. Avoid unintentional starting. Don't carry a plugged-in tool with your fingers on the switch. Be sure the tool is switched off when plugging it in.
18. During outdoor work use extension cords intended for outdoor use.
19. Stay alert when operating the machine. Do not operate the tool when you are tired.
20. Check damaged parts. Before further use of the tool, any part of the casing or other parts that are damaged should be carefully checked to determine if they will operate properly and perform their intended function. Check for alignment of moving parts, mounting, and any other conditions that may affect its operation. A damaged part should be properly repaired or replaced by an authorized service centre unless otherwise indicated elsewhere in this instruction manual. Defective switches should be replaced by an authorized service centre. Do not use the tool if the switch does not turn it on and off.
21. Do not use power tools for applications other than those specified in the instructions (other than that for which it was designed).
22. To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
23. Do not touch movable parts or accessories unless the power source has been disconnected.
24. Use your tool at a lower input load than specified on the nameplate to increase working efficiency and decrease the wearing out process.
25. Do not wipe any plastic parts with solvents. Solvents such as gasoline, thinner, benzene, alcohol, ammonia and oil may damage and crack the plastic parts. Do not wipe them with such solvents. Wipe the plastic parts with a soft cloth lightly dampened with soapy water.
26. Consult an authorized service agent in the event of power tool failure.
27. Use only original replacement parts.
28. This tool should only be disassembled for replacing carbon brushes.
29. When transporting and handling the diamond drilling machine between the warehouse and the destination, take into account the occupational health and safety principles for manual transport operations which apply in the country where the device will be used.

II. PRECAUTIONS ON USING THE MACHINE

1. Wear protective glasses to protect your eyes.

2. Use dust masks.
3. Use earplugs to keep your ears noise-free while working.
4. Check for the proper handle adjustment.
5. The tool becomes very hot during operation.
6. Safe operation depends on one's work posture.
7. When working in an elevated location, pay attention to objects and persons below.
8. Wear protective shoes to protect your feet.

Failure to follow safety recommendations and instructions may result in serious injuries or death!

III. TECHNICAL SPECIFICATIONS

Product name	Diamond drilling machine		
Model	MSW-DDM230 UK	MSW-DDM205 UK	MSW-DDM255 UK
Rated voltage [~V]/ Frequency[Hz]	230/50		
Rated power [W]	4080	3900	4350
Weight [kg]	21	20,5	22
Water connection diameter ["]	1/2		
Maximum rotational speed (without load) [rpm]	570	580	580
Core drill attachment diameter	1 1/4"		
Core drill diameter [mm]	15 – 230	15 – 205	15 – 255

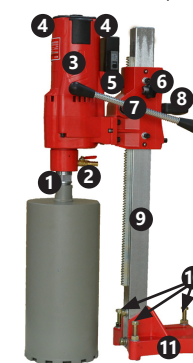
IV. APPLICATIONS

The diamond core drill is designed to drill pass-through and not pass-through holes in mineral construction materials such as concrete, all types of walls, asphalt, all types of screed, natural stone, with the use of standard diamond tipped core drills, wet drilling and using a stand.

V. BEFORE FIRST USE

1. Power source.
Ensure that the power source which is utilized conforms to the power requirements specified on the product name.
2. Power switch.
Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, serious accidents can occur.
3. Extension cord.
When the work area has no power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as possible.

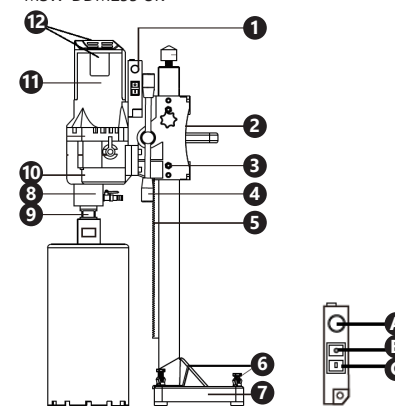
VI. DESCRIPTION OF THE DEVICE MSW-DDM230 UK / MSW-DDM205 UK



1. spindle
2. coolant valve
3. motor
4. motor carbon brushes cover
5. ON/OFF switch
6. device height adjustment handle
7. lever for raising/lowering the device
8. handle
9. guide rail
10. attachment screws
11. base

Open the coolant valve and place the hose end in the work area. Turn on the device. Use lever for raising / lowering the device to adjust device height. Upon completing work, close the coolant valve, raise the device and turn it off. **ATTENTION!** Ensure that the core drill does not snag in the work-piece during operation.

MSW-DDM255 UK



1. control panel
A – revs adjuster
B – on button
C – off button
2. device attachment to guide rail unit
3. attachment screw
4. lever for raising/lowering the device
5. guide rail for raising / lowering the device
6. attachment screws
7. base
8. coolant valve
9. spindle
10. device
11. motor
12. motor carbon brushes cover

Open the coolant valve and put the pipe output in the work area. Before turning it off, make sure that the minimal rotation speed range is selected. Turn the device on via the built-in switch, adjust the speed control to the rotation speed of the required task and adjust the height of the device with the lever. After having successfully used it, turn off the cooling water valve, hold the device upwards, adjust the rotation speed to the smallest value and turn the device off via the switch. **ATTENTION!** When working, make sure that the core drills are not in the workpiece.

VII. ASSEMBLING THE DEVICE

1. Place the device on a stable and level surface, use attachment anchors to mount the device to the surface:
2. Place device base on the surface.
3. Mark the position of attachment holes.
4. Drill holes on the surface at the marked positions.
5. Insert anchors into the drilled holes.
6. Align the holes in device bases with drilled holes and tighten the attachment screws.
7. Level the device.

VIII. REPLACING CARBON BRUSHES

When the device is operated, carbon brushes steadily wear out. When the insulation tip integrated inside the brush gets revealed and touches the commutator it will trip the engine automatically. When this happens, both brushes must be replaced with new brushes of the same type. Inspect the carbon brushes after approx. 300 working hours.

Attention! Before commencing carbon-brush replacement, make sure the device is switched off and the power cord is unplugged.

Replacing the carbon brushes:

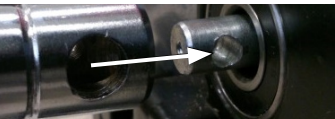
Unscrew the screw securing the carbon brushes on the side of the device housing:



Remove worn out carbon brush, insert new brush and tighten the screw. Replace the carbon brush on the other side of the housing in an analogous manner.

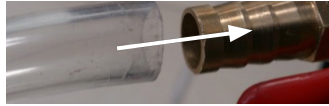
IX. ASSEMBLY/DISASSEMBLY OF THE DEVICE'S ELEMENTS

- Device height adjustment handle assembly:
Remove the screw from the handle bracket, insert the bracket into the device attachment, align holes:



Tighten the screw. When tightening make sure the screw goes all the way through.

- Coolant feed hose assembly:
Slide hose end over device coolant feed valve:



Once on, use a hose clamp to secure the hose in place.

- Bracket assembly:

Align the bracket with the guide rail and secure it to the rail using two bolts.



- Mounting a core drill on the device.

To mount a core drill on the spindle, screw it on clockwise.

X. MAINTENANCE AND INSPECTION

1. Inspecting the tool.
Since the use of a dull tool will cause the motor to malfunction, it should be replaced with a new one without delay when abrasion is noted.
2. Inspecting the mounting screws.
Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.
3. Maintenance of the motor.
The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.
4. Inspecting the carbon brushes.
The motor employs carbon brushes which are consumable parts. When they become worn or near the "wear limit", it could result in motor trouble. When an auto-stop carbon brush is equipped, the motor will stop automatically. At that time, replace both carbon brushes with new ones. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.
5. Cleaning the device.
To keep the device clean, clean it using a soft cloth dampened in water with soap. Never use brushes or other cleaning tools that may scratch/damage the device. Remember to prevent water from penetrating inside the device through vents in the housing of the device. Clean the vents with a paintbrush and compressed air.

XI. TRANSPORTATION AND STORAGE

Shaking, crashing and turning the machine upside down should be prevented when it is transported. Store it in a properly ventilated surrounding with dry air and without any corrosive gas.

XII. REGULAR CONTROL OF THE DEVICE

Regularly check the machine for signs of damage. Should it be damaged, please stop using it immediately and contact your customer service to solve the problem.

What to do in case of a problem?

Please contact your customer service and prepare following information:

- Invoice number and serial number (the latter is to be found on the technical plate on the machine).
- If relevant, a picture of the damaged, broken or defective part.
- It will be easier for your customer service clerk to determine the source of the problem if you give a detailed and precise description of the matter. The more detailed your information, the better customer service will be able to solve your problem rapidly and efficiently!

CAUTION: Never open the machine without the authorization of your customer service. This can lead to a loss of warranty!

NOTES

NOTES

Umwelt – und Entsorgungshinweise

Hersteller an Verbraucher

Sehr geehrte Damen und Herren,

gebrauchte Elektro – und Elektronikgeräte dürfen gemäß europäischer Vorgaben [1] nicht zum unsortierten Siedlungsabfall gegeben werden, sondern müssen getrennt erfasst werden. Das Symbol der Abfalltonne auf Rädern weist auf die Notwendigkeit der getrennten Sammlung hin. Helfen auch Sie mit beim Umweltschutz. Sorgen Sie dafür, dieses Gerät, wenn Sie es nicht mehr weiter nutzen wollen, in die hierfür vorgesehenen Systeme der Getrenntsammlung zu geben.



In Deutschland sind Sie gesetzlich [2] verpflichtet, ein Altgerät einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen. Die öffentlich – rechtlichen Entsorgungsträger (Kommunen) haben hierzu Sammelstellen eingerichtet, an denen Altgeräte aus privaten Haushalten ihres Gebietes für Sie kostenfrei entgegengenommen werden. Möglicherweise holen die rechtlichen Entsorgungsträger die Altgeräte auch bei den privaten Haushalten ab.

Bitte informieren Sie sich über Ihren lokalen Abfallkalender oder bei Ihrer Stadt – oder Gemeindeverwaltung über die in Ihrem Gebiet zur Verfügung stehenden Möglichkeiten der Rückgabe oder Sammlung von Altgeräten.

[1] RICHTLINIE 2002/96/EG DES EUROPÄISCHEN PARLAMENTS UND DES RATES
ÜBER ELEKTRO – UND ELEKTRONIK – ALTGERÄTE

[2] Gesetz über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung
von Elektro – und Elektronikgeräten (Elektro – und Elektronikgerätegesetz – ElektroG).

Utylizacja produktu

Produkty elektryczne i elektroniczne po zakończeniu okresu eksploatacji wymagają segregacji i oddania ich do wyznaczonego punktu odbioru. Nie wolno wyrzucać produktów elektrycznych razem z odpadami gospodarstwa domowego. Zgodnie z dyrektywą WEEE 2012/19/UE obowiązującą w Unii Europejskiej, urządzenia elektryczne i elektroniczne wymagają segregacji i utylizacji w wyznaczonych miejscach. Dbając o prawidłową utylizację, przyczyniasz się do ochrony zasobów naturalnych i zmniejszasz negatywny wpływ oddziaływania na środowisko, człowieka i otoczenie. Zgodnie z krajowym prawodawstwem, nieprawidłowe usuwanie odpadów elektrycznych i elektronicznych może być karane!

For the disposal of the device please consider and act according to the national and local rules and regulations.

CONTACT

expondo Polska sp. z o.o. sp. k.

ul. Nowy Kisielin-Innowacyjna 7
66-002 Zielona Góra | Poland, EU

e-mail: info@expondo.de