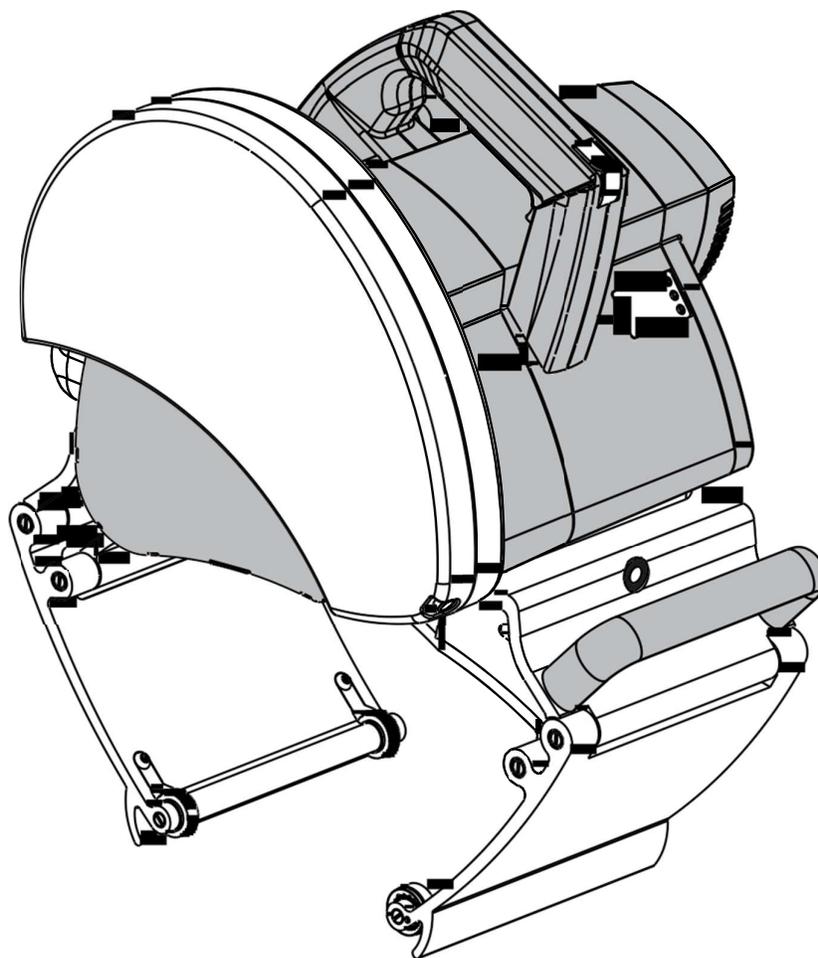


exact

EN Operating Instructions

Pipecut 280 Pro Series / 360 Pro Series / 450 Pro Series



The instructions are translated from original manual written in Finnish language available on web-site: exacttools.com/manuals

exact Patents: US 7,257,895, JP 4010941, EP 1301311, FI 108927, KR 10-0634113

Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series

Data of Exact PipeCut saw blades

1. Exact TCT saw blades are for cutting steel, copper, aluminium and all kind of plastics pipe materials. Exact TCT saw blades can be sharpened.
2. Exact CERMET saw blades are for cutting stainless steel, acid proof materials, steel, copper, aluminium and all kind of plastic pipe materials. Exact CERMET saw blades can be sharpened.
3. Exact CERMET ALU saw blades are for cutting all kind of aluminum and plastic pipe materials. Exact CERMET ALU saw blades can be sharpened.
4. Exact TCT P blades are for cutting all kind of plastic pipe materials. Exact TCT P saw blades can be sharpened.
5. Exact DIAMOND X discs are for cutting Cast or Ductile Iron only. Exact DIAMOND X discs cannot be sharpened.

280 Pro Series / 360 Pro Series / 450 Pro Series speed control recommendations:

Stainless steel I
Steel II
Cast-iron II
Plastics II

Declaration of Conformity

WE declare under our sole responsibility that the pipe cutting machines
Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series
Described under "Technical Data" are in conformity with the following standards or standardization documents:
IEC 62841-1:2014, IEC 62841-2-5:2014, EN 62841-1:2015, EN 62841-2-5:2014, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3

For more information, please contact Exact Tools at the following address:
The technical file is available at the address underneath:
The person authorized to compile the technical file:

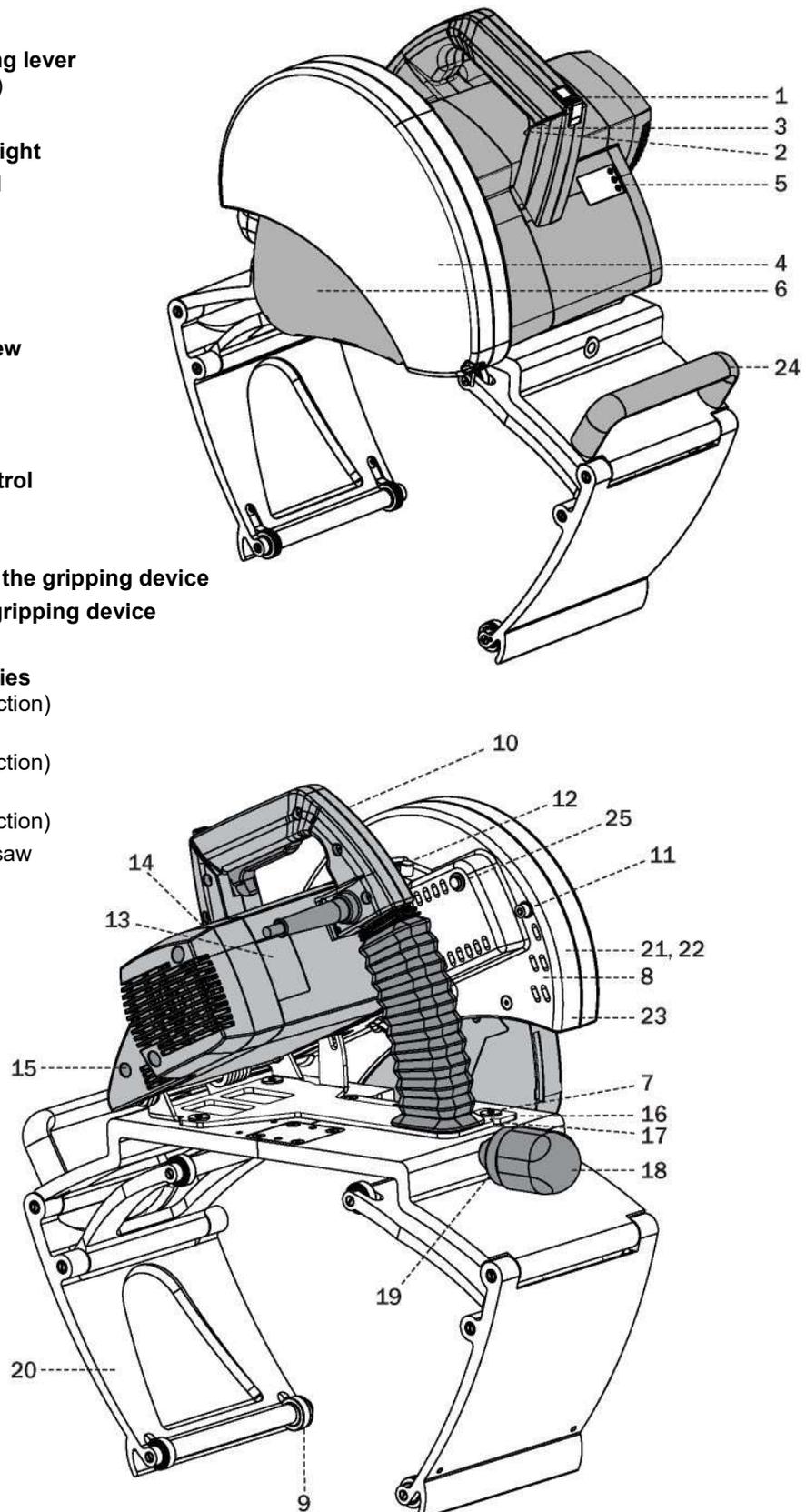
Seppo Makkonen, chairman of the board (seppo.makkonen@exacttools.com)
Helsinki, 01.02.2018



Seppo Makkonen, chairman of the board Exact Tools Oy
Särkiniementie 5 B 64
FI-00210 Helsinki, Finland

FIGURE A

- 1 Unlocking switch
- 2 Power switch
- 3 Power switch locking lever
(in front of the switch)
- 4 Blade guard cover
- 5 Overload indicator light
- 6 Moving blade-guard
- 7 Adjusting screws
- 8 Laser pointer box
- 9 Adjusting wheel
- 10 Handle
- 11 Disc protection screw
- 12 Lock pin
- 13 Plate
- 14 Motor unit
- 15 Rotation speed control
- 16 Adjustment arrow
- 17 Adjustment ring
- 18 Adjusting button of the gripping device
- 19 Locking nut of the gripping device
- 20 Gripping device
- 21 Laser pointer batteries
(inside the disc protection)
- 22 Battery seat cover
(inside the disc protection)
- 23 Laser Pointer
(inside the disc protection)
- 24 Handle to rotate the saw
- 25 Laser switch



Contents

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- 9. Connection to the mains power supply
- 9. Setting the pipe on supports
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- 10. Piercing the pipe wall
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- 12. Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series cutting result adjustment

- 13. Installing and changing the saw blade or Diamond X Disc

- 13. Maintenance and servicing instructions

- 14. Environment /Disposal

- 14. Guarantee/Guarantee conditions

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- 15. Extra equipment

- 15. Cutting depths

Definitions: Safety instructions

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in serious injury or in extreme cases a fatality



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or in extreme cases a fatality



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



NOTICE: Indicates a practice not related to personal injury which, if not avoided, may result in property damage.



Denotes risk of electric shock.

Exact PipeCut 280 Pro Series / 360 Pro Series pipe saws models

Voltage 1	230 V– 240 V / 50–60 Hz tai 100 V–120 V 50–60Hz
Power	2500 W– 230 V– 240 V / 15 A-100 V– 120 V
No-load speed	I (low) = 1900/min, II (high) = 2850 /min
Blade diameter	140 mm (5.6"), 165 mm (6.50"), 180 mm (7.2"), 190 mm (7.6")
Mounting bore	62 mm (2.44")
Weight	280 Pro Series 15,5 kg (34 lbs), 360 Pro Series 17,5 kg (38,6 lbs), 450 Pro Series 16,5 kg (40.7 lbs)
Range of use Ø 280 Pro Series	40 mm–280 mm (1.6"–11")
Range of use Ø 360 Pro Series	75 mm–360 mm (3.0"–16")
Range of use Ø 450 Pro Series	100 mm–450 mm (4"–17.5")
Max. Pipe wall 230V, steel, iron	20 mm / 0.78"
Max. Pipe wall 120V, steel, iron	12 mm / 0.47"
Protection class	IP / II
Spindle lock	Yes
Speed preselection	Yes
Constant electronic control	Yes
Overload Protection	Yes
Reduced starting current	Yes
Vibration	2,84 m/s ²
LpA (sound pressure)	90,6 dB(A)
KpA (sound pressure uncertainty)	3 dB(A)
LWA (acoustic power)	103,6 dB(A)
KWA (acoustic power uncertainty)	3 dB(A)

The values given are valid for nominal voltages [U] of 230/240 V. For lower voltage and models for specific countries, these values can vary.

Please observe the article number on the type plate of your machine. The trade names of the individual machines may vary. Only for power tools without reduced starting current: Starting cycles generate brief voltage drops. Interference with other equipment/machines may occur in case of unfavorable mains system conditions. Malfunctions are not to be expected for system impedances below 0.36 ohm.

Noise/vibration Information

The vibration emission level given in this information sheet has been measured in accordance with a standardized test given in EN60745.

Use ear protection!

Vibration level values (sum of vectors of three directions) are defined in accordance with standard EN60745: Vibration rate = 2.84 m/s², Uncertainty K = 1,5 m/s².

The vibration emission level given in this information sheet has been measured in accordance with a standardized test given in EN60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

! WARNING: The declared vibration emission level represents the main applications of the tool. However, if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organize work patterns.

! WARNING:

Pipecut Exact PipeCut 280 Pro Series/ 360 Pro Series / 450Pro Series

Use with generator or extension cords, their minimum requirements are as follows: Generator: minimum power of 3500 watts, if other electrical equipment is not used at the same time.

Extension cords 230 V: The maximum length - 25 meters. Cable cross section - not less than 2,5mm².

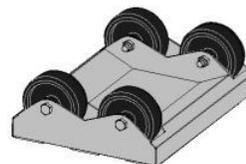
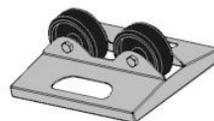
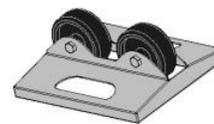
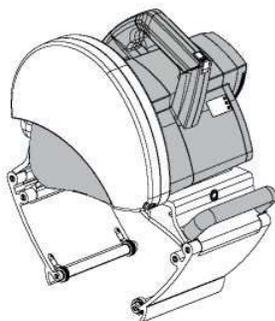
Extension cords 120 V: The maximum length – 82 Feet Extra Heavy Duty.

Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series pipe cutting systems

Package Contents

Please check that the package contains the following items:

1. Exact PipeCut System Shoulder Bag
2. Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series pipe saw
3. Pipe Cutting supports 1 + 2 pcs.
4. Operating instructions
5. Allen key 2 pc (5 mm and 2 mm) and disc regulation key.



General power tool safety instructions

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.

1 Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2 Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tool. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) 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.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock
- d) 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 and moving parts. Damaged or entangled cords increase the risk of electric shock
- e) Damaged cable should be changed in the authorized service center.
- f) 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.
- g) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock
- h) Take electric tools by isolated handle, because during the operation it can connect to flush conductor and own cable. If tool relates to voltage-carrying cables, voltage can pass to metal parts and it increases the risk of electric shock.

3 Personal safety

- a) 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.

- b) 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.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d) Do not operate tool, if its blade/discs are not in place.
- e) 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.
- f) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- g) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- h) Do not put your hands inside the pipe during the operation. Take care, that no one will push anything inside the pipe during the operation.
- i) Do not let your knowledge and permanent using of instrument to affect your care. You should use always the safety instructions. Uncaring work can induce the serious injuries in a second.
- j) Install the pipe securely. Pipe support are more reliable for holding hold the pipe than do it by hands.
- k) Do not put your hands to the waste disposal box (vacuum cleaner connection, extra equipment). Moving parts can cause injury.

4 Power tool use and care

- a) Do not force the power tool. Do not force the power tool. If the power tool is forced to be used, using is more dangerous and the quality of using is worse.
- b) 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.
- c) Disconnect the plug from the power source from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. If tool is broken, before operation it must be repaired. Most accidents occur as a result of poor maintenance of 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.
- h) Keep handles and other gripping surfaces dry and clean without oil and grease. Slim handles and other gripping surfaces using is dangerous for the power tool and they complicate tool's using in unexpected situations.
- i) Do not use dull or damaged Disc. Blade flange and mounting bolts are available for tool's optimum operating ja safety.

5 Service

Have your power tool serviced by a qualified repair Center using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Further safety instructions

The pipe saw must never be used in the following cases, if:

- There is water or another liquid, explosive gases or poisonous chemicals inside the pipe to be cut.
- The power switch is faulty.
- The power cable is faulty.
- The disc is bent.
- The disc is blunt or in poor condition.
- The plastic components are cracked or have parts missing.
- The gripper unit is not properly tightened around the pipe or if it is warped.
- The blade guard cover or moving blade guard has been damaged or removed from the machine.
- The locking mechanisms do not work properly (UNLOCK - SWITCH).
- The pipe saw has become wet.

When you use the saw, the following factors shall be considered:

- Fasten pipes to be cut properly so that the disc is not clamped between the ends of the pipes.
- Make sure that the pipe to be cut is empty.
- Make sure that the pipe is installed correctly.
- Make sure that the diameter and thickness of the disc are suitable for the saw and that the disc is suitable for rotation speed selected
- Never use help of third parties to fasten the disc, it should move freely.
- Check the parts of the disc protection.
- Never apply excessive force when using pipecut.
- Never use the pipecut to lift the pipe if it is fixed on the pipe.
- Avoid excessive load on the motor.
- Always follow safety and operation manual and applicable regulations.

Description of the work

Read all manuals and warnings carefully. If warnings and instructions are not complied with, the risk of electric shock, fire and/or severe damage to life may occur.

Intended Use

PipeCut 280 Pro Series / 360 Pro Series

PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series pipe saw is intended for use as a pip fitter's tool at the Job site.

PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series can only be used to cut round pipes, with a diameter of:

PipeCut 280 Pro Series 40 mm–280 mm (1.6"–11") or 360 Pro Series: 75 mm–360 mm (3"–16") or 450 Pro Series 100 mm–450 mm (4"–17.5") and maximum wall thickness of 20 mm (0.4") with steel and 50 mm (1.5") with plastics.

PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series pipe saw can be used to cut all normal pipe materials, such as steel, stainless steel, cast/ductile iron, copper, aluminum and plastic.

See the cutting depth table on page 15.

PipeCut 280 Pro Series / 360 Pro Series

Is not intended for use in industrial production. Use pipe holders to support the pipe being cut

Exact PipeCut 280 Pro Series / 360 Pro Series / 450 Pro Series pipe cutting system operation instructions

Before operation the tool

- Ensure that motor unit is in the upright position. The yellow mark of the UNLOCK SWITCH is visible.
- Check that the disc is correctly fitted, in good condition and suitable for the material to be cut.
- Ensure the pipe saw guide wheels rotate.
- Ensure the support wheels rotate.
- Check the operation of the lower blade guard.
- Ensure the pipe is empty.

Connection to the mains power supply

Ensure that the mains voltage is the same as indicated on the rating plate (Fig A/13). Connect the pipe saw to the power outlet only after having checked the above points first.

Setting the pipe on supports

Use the system supports when cutting pipes. This will ensure safe working and optimum results. Work on flat surface. Place the pipe on two supports so that the cutting point is between the supports. Place two more support under both ends of the pipe. Check that all support wheels contact the pipe (adjust if required e.g. with pieces of lumber) (Fig B/1). When cutting short and light weight pipes, place the supports so that the cutting point is outside supports (Fig B/2). Support the pipe with your left leg, if required. Proper arrangements will prevent the disc from jamming as the pipe is cut through.

Attaching the pipe saw to the pipe

Open the pipe saw's gripper unit enough to suit the diameter of the pipe by rotating the adjustment handle located at the rear of the saw (Fig C/1). Position the pipe saw on top of the pipe so that the edge of the lower blade guard is at the cutting mark. Fasten the pipe saw to the pipe by turning the gripper adjustment handle until the gripper grips firmly the pipe to be cut (Fig C/2). Lock the mechanism by turning the gripper safety (Fig C/3). Hold the pipe in place and ensure that pipe saw moves freely in the direction the pipe is fed. For sake of safety ensure the pipe saw leads are to the left of the pipe saw. The pipe saw is now ready for cutting.

FIGURE B /1

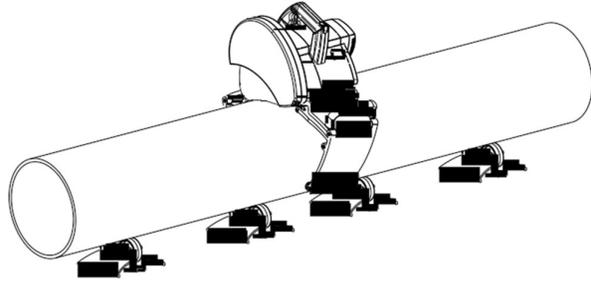


FIGURE B /2

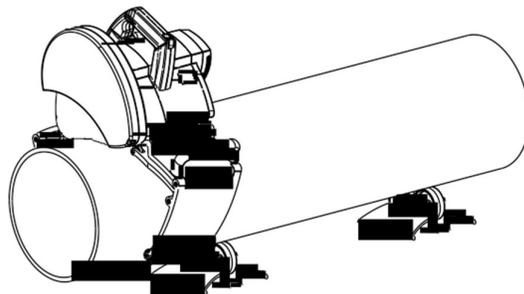
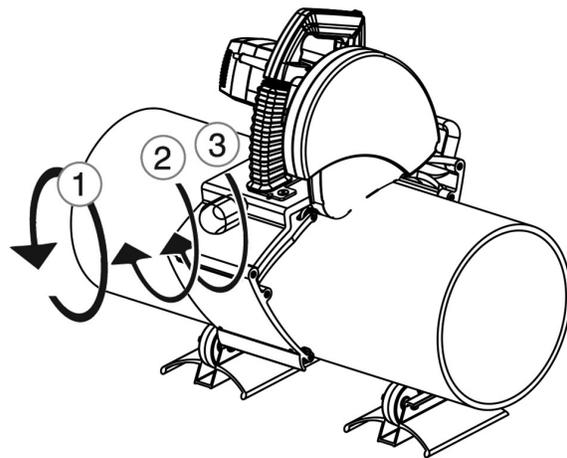


FIGURE C



Piercing the pipe wall

Grip the gripper firmly with your right hand and place your left foot on top of the pipe approximately 50 cm from the pipe saw. Turn the saw until it leans slightly forward (Figure I). When starting the motor, first of all release the power-switch locking lever (Fig G/1) and push the power switch all the way down (Fig G/2). Before starting to saw, wait until the disc reaches full speed. Pierce the pipe wall by pressing pipe saw operating handle downwards slowly and evenly until the blade/disc has cut through the pipe wall (at this stage the pipe must not rotate) and the motor unit is locked in the sawing position (Fig I /1). Look at the UNLOCK SWITCH during the piercing operation. When UNLOCK SWITCH is locked, i.e. the yellow mark disappears (Fig H), the pipe saw is locked in the sawing position, and you can safely start sawing around the pipe.

Sawing around the pipe

Start sawing by feeding the pipe saw forward and fix the pipe with your left foot (Fig F/2). After that release the pipe (remove your left foot from the pipe) and turn the pipe saw backwards, whereby the pipe will also be rotated backwards (Fig G). Start a new feeding movement, and feed continuously forward ca. 1/6 of the pipe's circumference. Repeat until the pipe is cut off (Fig H). Select the sawing / feeding speed as per the material and the thickness of the wall. Too high speed can damage the blade/disc, overload the pipe saw and give a poor sawing result.

When the pipe is cut off, push the UNLOCK SWITCH forward until the yellow mark is visible and the locking is released (Fig L/1). Now raise the motor unit to starting position (Fig I/2). Release the power switch (Fig I/3). When the blade/disc has stopped, open the gripper safety mechanism (Fig I/4) and disengage the pipe saw from the pipe by loosening the gripper adjustment handle (Fig I/5). Ensure that the moving lower blade-guard is lowered into safety position.

Should there be problems during piercing or sawing, abnormal sounds or vibrations due to which you have to interrupt sawing before the pipe is cut through, release the blade/disc by pushing the UNLOCK SWITCH forward until the UNLOCK SWITCH is released, and lift the motor unit up. Once the problem is cleared, start sawing again.

Never start the motor, when the motor unit is locked in sawing the position or teeth of the blade contact the pipe to be sawn. Ensure, that the blade/disc is not connected to pipe during the motor operating.

FIGURE D

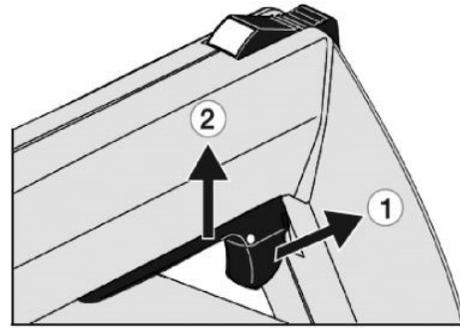


FIGURE E

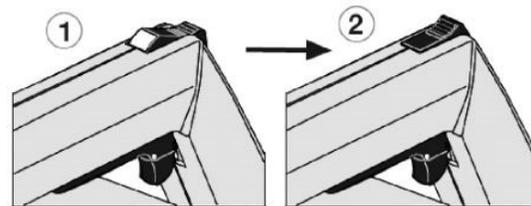


FIGURE F

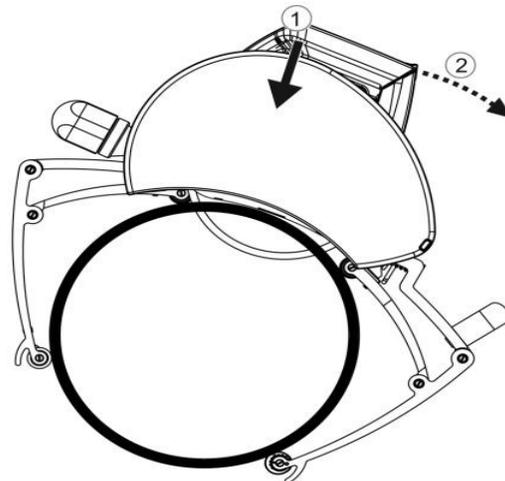
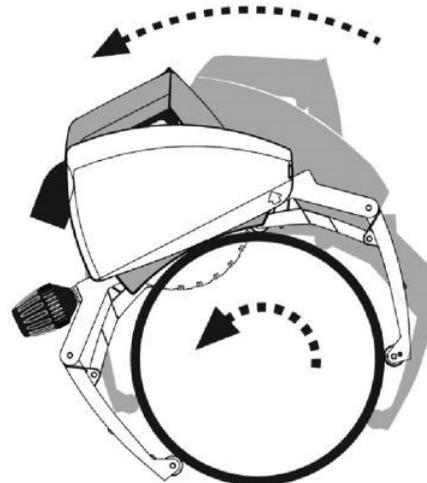


FIGURE F



Overload protector and rotation speed control

The saw has a two-speed rotation speed control (Fig A/15). When sawing stainless or acid-proof steel use the lower rotation speed I. When sawing other materials use the faster rotation speed II.

The saw also has an overload protector which switches the power off automatically in an overload situation. The motor part has a red indicator light (Fig A/5).

Meaning of indicator lights (FIGURE J)

GREEN If green light is on, the motor's temperature and power supply are within the norm.

Go ahead **You can continue using the tools.**

YELLOW If yellow light begins to flash, the motor and power supply must be cooled down.

Go ahead **You should slow down the cutting speed** (It's possible, that you are using a worn-out blade/disc)

RED If the red light begins to flash, this then automatically reduces the current motor power to the minimum. The Motor is still running, but the motor power is limited to a minimum, so that cutting process cannot be continued.

Go ahead **Press the motor switch and let it run freely (UNDER NO LOAD) until the green light is on.**

ATTENTION! If the yellow light begins to flash continuously, it indicates that the motor control unit has been damaged. You can finish the sawing, but the saw should take out for service. If the motor control unit is not repaired, the motor of the saw will be broken.

Improving possible misalignment of the cut

The cut is affected by many factors, e.g. the size of the pipe, the material, the wall thickness, the quality of the pipe's surface, the roundness, welded seams, blade condition, feed rate, operator's experience. For this reason, the saw may move to left or right cussing unperfect cut (see Fig K).

FIGURE H

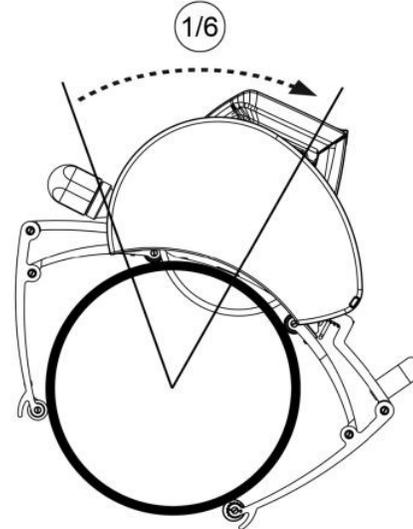


FIGURE I

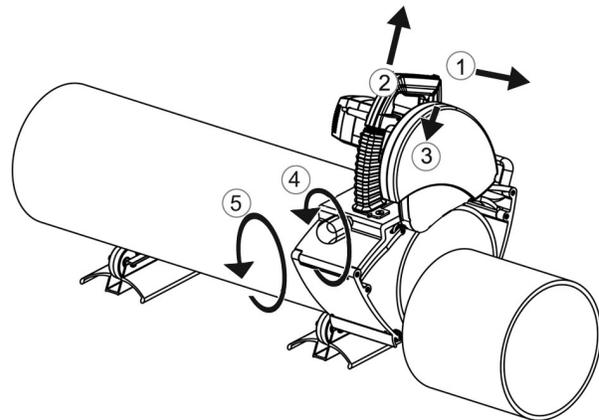
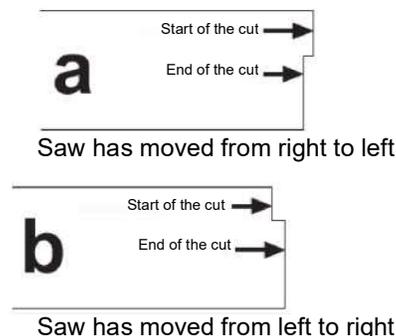


FIGURE J

	GO AHEAD
	WARNING
	RUN THE MOTOR UNTIL GREEN LIGHT IS ON

FIGURE K



Models 280 Pro Series / 360 Pro Series / 450 Pro Series cutting results adjustment

Within the gripping devices of these models there are eight control wheels. One of them is the adjustment wheel (FIGURE A/9). Please note that adjustment by this wheel concerns only the size of one pipe and material and the wheel may need to be adjusted again as the saw blade or disc wears out.

Adjust the wheel by releasing the locking screw (FIGURE L1) and turning the central part of the wheel CLOCKWISE or ANTICLOCKWISE to obtain the desired position (FIGURE L/2), lock the wheel again (FIGURE L/3). If the saw is moving from right to left (FIGURE K/a), turn the central part of the adjustment wheel so that "d" is smaller (FIGURE K/a). If the cutting is carried out according to Figure K/b, proceed as shown in Fig. K/b. It is recommended to lubricate the adjusting wheel periodically.

In these models the angle of the entire engine can be adjusted left or right. The laser beam can be used to ensure correct adjustment.

Adjustment stages

1. Mark the reference surface precisely on the pipe at an angle of 90 degrees in the longitudinal direction.
2. Place the saw on the pipe so that the red line of the laser is next to the reference value at an angle of 90 degrees. Tighten the grip to the normal tension level. Check if the laser line and set value are at the same level. FIGURE M/A describes the situation when the laser beam is at different level with the reference value.
3. Release the locking screws of the adjustment plate 1 and 2 (FIGURE M/b).
4. Adjust the engine part to the right or left as needed so that the laser beam and the value are in the same direction. Check they are in the same direction after adjustment.
5. Tighten the grip unit and check that the laser beam is in one direction with the reference value set for the pipe. FIGURE M/c describes a situation when the laser beam is at the same level as the reference value.
6. Tighten the locking screws of the adjustment plate very tightly.

CAUTION! The motion sensor located in the back of the adjustment plate does not report the exact size to adjust. The sensor shows only the direction of adjustment and the category of magnitude.

FIGURE L

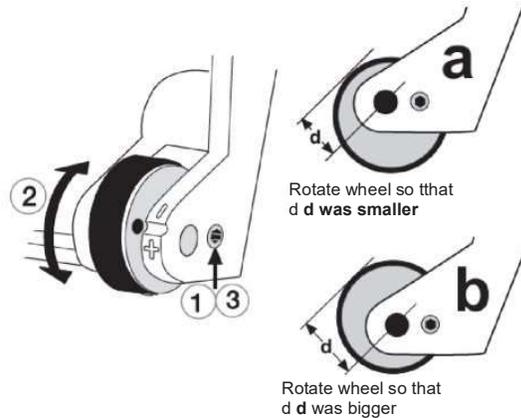


FIGURE M /a

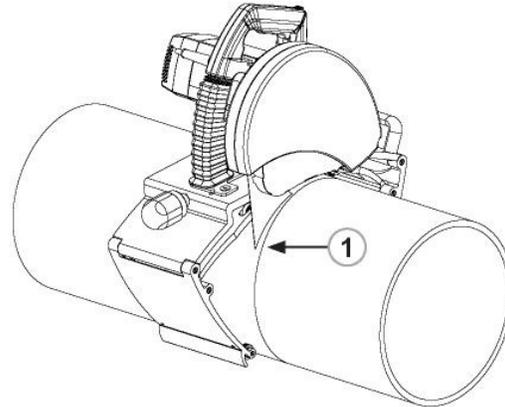


FIGURE M /b

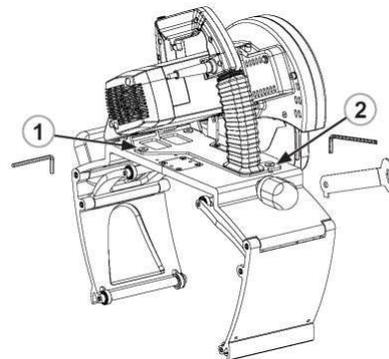
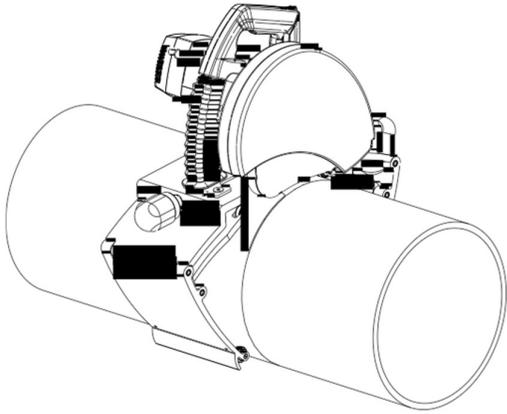


FIGURE M /c



CAUTION! If a part of the engine is regulated by the laser, the gripping device must be attached to the pipe with normal tension. Thus, you can be sure that the saw fastening corresponds to the standard condition of operation.

If you are not satisfied with the result of the work of your saw and you need to adjust it again then always start adjusting using the adjustment wheel.

Installing and changing the saw blade



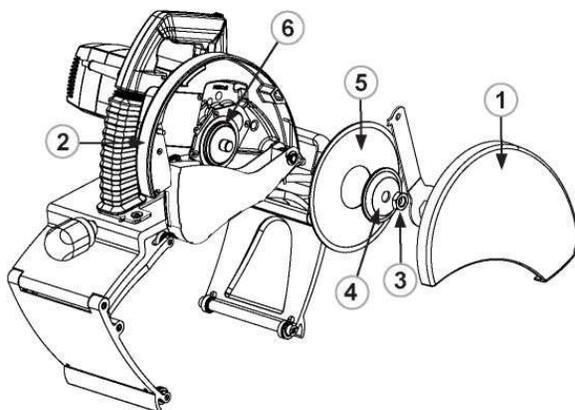
WARNING: To reduce the risk of injury, Turn the unit off and disconnect it from the power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

Remove the power plug from the socket. Check that the motor unit is locked in the upper position.

Remove the blade guard cover (Fig N/1) by opening the screw (Fig N/2). Press the spindle-lock button (Fig A/12) and simultaneously rotate the blade/disc by hand until the spindle-lock button drops a further distance of about 7 mm. Now the rotation of the blade/disc is prevented. Use the blade/disc key to open the blade/disc attachment bolt. Remove the securing bolt (Fig N/3), the washer (Fig N/4), the blade (Fig N/5)

Before installing a new blade/disc, check that both blade flange discs are clean. Place a new or sharpened blade/disc on the back flange (Fig N/6), so that the marked side of the blade/disc is facing outwards and the arrows on the blade/disc are facing in the same direction as the rotation direction markings on the inside of the blade/disc case. Ensure that the new blade/disc goes right to the bottom in the back blade/disc flange. Put the blade flange disc, the washer, and the securing bolt back in place. Press the spindle lock button and tighten the blade/disc securing bolt. Put the blade guard cover back in place and tighten the finger bolts

FIGURE N



Maintenance and servicing instructions

Remove the power plug from the socket before servicing or cleaning the pipe saw. All maintenance operations carried out on the pipe saw's electrical components must be carried out at an approved service center or engineer

Blade/Disc

Check the condition of the blade/disc. Replace a bent, blunt, or otherwise damaged blade/disc with a new one. Using a blunt blade or disc can overload the pipe saw's electric motor. When you notice that the blade or disc is blunt do not continue sawing with it, as the blade/disc may become so badly damaged that it will not be worth sharpening. A blade in sufficiently good condition can be sharpened a few times by a professional sharpening company. Diamond X Discs cannot be sharpened

Gripper unit

Clean the gripper unit regularly with compressed air. Lubricate the gripper's wheel axles (Fig O/1) and its joints (Fig O/2). Also, clean and lubricate the gripper's trapezoidal screw (Fig O/3) and the two worm screws on it (Fig O/4).

Blade guard

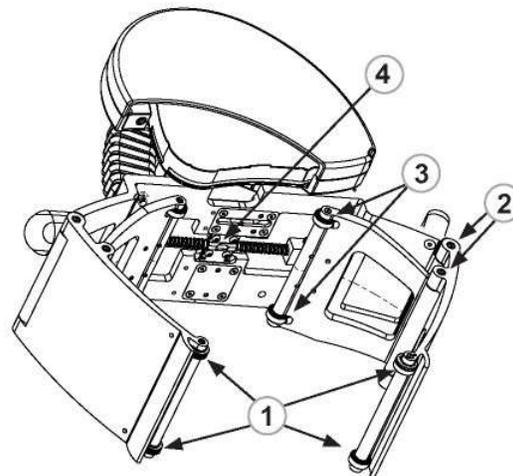
When you have sawn plastic pipes and then intend to start sawing metal pipes always clean the inside of the blade guards. Hot particles derived from sawing metal will burn plastic particles, which may release toxic smoke. Make it a rule to clean the blade guard regularly and pay special attention to keep the moving blade guard movement from becoming hampered. Lubricate the axis of the moving blade guard regularly.

As an extra equipment you can buy blade protection with connection for vacuum cleaner. Extra equipment See page 15.

Motor

Has air vents to keep engine clean.

FIGURE O



Plastic parts

Clean the plastic parts with a soft rag. Only use mild detergents. Do not use solvents or other strong detergents as they may damage the plastic parts and paint surfaces

Power cable

Check the condition of the power cable regularly. A faulty power cable should always be replaced at an approved service Center. Correct use and regular servicing and cleaning will ensure the continued operation of the pipe saw.

Environment

Separate collection. This product must not be disposed of with normal household waste. When your Exact PipeCut machine is worn out, do not dispose of it with normal household waste. This product must be recycled separately. Separate recycling of used products and packaging facilitate recycling and recovery of materials. Reusing of recycled materials helps prevent pollution of the environment. According to local regulations it is possible to deliver household appliances to municipal rubbish depositories or to the dealer when purchasing a new product.

Guarantee

Warranty terms valid from 01.01.2018. If the Exact PipeCut saw becomes unusable due to material or manufacturing defects within the Warranty Term at our discretion we will repair the Exact PipeCut Saw or supply an entirely new or factory reconditioned Exact PipeCut Saw at no charge.

The Exact Tools Warranty Term is for 12 months from date of purchase.

The Warranty is only valid if:

- 1.) Copy of a dated purchase receipt is returned to the Authorized Warranty Repair Center or has been uploaded to our website at the time of warranty registration.
- 2.) The Exact PipeCut Saw has not been misused.
- 3.) No attempt has been made by non-approved persons to repair the saw.
- 4.) The Exact PipeCut Saw has been used in accordance with the operating, safety, and servicing instructions provide in the manual.
- 5.) The Exact PipeCut Saw has been delivered to an Authorized Warranty Repair Center within the term of the warranty.

NOTICE! The Exact PipeCut Saw is to be shipped to the Authorized Warranty Repair Center freight prepaid. If the Exact PipeCut Saw is repaired under Warranty the return shipment will be made freight prepaid.

CAUTION!

The following items or services are excluded for Warranty claims:

- Saw Blades
- Carbon Brushes
- Gripping Unit Wheels
- Attachment Flange
- Pulling Flange Washer
- Normal Wear
- Errors Due to Misuse or Accident
- Water, Fire and Physical Damage
- Cables
- Adjustment of Adjustment Wheel
- If a wrong type of generator has been used as power source.

Exact Pipe Cut operation tips

Diamond blade can only be used for cutting cast or ductile iron pipes. This pipe material is not recommended to attempt to cut using to a saw blade of any type

Clean the inside of the blade guards after cutting plastic pipes.

The smaller pipe is easier to cut by turning the pipe manually either on the table or on the floor.

CAUTION! Turn the pipe towards yourself when you do it manually. Don't turn the pipe too fast.

Check the condition of the pipe regularly.

The cutting process is divided into two stages: first you need to cut the pipe wall, then cut around the pipe

Do not overload the saw while working without interruption. The pipecut will overheat and metal parts can become very hot. In this case, the motor and blades/discs may also become damaged. Use the pipecut system in accordance with it's duty cycle being continuous cutting 2.5 minutes, then let it cool under no load for 7.5 minutes.

Maintain a uniform feed speed rate. This increases the lifespan of the disc. For example a steel pipe thickness with an O/D diameter 170 mm (6") and wall thickness-5 mm (1/5"), the cutting time-is 15-20 seconds, and accordingly, with a diameter of 4" (110 mm) and wall thickness of 1/6" (4 mm) the cutting time of cast iron pipe-is 20 – 25 seconds.

Title

Factors Influencing the Blade/Disc lifespan:

- Pipe material
- Combination of disc type with cutting material
- Correct motor speed setting
- Pipe wall thickness
- Feed rate
- Smoothness of the pipe
- General user knowledge
- Cleanliness of the pipe
- Corrosion on pipe
- welded seam on the pipe
- Blade/Disc speed

Factors influencing straightness of cutting:

- Blade/Disc condition
- Pipe wall thickness
- Feed speed rate
- Uniformity of feed
- General user knowledge
- Cleanliness of the pipe
- Pipe circumference
- Too loose or tightened gripping device
- Too tightened blade/disc

**• Extra equipment 280 – 360 – 450 PS
Blade/Discs**

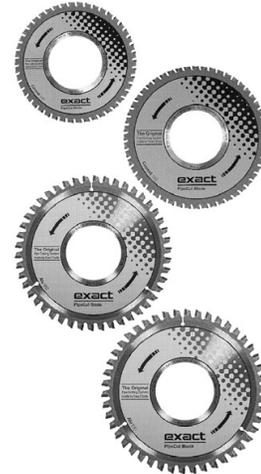
Exact TCT: Suitable for cutting steel and all kinds of plastic pipe material

Exact Cermet: Suitable for cutting stainless steel and acid proof materials, steel, copper, aluminium and all kind of plastic pipe materials.

Exact ALU: Suitable for cutting aluminum and all kinds of plastic.

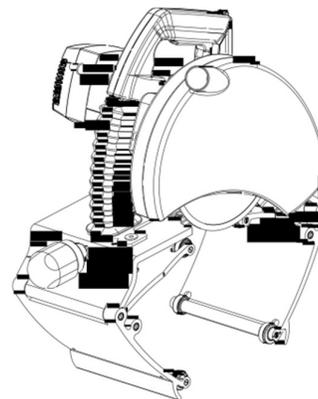
Exact Diamond: Suitable only for cutting cast and duct iron pipe materials. Also for cutting concrete lined cast iron pipes.

- Exact TCT 140
- Exact Cermet 140
- Exact ALU 140
- Exact Diamond X 140
- Exact TCT 165
- Exact Cermet 165
- Exact ALU165
- Exact Diamond X 165
- Exact Cermet 180
- Exact ALU 180
- Exact Diamond X 180
- Exact ALU 190



Protection cover with vacuum cleaner connection.

FIGURE P



Due to the continuous improvement of the products, the present manual may be modified. No changes will be reported separately.

**For more information check
www.exacttools.com**

Theoretical cutting depths

280 PS Max. pipe wall / mm, With pipe diameters 140, 165, 180, 190				
OD / mm	140	165	180	190
50	5,3	17,8	25,3	30,3
75	4,9	17,4	24,9	29,9
100	6,1	18,6	26,1	31,1
110	6,8	19,3	26,9	31,9
115	7,2	19,8	27,2	32,2
140	9,5	22	29,5	34,5
165	12	24,5	32	37
215	17,2	29,8	37,2	42,2
270	22,6	35,1	42,6	47,6
320	–	–	–	–
355	–	–	–	–

360 PS Max. pipe wall / mm, With pipe diameters 140, 165, 180, 190				
OD / mm	140	165	180	190
50	–	–	–	–
75	21,6	34,1	41,6	46,6
100	16,4	28,9	36,4	41,4
110	15,6	28,4	35,6	40,6
115	15,3	27,8	35,3	40,3
140	14,9	27,4	35	40
165	15,5	28	35,5	40,5
215	18	30,5	38	43
270	21,6	34,1	41,6	46,6
320	24,9	37,4	44,9	49,9
355	26,7	39,2	46,7	51,7

**Max. pipe wall thicknesses in different pipe materials,
which can be cut by Exact 280 Pro Series and Exact 360
Pro Series****European model 230V / 2500W**

Steel pipes	Max.pipe wall thickness 20 mm / 0.78"
Stainless steel pipes	Max.pipe wall thickness 20 mm / 0.78"
Iron pipes	Max.pipe wall thickness 20 mm / 0.78"
Any on plastic, aluminium, cooper	Pipe wall thickness of these pipes is not limited

USA model 120V / 15A

Steel pipes	Max.pipe wall thickness 12 mm / 0.47"
Stainless steel pipes	Max.pipe wall thickness 12 mm / 0.47"
Cast or Ductile Iron pipes	Max.pipe wall thickness 12 mm / 0.47"
Any Types of plastic, aluminium, cooper	Pipe wall thickness of these pipes is not limited

ATTENTION! Do not cut thicker pipe walls, than the above mentioned.

ATTENTION! Check the status and condition of the pipe before using the saw