

2100W METAL CUT OFF SAW



INSTRUCTION MANUAL

MODEL NUMBER BT-MC 355

AFTER SALES SUPPORT TEL: 1300 922 271 EMAIL: service.australia@einhell.com



Metal Cut Off Saw

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What your 1 year warranty means

Great care has gone into the manufacture of this product and it should therefore provide you with years of good service when used properly. In the event of product failure within its intended use over the course of the first 1 year after the date of purchase, we will remedy the problem as quickly as possible once it has been brought to our attention. In the unlikely event of such an occurrence, or if you require any information about the product, please contact us via our after sales support services, details of which can be found in this manual and on the product itself.

Welcome Section

Congratulations on choosing to buy a TAURUS® product.

All products brought to you by TAURUS[®] are manufactured to the highest standards of performance and safety, and, as part of our philosophy of customer service and satisfaction, are backed by our comprehensive 1 Year Warranty.

We hope you will enjoy using your purchase for many years to come.

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1. GENERAL SAFETY RULES

WARNING! Read all instructions Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1.Work area

- a. Keep work area clean and well lit. Cluttered and 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 tools 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 or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. 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.
- 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.
- 4. Power tool use and care
- a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- 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 and/ or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 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. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, 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.
- 5. Service
- a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- 6. Recommendation

We recommend that the tool always be supplied via a residual current device with a rated residual current of 30mA or less.

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2. SPECIAL SAFETY RULES

- For your own safety, read these safety instructions before you put the electric tool into operation. Familiarize yourself with the tools operating range and limits, as well as the special hazards involved in its operation.
- 2. Do not remove any safety devices.
- Avoid hazardous ambient conditions. Never use electric tools in damp or wet locations, and never expose them to rain. Keep your work area clean. Ensure that there is sufficient space at your place of work.
- Make the machine child-proof. Fit a pad-lock, deactivate the main switch or remove the start key.
- Do not overload your electric tool. Electric tools work better and safer when used within their quoted capacity range.
- 6. Secure your workpiece. Use clamps or a vice to hold the workpiece securely. This is safer than using your hand.
- 7. Take care of your electric tools. Keep mounted attachments such as cut-off wheels, blades and bits sharp and clean to enable you to work well and safely. Follow the maintenance regulations and the instructions for changing mounted attachments such as cut-off wheels, blades and bits. Check the electric tool's cable regularly and have it replaced by an authorized specialist if damaged. Check your extension cables regularly and replace them if damaged. Keep handles dry and free from oil and grease.
- 8. Do not climb on your electric tool. The tool may topple and cause an injury.
- 9. Check the electric tool for damage. Each time before reusing the electric tool, carefully check that the safety devices or any slightly damaged parts are working as intended. Check that the moving parts are in good working order, that they do not jam, and that no parts are damaged. All parts must be correctly assembled and meet all the conditions required to ensure that the electric tool works correctly. Unless otherwise stated in the operating instructions, damaged safety devices and parts have to be repaired or replaced by an authorized service center. Have damaged switches replaced by a customer service workshop.
- 10. Direction of operation: Make sure that the direction arrow points toward the workpiece.
- Never leave an electric tool unattended when it is running. Always switch off your electric tool before leaving it. Wait until the tool stops moving completely.
- 12. Connect your electric tool to earth. An electric tool with a PE conductor may only be connected to a matching socket-outlet.

- Keep your electric tools in a safe place. When equipment is not being used it should be kept in a dry, closed place out of children's reach.
- 14. Connect up a dust extraction system. If there are provisions for connecting up a dust extraction and collection system, make sure that such a system is connected and in use.
- CAUTION! The use of mounted attachments and accessories other than those intended may put you at risk of injury.
- 16. Do not lose these safety regulations.
- 17. CAUTION! Never use your cut-off machine unless it is fully assembled and installed as described in this manual. If you are not acquainted with the use of a cut-off machine, get advice from a supervisor, trainer or other qualified person.
- 18. Wear safety goggles, a visor, a breathing mask, an apron, safety shoes, long tight sleeves and gloves.
- 19. Use only recommended, reinforced cut-off wheels.
- 20. Securely tighten the shaft screw and all clamps before beginning your work.
- 21. Make sure that the shaft lock is released before starting.
- 22. Always leave the safety devices in position and make sure that they are in good working order.
- 23. Keep your hands away from the cut-off wheel.
- 24. Secure the workpiece carefully. It has to be securely clamped in a straight position in order to prevent it from moving and skewing while the cut is being made.
- 25. Never cut free-handed.
- 26. Never reach behind or near the cut-off wheel.
- Make sure that the cut-off wheel stops completely before you remove the workpiece, clamp in a new workpiece, or adjust the angle.
- Make sure that there are no foreign bodies on the cut-off wheel and flange.
- 29. When you fit a cut-off wheel, take care to tighten the shaft screw just enough to hold the wheel in place and prevent it from spinning. Overtightening the shaft screw may damage the cut-off wheel or cause it to break off the wheel flange.
- 30. Use only recommended cut-off wheels that are suitable for 3800/min or higher and are marked accordingly.
- Always check the cut-off wheel for cracks or other signs of damage. Replace cracked or damaged cut-off wheels immediately.
- 32. Use only the cut-off wheel flanges specified for your machine.
- 33. Before you switch on, make sure that the cut-off wheel does not touch the machine.

- 34. Allow the motor to reach top speed before you begin to cut.
- 35. After you have switched on, lower the cut-off wheel slowly until it comes into contact with the workpiece. Then carry out a smooth cut. Avoid causing the cut-off wheel to jump or chatter.
- 36. This will only lead to premature wear and result in poor cuts or a broken cut-off wheel.
- 37. Workpieces are best cut when their angle in relation to the cut-off wheel is kept as small a possible.
- 38. The number of cuts per cut-off wheel and their quality may vary considerably with the time taken to make the cuts. Fast cuts may accelerate wheel wear, but they also prevent discoloring of the workpiece and the formation of burr. This requires particular attention when cutting thinwalled tubes. Do not reduce the cutting speed toward the end of the cut, but cut right through to the end with full power. This will help to prevent the material from overheating and forming burr.
- 39. Always use the guard over cut-off wheel.
- 40. Never use the machine in the vicinity of combustible liquids or gases.
- 41. To avoid electric shocks, never use the machine in damp or wet locations, and never expose it to rain.
- 42. This electric tool was developed exclusively for cutting ferrous metals. Do not try to cut wood, brick or magnesium on this machine.
- 43. Do not stand in the cutting direction after a new cut-off wheel has been fitted. Allow the machine to run for approximately one minute before you begin with the cutting. If the cutting- off wheel has an invisible fracture or defect, it will burst in less than one minute.
- 44. Switch off the power supply before you carry out any maintenance or adjustment work on the machine.
- 45. Should any part of your machine be missing, damaged or out of order in any way, or should any electrical components fail to work correctly, switch off the machine and pull the power plug out of the socket-outlet. Replace the missing, damaged or defective part before you carry on with your work.
- 46. In the case of cut-off wheels with straightsided flanges, be sure to observe the recommend values for thickness and hole diameter.



Wear ear-muffs.

The impact of noise can cause damage to hearing.

Wear a breathing mask.

Dust which is injurious to health can be generated when working on wood and other materials. Never use the device to work on any materials containing asbestos!

Wear safety goggles.



Sparks generated during working or splinters, chips and dust emitted by the device can cause loss of sight.

Important!

When using equipment, a few safety precautions must be observed to avoid injuries and damage.

Please read the complete operating manual with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, give them these operating instructions as well.

We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information.

3. LAYOUT (FIG. 1/2)

- 1. Saw head
- 2. Handle
- 3. Adjustable guard for the cut-off wheel
- 4. Adjustable clamping face
- 5. Spindle
- 6. Hand crank
- 7. Stationary clamping face
- 8. Carry handle
- 9. Shaft lock
- 10. ON/OFF switch
- 11. Cut-off wheel
- 12. Table
- 13. Locking device
- 14. Overload switch
- 15. Vice
- 16. Lock screw
- 17. Lock screw
- b. Safety lock

4. ITEMS SUPPLIED

Metal cut-off saw

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- 2x Cut-off wheel
- Open-ended wrench
- Instruction Manual
- Quick Start Guide
- Warranty Card and Details
- Warranty Sticker

5. PROPER USE

The metal cut-off machine is designed for cutting metal commensurate with the machine's size.

The machine is to be used only for its prescribed purpose.

Any other use is deemed to be a case of misuse.

The user/operator and not the manufacturer will be held liable for damage and/or injuries of any kind that result from such misuse.

The machine is to be operated only with suitable cut-off wheels. It is prohibited to use any kind of saw blade made of HSS, HM, CV, etc.

To use the machine properly you must also observe the safety regulations, the assembly instructions and the operating instructions to be found in this manual.

All persons who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.

The same applies for the general rules of occupational health and safety.

The manufacturer shall not be liable for any changes made to the machine nor for any damage resulting from such changes.

Even when the machine is used as prescribed it is still impossible to eliminate certain residual risk factors. The following hazards may arise in connection with the machine's construction and design:

- Contact with the cut-off wheel in the uncovered cutting zone.
- Reaching into the cut-off wheel while it is running (injuries through cutting).
- · Kick-back of workpieces and parts of workpieces.
- Broken cut-off wheels.
- · Catapulting of damaged or cut-off wheels.
- · Damage to hearing if ear-muffs are not used as necessary.

6. TECHNICAL DATA

AC motor	240 V ~ 50 Hz
Power P	2100 W
Idle speed	n _o 3800 min ⁻¹
Cut-off wheel	Ø 355 x Ø 25.4 x 3.2 mm
Footprint	480 x 277 mm
Swiveling range	0 - 45°
Vice clamping range	max. 195 mm
Saw width at 90°	Ø 70 / 105 x 45 mm
Saw width at 45°	85 x 45 mm
Weight	17.5 kg

Sound and vibration

Sound and vibration values were measured in accordance with EN 61029.

L _{pA} sound pressure level	101 dB(A)
K _{pA} uncertainty	3 dB
wa sound power level	114 dB(A)
K _{wa} uncertainty	3 dB

Important!

The vibration value changes according to the area of application of the electric tool and may exceed the specified value in exceptional circumstances.

Keep the noise emissions and vibrations to a minimum.

Only use appliances which are in perfect working order.

Service and clean the appliance regularly.

Adapt your working style to suit the appliance.

Do not overload the appliance.

Have the appliance serviced whenever necessary.

Switch the appliance off when it is not in use.

Wear protective gloves.

7. BEFORE PUTTING THE MACHINE INTO OPERATION

- Unpack the metal cut-off machine and check it for damage which may have occurred in transit.
- The machine has to be set up where it can stand firmly, e.g. on a work bench, or it must be bolted to a strong base.
- All covers and safety devices have to be properly fitted before the machine is switched on.
- It must be possible for the cut-off wheel to run freely.
- Before you actuate the ON/OFF switch, make sure that the cut-off wheel is correctly fitted and that the machine's moving parts run smoothly.
- Before you connect the machine to the power supply, make sure the data on the rating plate is the same as that for your mains.

• Release the (fig.2/Item 13) locking device.

8. ASSEMBLY

Important. Always pull out the power plug before carrying out maintenance, resetting or assembly work.

8.1 Transport brace / carry-handle (Fig. 1 / 2)

- Push saw head (1) down with the handle (2) and pull out the locking device (13).
- Slowly raise the saw head (1).
 Caution! The resetting spring lifts the saw head (1) automatically. Therefore, do not simply let go of the handle (2) after cutting, but allow the saw head (1) to rise slowly by applying slight counterpressure.
- Fig.1 shows the saw head (1) in its upper position.
- For transporting, the saw head (1) should be locked in the lower position with the locking device (13).
- The saw is equipped with a carry-handle (8) to make it easier to transport.

8.2 Vice (Fig. 3)

Every workpiece has to be fastened in the vice (15) before it is cut.

- Flip up the top half of the nut (a).
- Pull out the spindle (5) far enough for the workpiece to be clamped between the clamping faces (4/7) of the vice (15).
 Note: You do not have to turn the spindle (5)when the top half of the nut (a) has been flipped up. The spindle (5) can be pulled out or pushed in to the exact amount required.
- Push forward the spindle (5) to the point where the clamping face (4) touches the workpiece.
- Flip down the top half of the nut (a) again so that the spindle (5) and both halves of the nut engage with each other.
- Turn the hand crank (6) to safely secure the workpiece in the vice (15).

8.3 Mitre cuts (Fig. 4)

The vice (15) can be swiveled from 0° to 45° in order to make mitre cuts.

- Slacken the two screws (16/17).
- Turn the clamping face (7) of the vice (15) to the required angle.
- Retighten the screws (16/17).
- When you clamp the workpiece, the front clamping face

 (4) will automatically swing into the correct position and
 align itself with the workpiece in order to ensure that the
 workpiece is safely fastened.

8.4 Adjusting the stop screw (Fig. 5)

The downward movement of the cut-off wheel can be

adjusted with the stop screw (18).

This is necessary to compensate wheel wear—as the cut-off wheel becomes smaller in diameter it would no longer be able to cut right through the workpiece.

- Undo the lock nut (19).
- Turn the stop screw (18) in or out as required.
- Lower the saw head (1) to check whether the cut-off wheel (11) reaches the clamping face (7) of the vice (15).
- Retighten the lock nut (19).

8.5 Replacing the cut-off wheel (Fig. 6 / 7/8)

- Pull out the power plug.
- Move the saw head (1) to its upper position of rest.
- Swing up the adjustable guard (3) for the cut-off wheel and hook it in place.
- Open the wing nut (20) and turn the side guard (21) for the cut-off wheel to the rear.
- Push the shaft lock (9) to the right and turn the cut-off wheel (11) slowly with the other hand until the shaft lock (9) engages.
- Use the supplied open-ended wrench (23) to turn out the shaft screw (22) in counterclockwise direction.
- Remove the shaft screw (22), washer, outer flange (24) and worn cut-off wheel (11).
- Install the new cut-off wheel in reverse order and tighten.
- **Important!** The flanges have to be thoroughly cleaned prior to mounting the cut-off wheel.
- Note the direction arrow!
- Use only recommended, reinforced cut-off wheels and take care to tighten the shaft screw (22) just enough to hold the wheel (11) securely in place and prevent it from spinning.

Overtightening the shaft screw (22) may damage the cut-off wheel.

- Turn the side guard (21) for the cut-off wheel back to the front and fasten in place with the thumb screw (20).
- Unhook the guard for the cut-off wheel, so that the adjustable guard (3) can be flipped forward again.

9. USING THE CUT OFF SAW

9.1 ON/OFF switch (Fig. 8)

- Press the safety lock (b), then press the ON/OFF switch (10) to turn on the saw. Keep the ON/OFF switch (10) pressed while you are sawing.
- To deactivate the cut-off machine again, let go of the ON/ OFF switch (10).

9.2 Overload cut-out (Fig. 2)

The motor is protected against overload by an overload cutout (14). If the rated current is exceeded, the overload cut-out (14) switches the appliance off. After a short cooling-off phase, the appliance can be switched back on by pressing the overload switch (14)

9.3 Making a cut (Fig. 9)

- Clamp the workpiece securely in the vice (15).
- Switch on the machine and wait for the motor to reach its top speed.
- Push down the saw head by the handle (2) until the cut-off wheel (11) makes slight contact with the workpiece.
- Move the cut-off wheel (11) smoothly through the material you want to cut.
 Important! Avoid causing the cut-off wheel to jump or chatter. This will only result in cuts of poor quality or a broken wheel.
- Press down the handle (2) firmly and evenly during the cutting operation. To prevent overheating of the workpiece and excessive formation of burr, you should not reduce cutting speed at the end of the cutting operation.
 Note: The number of cuts per cut-off wheel and their quality may vary considerably with the time taken to make the cuts. Fast cuts may accelerate wheel wear, but they also prevent discoloring of the workpiece and the formation of burr.

10.MAINTENANCE

- Caution! Pull out the power plug first.
- Remove dust and dirt regularly from the machine.
 Cleaning is best carried out with a fine brush or a cloth.
- Never use caustic agents to clean plastic parts.

11.ORDERING SPARE PARTS

Contact the After Sales Support on **1300 922 271** and quote the following data when ordering spare parts:

- Type of machine
- Article number of the machine
- Identification number of the machine
- Spare part number of the part required

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