

МАГАЗИН МАЙСТОРА®
БАШ ПРОФЕСИОНАЛНИ РЕШЕНИЯ

US

Operator's manual

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.

FR

Manuel d'utilisation

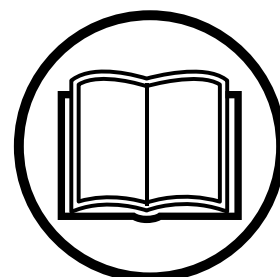
Lire attentivement et bien assimiler le manuel d'utilisation avant d'utiliser la machine.

ES

Manual de instrucciones

Lea detenidamente el manual de instrucciones y asegúrese de entender su contenido antes de utilizar la máquina.

DM 406 H



US FR ES

KEY TO SYMBOLS

Symbols on the machine:

WARNING! The machine can be a dangerous tool if used incorrectly or carelessly, which can cause serious or fatal injury to the operator or others.



Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



Always wear:

- Approved protective helmet
- Approved hearing protection
- Protective goggles or a visor
- Breathing mask



Environmental marking. Symbols on the product or its packaging indicate that this product cannot be handled as domestic waste.



By ensuring that this product is taken care of correctly, you can help to counteract the potential negative impact on the environment and people that can otherwise result through the incorrect waste management of this product.

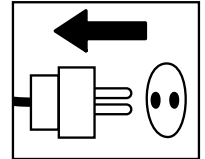


For more detailed information about recycling this product, contact your municipality, your domestic waste service or the shop from where you purchased the product.

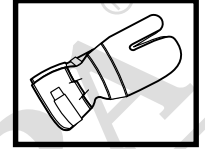
Other symbols/decals on the machine refer to special certification requirements for certain markets.

Symbols in the operator's manual:

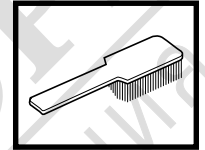
Inspection and/or maintenance should be carried out with the motor switched off and the plug disconnected.



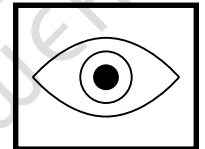
Always wear approved protective gloves.



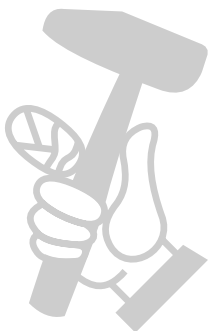
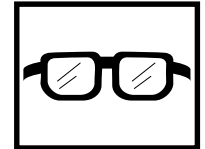
Regular cleaning is required.



Visual check.



Protective goggles or a visor must be worn.



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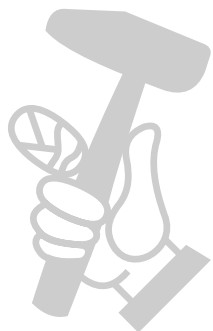
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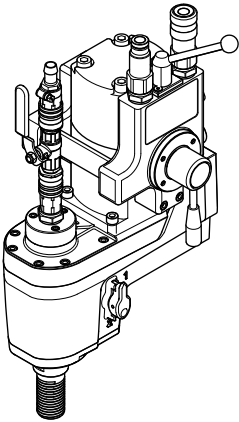
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PRESENTATION

DM 406 H

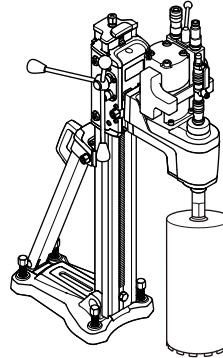


It is our wish that you will be satisfied with your product and that it will be your companion for a long time. Think of this operator's manual as a valuable document. By following its' content (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you ever lend or sell this machine, make sure that the borrower or buyer gets the operator's manual, so they will also know how to properly maintain and use it.

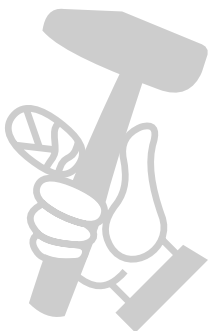
A purchase of one of our products gives you access to professional help with repairs and services. If the retailer who sells your machine is not one of our authorised dealers, ask him for the address of your nearest service workshop.

Husqvarna Construction Products has a policy of continuous product development. Husqvarna reserves the right to modify the design and appearance of products without prior notice and without further obligation introduce design modifications.

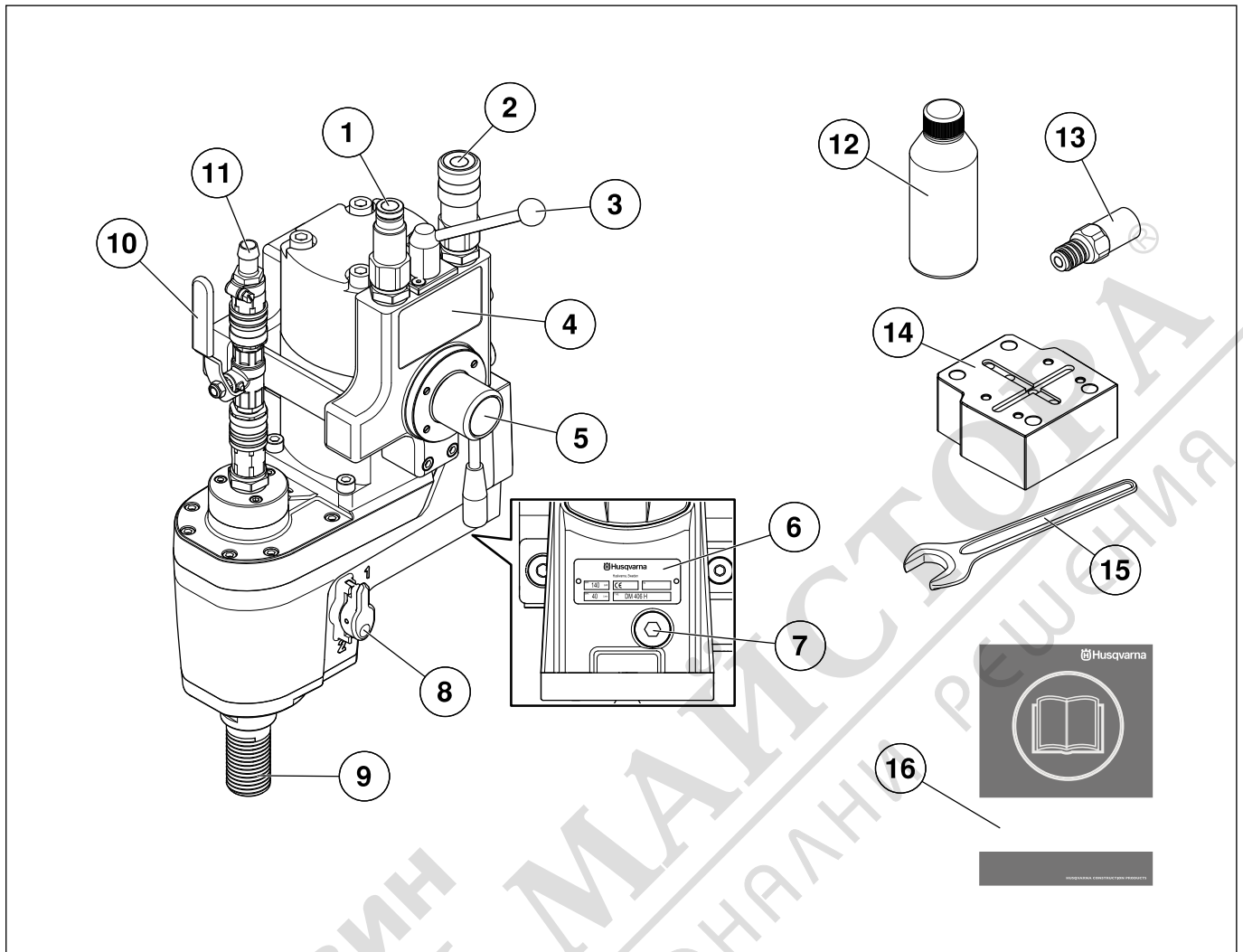
- DM 406 is an hydraulic drill motor, intended for drilling concrete, brick and various stone materials.
- The machine is intended for stand mounted drilling.



- The following Husqvarna drill stands are recommended for use with the drill motor:
 - DS 50 AT/ATS/Gyro/COMBO/BASIC
 - DS 70 AT/ATS
 - DS 450
- The machine is intended for use together with the PP 325 power unit. When used together with another power unit, the specified max. flow and max. pressure must not be exceeded. See instructions in the section "Technical data".
- The drilling machine has a modular design and is easy to assemble.
- The hydraulic motor speed can be set in three positions. The mechanical gearbox has two gears. This makes it possible to set 6 different spindle speeds.
- The machine has a water cooled gearbox with a pipe that runs through the spindle.



WHAT IS WHAT?



What is what on the drilling machine?

- | | |
|----------------------------------|---|
| 1 Connection return hose | 9 Drill spindle |
| 2 Pressure connection | 10 Water tap |
| 3 Control rotation, on/off | 11 Water connector |
| 4 Speed chart | 12 Oil bottle (3 dl) |
| 5 Speed control, hydraulic motor | 13 Junction coupling (1/4" UNC - CR 128 M), accessory |
| 6 Type plate | 14 Adapter, accessory |
| 7 Oil plug | 15 Open-ended spanner, 36 mm |
| 8 Gear knob | 16 Operator's manual |

SAFETY INSTRUCTIONS

Steps before using a new drilling machine

- Do not use the drilling machine without first reading and understanding the contents of this Operator's Manual.
- DM 406 is an hydraulic drill motor, intended for drilling concrete, brick and various stone materials.
- The machine is intended for use in industrial applications by experienced operators. Use in any other way is considered as contrary to the intended use.

Always use common sense

It is not possible to cover every conceivable situation you can face when using a drilling machine. Always exercise care and use your common sense. Avoid all situations which you consider to be beyond your capability. If you still feel uncertain about operating procedures after reading these instructions, you should consult an expert before continuing. Do not hesitate to contact your dealer or us if you have any more questions about the use of the drilling machine. We will willingly be of service and provide you with advice as well as help you to use your drilling machine both efficiently and safely.

Let your Husqvarna dealer check the drilling machine regularly and make essential adjustments and repairs.

Husqvarna Construction Products has a policy of continuous product development. Husqvarna reserves the right to modify the design and appearance of products without prior notice and without further obligation introduce design modifications.

All information and all data in the Operator's Manual were applicable at the time the Operator's Manual was sent to print.



WARNING! Under no circumstances should you modify the original design of the machine without approval from the manufacturer. Always use original spare parts. Unauthorized modifications and/or accessories may lead to serious injury or death to the user or others.



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

Lead from lead-based paints.

Crystalline silica from bricks, cement and other masonry products.

Arsenic and chromium from chemically treated lumber.

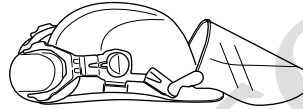
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic material.

Personal protective equipment

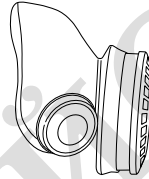


WARNING! You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.

- Protective helmet
- Hearing protection
- Protective goggles or a visor



- Breathing mask



- Heavy-duty, firm grip gloves.



- Tight-fitting, heavy-duty and comfortable clothing that permits full freedom of movement.



- Boots with steel toe-caps and non-slip sole



- Always have a first aid kit nearby.



SAFETY INSTRUCTIONS

General safety precautions

This section describes basic safety directions for using the machine. This information is never a substitute for professional skills and experience.

- Please read the operator's manual carefully and make sure you understand the instructions before using the machine.
- Keep in mind that it is you, the operator that is responsible for not exposing people or their property to accidents or hazards.
- The machine must be kept clean. Signs and stickers must be fully legible.

Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- People and animals can distract you causing you to lose control of the machine. For this reason, always remain concentrated and focused on the task.
- Do not use the machine in bad weather, such as dense fog, heavy rain, strong wind, intense cold, etc. Working in bad weather is tiring and can lead to dangerous conditions, e.g. slippery surfaces.
- Never start to work with the machine before the working area is clear and you have a firm foothold. Look out for any obstacles with unexpected movement. Ensure that no material can become loose and fall, causing injury when operating the machine.
- Always check the rear side of the surface where the drill bit will emerge when drilling right through. Secure and cordon off the area and make sure that no one can be injured or material damaged.

Use and care

- Wear personal protective equipment. See instructions under the heading "Personal protective equipment".
- Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination.
- Check that no tools or other objects have been left lying on the machine.
- Never allow anyone else to use the machine without first ensuring that they have understood the contents of the operator's manual.
- Be careful as clothing, long hair, and jewellery can get caught in moving parts.
- Remain at a distance from the drill bit when the motor is running.
- Make sure that no pipes or electrical cables are routed in the area to be drilled.
- Never leave the machine unsupervised with the motor running.
- Never work alone, always ensure there is another person close at hand. Apart from being able to receive help to assemble the machine, you can also get help if an accident should occur.

- Never use a machine that is faulty. Carry out the checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists. See instructions under the heading Maintenance.
- Never use a machine that has been modified in any way from its original specification.
- Do not overload the machine. Overloading can damage the machine.
- Keep tools sharp and clean in order to enable safer work.
- Keep all parts in good working order and ensure that all fixtures are properly tightened.
- Keep the hydraulic hoses and couplings free from dirt. Do not use hoses that are distorted, worn or damaged.
- Check that all couplings, connections and hydraulic hoses are in full working order. Check that the hoses are connected correctly to the machine and that the hydraulic couplings lock as intended before pressurising the hydraulic system. The couplings are locked by turning the outer sleeve on the female coupling so that the slot moves away from the ball.
- Check the machine, couplings and hydraulic hoses daily for leakage. A rupture or leak can cause a "hydraulic fluid injection" in the body or result in other serious physical injury. Do not check for leakage with your hands. Contact with the leak can result in serious personal injury caused by the high pressure in the hydraulic system.
- Make sure the rotation control is set to OFF (0) before connecting the hydraulic hoses.
- Never disconnect the hydraulic hoses without first shutting off and disconnecting the hydraulic unit and ensuring the motors have stopped completely.
- Inspection and/or maintenance should be carried out with the hydraulic hoses disconnected.
- Do not exceed the specified hydraulic fluid flow or pressure for the tool being used. Excessive pressure or flow can result in rupturing.
- Observe care when lifting. You are handling heavy parts, which implies the risk of pinch injuries or other injuries.

Transport and storage

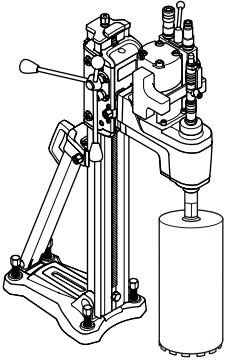
- Secure the equipment during transportation in order to avoid transport damage and accidents.
- Do not store or transport the drilling machine with the drill bit fitted in order to protect your drilling machine and drill bits from damage.
- Store the drilling machine in a lockable area so that it is out of reach of children and unauthorised persons.
- Store the drilling machine and stand in dry and frost free conditions.

SAFETY INSTRUCTIONS

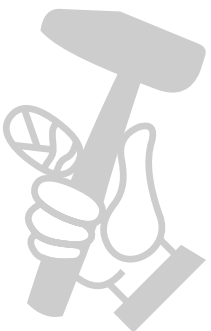
Work safety

- The machine has a very high torque. This demands good concentration during work, as serious personal injuries can occur if the drill bit suddenly jams.
- Keep your hands at a safe distance from the drill spindle and drill bit when the machine is running.
- Keep an eye open for oil or water leakage. If water or oil trickles out from the leakage hole on the top of the pinion neck, the seals must be replaced.

Stand drilling



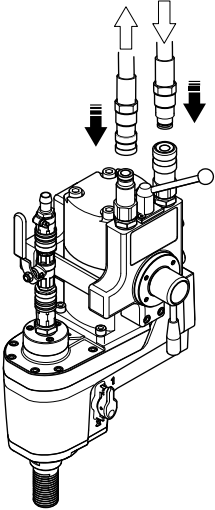
- The machine is intended for stand mounted drilling.
- Make sure that the stand is secured correctly.
- Make sure that the drilling machine is secured correctly in the stand.
- Take extra care during the start of the drilling when the drill bit is placed against the work piece. The drill bit does not have any guidance. This increases the risk for it starting to drift. This puts load onto the stand, with the risk of its fixing breaking loose.
- Be careful if the drill bit gets caught in the work piece. This puts load onto the stand, with the risk of its fixing breaking loose. This will cause the stand to start rotating around the drill bit.
- Make sure that the cooling water does not come into contact with an electrical cabinet or similar.



ASSEMBLING AND ADJUSTMENTS

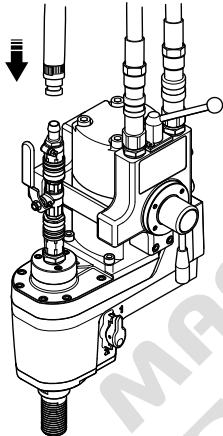
Connect the power unit

- The couplings should be wiped clean to reduce the risk of leakage before the hoses are fitted.
- The couplings are locked by turning the outer sleeve on the female coupling so that the slot moves away from the ball.



Connect the water cooling

- Connect the water hose to the incoming water connector.

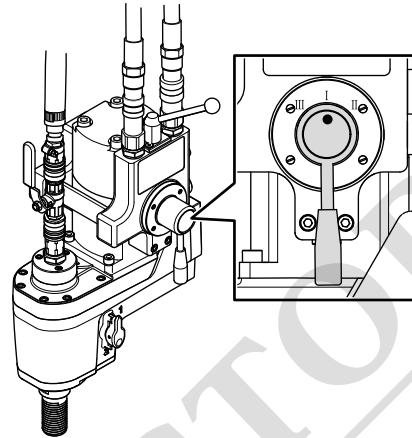


Fitting the drill bit

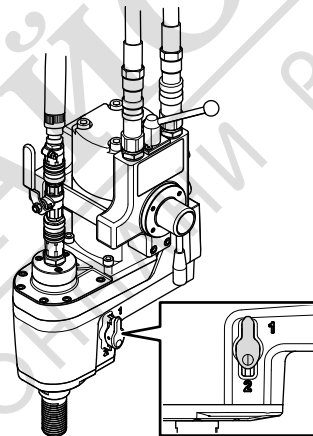
- Apply water-resistant grease to the thread of the drill bit.
- Attach the drill bit using the open-ended spanners.
- Before the machine is started, carefully check that the new bit is firmly attached.

Speed

- Set the right speed for the present diameter of the drill bit. See instructions in the section "Technical data".
- The hydraulic motor speed can be set in three positions. The motor speed can be changed during operation.



- The mechanical gearbox has two gears.



NOTICE! Changing mechanical gear may only be done when the machine is switched off. Otherwise there is a risk of damaging the gearbox.

STARTING AND STOPPING

Before starting



- Ensure you stand firmly. Keep people and animals well away from the working area.
- Check that all couplings, connections and hydraulic hoses are in full working order.

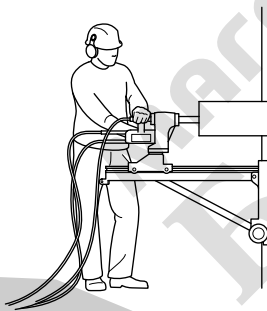
Make sure that:

- The machine and its equipment are correctly installed.
- The stand is properly fixed and that the drill is properly mounted on the stand.
- The drill is secured properly.
- Water cooling is undamaged and connected to the machine.
- Use suitable drill bits depending on whether water or dry drilling is being performed. In the event of uncertainty contact your dealer, your service workshop or an experienced operator.

Starting

NOTICE! Changing mechanical gear may only be done when the machine is switched off. Otherwise there is a risk of damaging the gearbox.

- Set the control for the hydraulic motor speed to position I.
- Turn on the water cooling.
- Start the rotation by turning the rotation control to ON (I).
- Carefully feed the drill bit in to obtain a good guidance.



Stopping



WARNING! The drill bit continues to rotate for a while after the motor has been switched off.

Do not stop the drill bit with your hands. Personal injuries can occur.

- Stop the rotation by setting the rotation control to OFF (0).
- Allow the motor to stop completely.
- Shut down the hydraulic unit.

MAINTENANCE

General



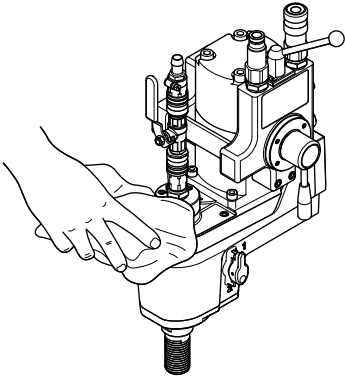
CAUTION! Inspection and/or maintenance should be carried out with the hydraulic hoses disconnected.

The lifetime of your machine can be extended considerably if it is used, cared for and maintained in the proper manner.

Cleaning



- Keep the machine and drill bit clean in order for drilling to be carried out safely.



- Keep the handle dry and free of grease and oil.
- Make sure to keep the connectors and pins clean. Clean with a rag or brush.

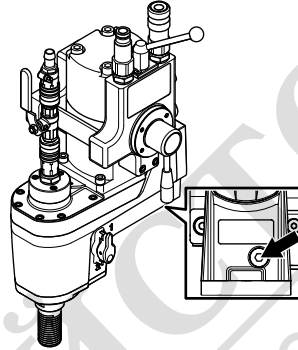
NOTICE! Do not use a high pressure washer to clean the machine.

Changing the gearbox oil



The oil should be replaced once a year or every 100 hours of operation. A container with sufficient oil quantity is supplied with the machine. Husqvarna Oil 220 is an environmentally adapted gear box oil for industrial use.

- Change the engine oil while the engine is hot.
- Place a suitable vessel to collect the oil in.
- Unscrew the oil plug and let the oil run out.



- Turn the machine with the oil hole facing upwards. Pour in a new bottle Husqvarna Oil 220.
- Wipe the threads and the oil plug clean and screw the plug back.

Daily maintenance

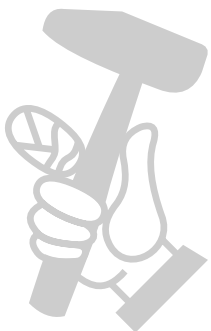


- Check that nuts and screws are tight.
- Clean the outside of the machine.
- Check that all couplings, connections and hydraulic hoses are in full working order.

Repairs



CAUTION! All types of repairs may only be carried out by authorised repairmen. This is so that the operators are not exposed to great risks.



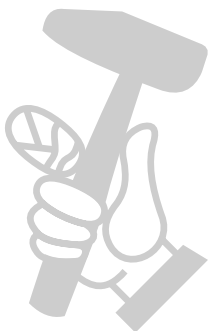
TECHNICAL DATA

DM 406 H

Motor	Hydraulic motor
Weight, kg	17
Gear box oil, type	STATOIL LoadWay Bio SE 220
Volume gear box oil, dl	3
Pressure max, bar	140
Flow, l/min	40
Max. diameter drill bit, mm/inch	650/25
Water cooling	
Spindle thread	G 1 1/4"
Water connector	G 1/4"
Water pressure - max, bar	8

Speed

Recommended drill bit size, mm	400-600	250-400	150-250	90-150	50-90	0-50
Recommended drill bit size, inch	16-24	10-16	6-10	4-6	2-4	0-2
Speed, rpm	120	230	340	580	980	1400
Mechanical gear	1	1	1	2	2	2
Speed, hydraulic motor	I	II	III	I	II	III



US WARRANTY STATEMENT

WARRANTY POLICY

All warranty claims will be determined after inspection at a designated facility. A Returned Goods Authorization is required for all warranty claims. Contact Husqvarna Customer Service Department at 800-845-1312 for an RGA. The customer must prepay the freight and absorb any labor expense required to return or replace a product submitted for warranty consideration. Husqvarna will pay return shipping expenses for repaired or approved replacement products.

EQUIPMENT

Equipment manufactured by Husqvarna is warranted to be free from manufacturing defects in normal service for a period of two (2) years from date of purchase by the original consumer purchaser. **Component manufacturers offer separate warranty periods. Call Technical Services at 800-288-5040 for complete information.**

Our obligation under this warranty is expressly limited to the replacement or repair at Husqvarna Construction Products North America, Olathe, Kansas 66061, or at a service facility designated by us, of such part or parts as inspection shall disclose to have been defective.

This warranty does not apply to defects caused by damage, unreasonable use, faulty repairs made by others than an approved Husqvarna servicing dealer, or defects caused by failure to provide reasonable maintenance, while in the possession of the consumer. Further, the warranty is void if the product, or any of its components, are altered or modified by the consumer purchaser, or if the product is used in an inappropriate manner or with tools not recommended by the manufacturer.

Exceptions: Drill motors - 3 months, Wall saws - 1 year, Power cutters - 3 months, DM230 - 1 year, DM225 - 3 months, Gyro systems - 1 year, CD40 system - 1 year, DS160 C - 1 year, Smart box - 1 year, CS2515 - 1 year, PP455 E - 1 year, PP345 E - 1 year, HP40 - 1 year.

Wear items: Filters, spark plugs, bearings*, belts, wheels** and wear pads.

*Except IntelliSeal™ system. **Except delamination.

