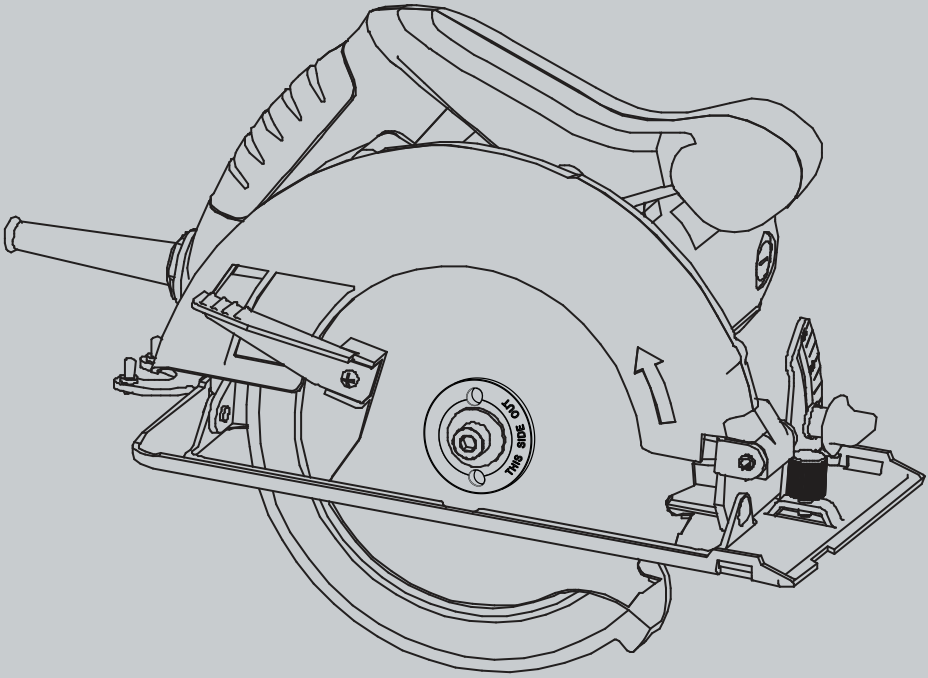
BLACK&DECKER®



CS1500

FIG.A

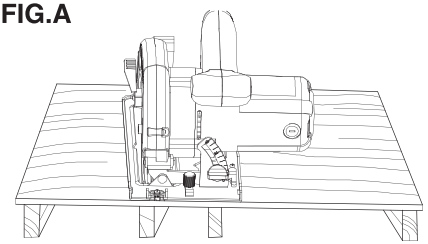


FIG.B

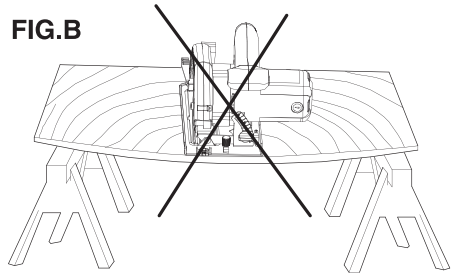


FIG.C

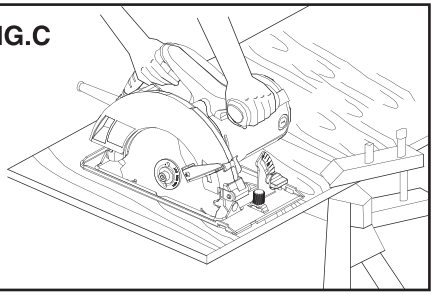


FIG.D

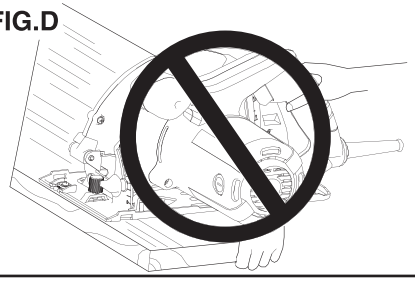


FIG.E

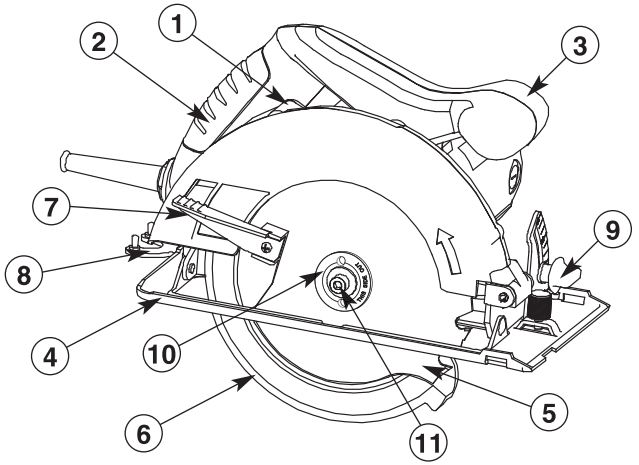


FIG.F

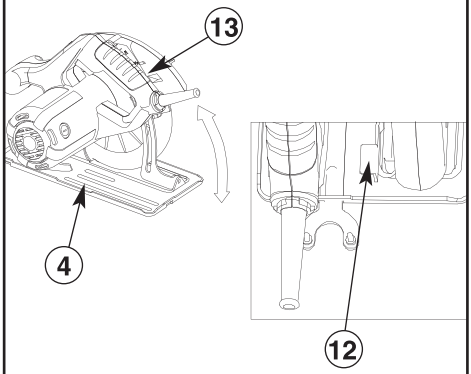


FIG.G

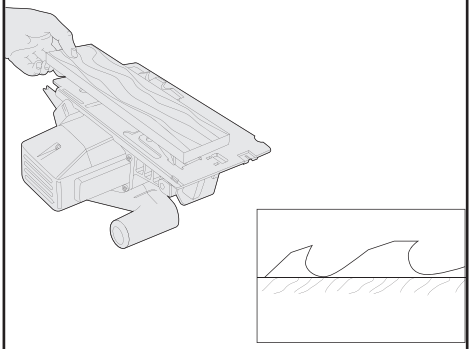


FIG.H

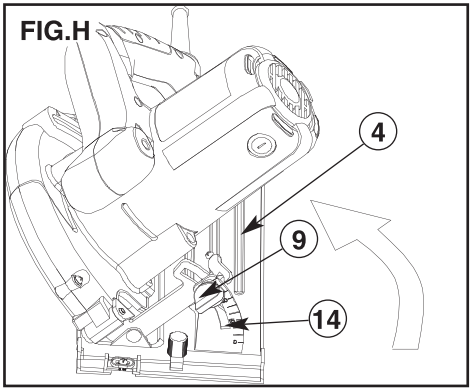


FIG.I

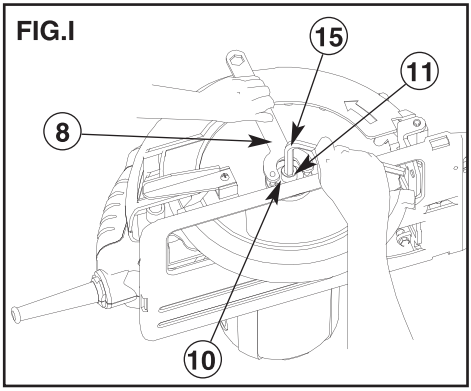


FIG.J

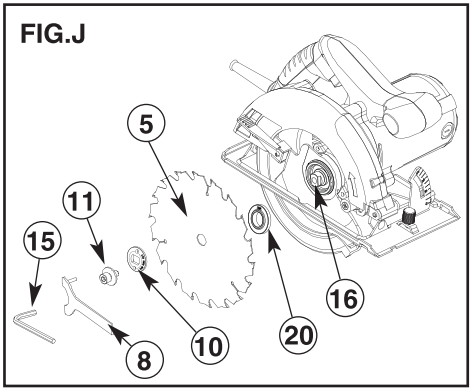


FIG.K

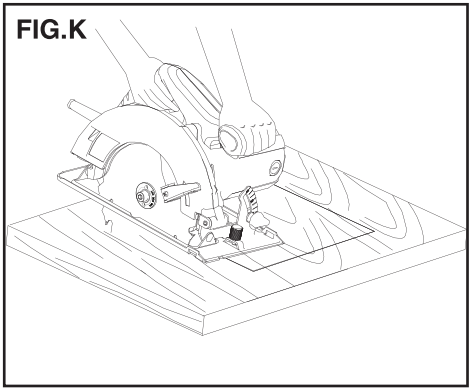


FIG.L

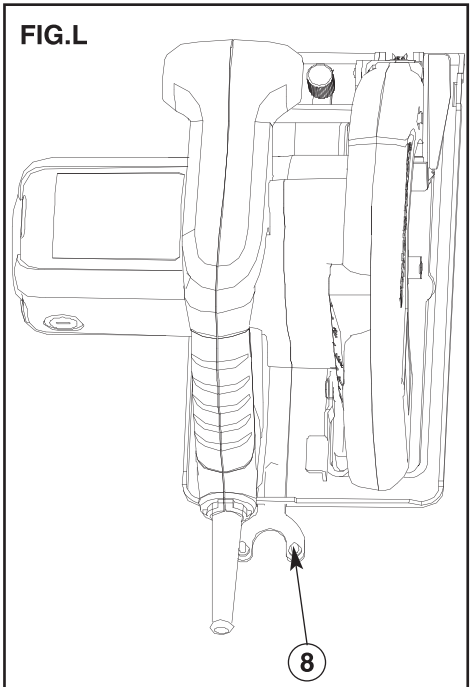
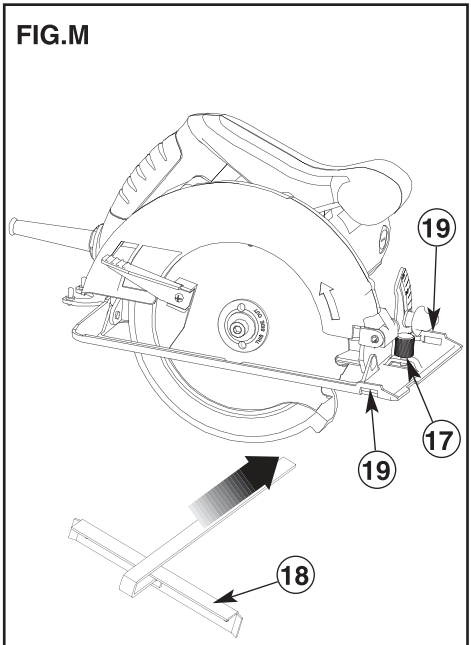


FIG.M



CS1500
1500W Circular Saw

TECHNICAL DATA

SPECIFICATION		IN	TW
VOLTAGE	V	220-240	110
INPUT/OUTPUT	W	1500/750	1500/750
NO-LOAD SPEED	/min	5500	5500
MAX. BLADE DIAMETER	mm	185	185
MAX. CUTTING DEPTH	mm	62	62

INTENDED USE

Your Black & Decker saw has been designed for sawing wood and wood products. This tool is intended for consumer use only.

GENERAL SAFETY RULES

Warning! Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAFE THESE INTRUCTIONS

SAFETY INSTRUCTIONS

General power tool safety warnings.

Warning! Read all safety warnings and all instructions. Failure to follow the warnings and instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference. 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.

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 tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. 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.

f. 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.

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. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising 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 a 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 toolin 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, 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. Electrical safety

This appliance is double insulated therefore no earth wire is required.Always check that the power supply corresponds to the voltage on the rating plate.

Warning! If the power cord is damaged, it must be replaced by the manufacturer, authorized Black & Decker Service Center or an equally qualified person in order to avoid damage or injury. If the power cord is replaced by an equally qualified person, but not authorized by Black & Decker, the warranty will not be valid.

7. Labels on tool

The label on your tool may include the following symbols:

V .....Volts
A.....Amperes
Hz .....Hertz
W .....Watts
min .....minutes
~ .....Alternating Current
⎓ .....Direct Current
n_0 .....No-Load Speed
⧈.....Class II Construction
⏚.....Earthing Terminal
⚠ .....Safe Alert Symbol
.../min .....Revolutions or Reciprocation per
.....Read instructions manual

- For tools intended to cut wood, instruction on correct use of the dust collection system.
- For tools intended to cut wood, instruction to wear a dust mask.
- Instrcution to only use saw blades recommended.
- Instruction to always wear hearing protection.

SAFETY INTRUCTIONS FOR ALL SAWS
CUTTING PROCEDURES

a. ⚠ **DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.

b. **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.

c. **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.

d. **Never hold piece being cut in your hands or across your leg.** Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

e. **Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.

f. **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.

g. **Always use blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

h. **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

FURTHER SAFETY INSTRUCTIONS FOR ALL SAWS

Causes and operator prevention of kickback:

- Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
- When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;

- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.
- Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a. Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.

NOTE For circular saws with 185 mm or smaller diameter blades, the words "with both hands" may be omitted.

b. When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

c. When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

d. Support large panels to minimise the risk of blade pinching and KICKBACK. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

e. Do not use dull or damaged blades. Unsharpened **or** improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

f. Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

g. Use extra caution when making a "plunge cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

SAFETY INSTRUCTIONS FOR CIRCULAR SAW
LOWER GUARD FUNCTION

a. **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

b. **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

c. **Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.

d. **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

SAFETY INSTRUCTIONS FOR CIRCULAR SAW

a. **Check guard for proper closing before each use. Do not operate the saw if guarddoes not move freely and enclose the blade instantly.** Never clamp or tie the guard with the blade exposed. If saw is accidentally dropped, guard may be bent. Check to make sure that guard moves freely and does not touch the blade or any other part, in all angles and depths of cut.

b. **Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use.** Guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

c. **Assure that the guide plate of the saw will not shift while performing the “plunge cut” when the blade bevel setting is not at 90°.** Blade shifting sideways will cause binding and likely kick back.

d. **Always observe that the guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

SAFETY GUIDELINES/DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting **Your Safety and Preventing Problems.** The symbols below are used to help you recognize this information.

⚠ **Danger!** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **Warning!** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **Caution!** Indicates a potentially hazardous

situation which, if not avoided, may result in minor or moderate injury.

⚠ **Caution!** Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

ADDITIONAL SAFETY RULES FOR CIRCULAR SAW

⚠ **Warning!** Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

⚠ **Caution!** Wear appropriate hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

- **Snagging the lower guard on a surface below the material being cut can momentarily reduce operatol control.** The saw can lift partially out of the cut increasing the chance of blade twist. Ensure there is sufficient clearance under the workpiece.
- **When necessary to raise lower guard manually, use the retracting lever.**
- **Keep the Blades Clean and Sharp.** Sharp blades minimize stalling and kickback. The use of dull and/or dirty blades can increase the saw loading causing the operator to push harder which promotes twisting.

⚠ **Caution! Laceration Hazard. Keep hands away from cutting areas.** Keep hands away from blades. Never place hands in front of or behind the path of the blade while cutting. Do not reach underneath work while blade is rotating. Do not attempt to remove cut material when blade is moving.

- **Support large panels.** Large panels must be supported as shown (Fig. A) in this manual to minimize the risk of blade pinching and kickback. Material supported only at the ends (Fig. B) will lead to blade pinching. When cutting operation requires the resting of the saw on the workpiece, the saw shall be rested on the larger portion and the smaller piece cut off.
- **Use only correct blades and blade assembly components when mounting blades.** Do not use blades with incorrect size holes. Never use defective or incorrect blade washers or bolts. Follow blade assembly procedures.
- **Adjustments. Before cutting be sure depth and bevel adjustments are tight.**
- **Support and secure the work properly.** Insure that the material to be cut is clamped (Fig. C) and solidly supported and balanced on a strong, stable and level work surface. Support the work so that the wide portion of the saw shoe is on the portion of the material that doesn't fall after the cut is made. Never hold cut off piece by hand (Fig. D). KICKBACK from blade pinch can result. Keep both hands on saw at all times.
- **Stay alert and exercise control. Keep body positioned to one side of blade**. Always maintain a firm grip and control of saw with both hands. Do not change hand grip or body position while saw is running. Take precaution to avoid injury from cut off pieces and other falling material during operation.

⚠ **Danger!** Release switch immediately if blade binds or saw stalls.

FEATURES (Fig. E)

1. On/Off Switch
2. Main Handle
3. Secondary Handle
4. Shoe
5. Saw Blade
6. Saw Blade Guard
7. Blade Guard Retracting Lever
8. Saw Blade Spanner Wrench
9. Bevel Adjustment Knob
10. Outer Washer
11. Blade Retaining Screw

Saw Blade Hex Wrench (Shown on Fig.I (15))
Rip Fence (Shown on Fig. M (18))
Inner Flange (Shown on Fig. J (20))

ASSEMBLY/ADJUSTMENT SET-UP

⚠ **Warning!** Always unplug saw from power supply before any of the following operations.

Adjusting the Depth of Cut (Fig. F and G)

The depth of cut should be set according to the thickness of the workpiece.

- Loosen the lever (12) to unlock the saw shoe.
- Move the saw shoe (4) into the desired position. The corresponding depth of cut can be read from the scale (13).
- Tighten the lever to lock the saw shoe in place.
- Set depth adjustment of saw such that one tooth of the blade projects below the workpiece as shown in Fig. G.

Adjusting the Bevel Angle (Fig. H)

This tool can be set to bevel angles between 0° and 45°

- Loosen the locking knob (9) to unlock the saw shoe.
- Move the saw shoe (4) into the desired position. The corresponding bevel angle can be read from the scale (14).
- Tighten the locking knob to lock the saw shoe in place.

Attaching the Blade (Fig. I and J)

- To prevent spindle rotation engage the protrusions of the spanner wrench (8) into the holes in the outer washer (10) as shown in Fig. I.
- Loosen and remove the blade retaining screw (11) by turning the hex wrench (15) counter- clockwise.
- Remove the outer washer.

- Check and re-assembly inner flange (20) on spindle (16). Insure the correct side of inner flange (20) faces outward and match saw blade.
- Place the saw blade (5) onto the inner flange (20), making sure that the arrow on the blade points in the same direction as the arrow on the tool.
- Fit the outer washer (10) on the spindle.
- Insert the blade retaining screw (11) into the hole in the spindle.
- Prevent spindle rotation by engaging the spanne wrench into the holes of the outer washer.
- Securely tighten the blade retaining screw by holding the spanner wrench and turning hex wrench clockwise to tighten the blade retaining screw.

  ⚠ **Warning!** Inner flange (20) respectively marked with “19” and “20”, match the saw blade (5) with 19mm or 20mm diameter arbor.

Removing the Blade

- To prevent spindle rotation, engage the protrusions of the spanner wrench (8) into the holes in the outer washer (10).
- Loosen and remove the blade retaining screw (11) by turning it counterclockwise using the hex wrench (15).
- Remove the outer washer (10).
- Remove the saw blade (5).

  ⚠ **Warning!** To reduce the risk of serious personal injury, read, understand and follow all important safety warnings and instructions prior to using tool.

GENERAL CUTS

Guard Against Kickback

With unit unplugged, follow all assembly, adjustment and set up instructions. Make sure lower guard operates. Select the proper blade for the material to be cut.

- Measure and mark work for cutting.
- Support and secure work properly (See Safety Rules and Instructions).
- Use appropriate and required safety equipment (See Safety Rules).
- Secure and maintain work area (See Safety Rules).
- With plug inserted and guard closed, make sure switch turns saw on and off.

  ⚠ **Warning!** It is important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury. Fig. C illustrates recommended hand position.

OPERATION

Switch

- To operate the tool, depress the trigger switch (1). The tool will continue to run as long as the trigger is depressed.
- To turn the tool off, release the trigger switch (1). There is no provision for locking the tool on, and the switch should never be locked on by any other means.

Sawing

⚠ **Warning!** To reduce the risk of serious personal injury,always hold the tool with both hands.

- Let the blade run freely for a few seconds before starting the cut.
- Apply only a gentle pressure to the tool while performing the cut.
- Work with the shoe pressed against the workpiece.

HINTS FOR OPTIMUM USE

- As some splintering along the line of cut on the top side of the workpiece cannot be avoided, cut on the side where splintering is acceptable.
- Where splintering is to be minimized, e.g. when cutting laminates, clamp a piece of plywood onto the top of the workpiece.

Pocket Cutting (Fig. K)

Pocket cutting is used to cut a hole in a piece of material without cutting from the side.

- Measure and mark work.
- Tilt saw forward and rest front of the shoe on material to be cut. Align so that cut will begin at the back of the drawn rectangle shown in Fig. K.
- Using the retracting lever, retract blade guard to an upward position, with the blade just clearing the material, start motor and gradually lower the saw into the material.

  ⚠ **Warning!** As blade starts cutting the material, release the retracting lever immediately.
- Never tie the blade guard in a raised position.
- When the shoe rests flat on the material being cut, complete the cut in forward direction.
- Allow the blade to come to a complete stop before lifting saw from material.
- When starting each new cut, repeat the above steps.

Wrench Storage (Fig. L)

The spanner wrench (8) can be stored on the saw shoe as shown in Fig. L.

Attaching and Removing the Rip Fence (Fig. M)

The rip fence is used to saw in a straight line parallel to the edge of the working piece.

Attaching

- Loosen the locking knob (17).
- Insert the rip fence (18) through the openings (19).
- Slide the rip fence into the desired position.
- Tighten the locking knob.

Removing

- Loosen the locking knob.
- Pull the rip fence out of the tool. Note: If you do not have a proper fitting fence, use a straight edge guide in contact with the edge of the shoe to improve accuracy of cut and reduce the possibility of binding

and kickback.

Accessories
The performance of your tool depends on the accessory used. Black & Decker accessories are engineered to high quality standards and designed to enhance the performance of your tool. By using these accessories you will get the very best from your tool.

⚠ **Warning!** The use of any accessory not recommended for use with this tool could be hazardous. Use only 185mm blades with 19mm or 20mm diameter arbor. Not to use any abrasive wheels.

MAINTENANCE
Your tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

⚠ **Warning!** Before performing any maintenance, switch off and unplug the tool.

- Regularly clean the ventilation slots in your tool using a soft brush or dry cloth.
- Regularly clean the motor housing using a damp cloth. Do not use any abrasive or solvent-based cleaner.

⚠ **Important!** To assure product Safety and Reliability, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

LUBRICATION
Black & Decker tools are properly lubricated at the factory and are ready for use.

PROTECTING THE ENVIRONMENT

Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.

Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

CS1500型
1500瓦特圓鋸機

技術參數

規格	CS1500-TW	
電壓	伏特	110
輸入功率/輸出功率	瓦特	1500/750
空載轉速	/分鐘	5500
最大鋸片直徑	毫米	185
最大鋸切深度	毫米	62

設計用途

本百得電鋸的設計用途是鋸切木材及木材製品。本工具僅供一般DIY 消費者使用。

安全總則

警告！請閱讀並理解手冊的全部內容。
如未能遵守下文列舉的任何內容，則可能會導致電擊、火災和/或嚴重的人身傷害。

請妥善保存本說明書

電器安全

警告！閱讀說明。沒有按照以下列舉的說明而使用或操作將導致觸電、著火和/或嚴重傷害。

請妥善保管所有警示與須知，以備將來參考使用。
在所有以下列舉的警告中術語“電動工具”指用電驅動（有線）電動工具或電池驅動（無線）電動工具。

1. **工作場地**

a. **保持工作場地清潔和明亮。**混亂和黑暗的場地會引發事故。
b. **不要在易爆環境，如有易燃液體、氣體或粉塵的環境下操作電動工具。**電動工具產生的火花會點燃粉塵或氣體。
c. **讓兒童和旁觀者離開後操縱電動工具。**分心會使你放鬆控制。

2. **電氣安全**

a. **電動工具插頭必須與插座相配。**不能以任何方式改裝插頭。需接地的電動工具不能使用任何轉換插頭。未經改裝的插頭和相配的插座將減少觸電危險。
b. **避免人體接觸接地表面，如管道、散熱片和冰箱。**如果你身體接地會增加觸電危險。
c. **不得將電動工具暴露在雨中或潮濕環境中。**水進入電動工具將增加觸電危險。
d. **不得濫用電線。絕不能用電線搬運、拉動電動工具或拔出其插頭。**讓電動工具遠離熱、油、銳邊或運動部件。受損或纏繞的電線會增加觸電危險。
e. **當在戶外使用電動工具時，使用適合戶外使用的外接電線。**適合戶外使用的電線將減少觸電危險。
f. **如果在潮濕的環境中使用電動工具，請使用漏電保護裝置（RCD）。**使用此裝置可降低觸電危險。

3. **人身安全**

a. **保持警覺，當操作電動工具時關注所從事的操作並保持清醒。**切勿在有疲倦、藥物、酒精或治療反應下操作電動工具。在操作電動工具期間精力分散會導致嚴重人身傷害。
b. **使用安全裝置。始終配戴護目鏡。**安全裝置，諸如適當條件下的防塵面具、防滑安全鞋、安全帽、聽力防護等裝置能減少人身傷害。
c. **避免突然起動。**確保開關在插入插頭時處於關閉位置，手指放在已接通電源的開關上，或開關處於接通時，插入插頭可能會導致危險。
d. **在電動工具接通之前，拿掉所有調節鑰匙或扳手。**遺留在電動工具旋轉零件上的扳手或鑰匙會導致人身傷害。
e. **手不要伸得太長。時刻注意腳下和身體平衡。**這樣在意外情況下能很好地控制電動工具。
f. **著裝適當。不要穿寬鬆衣服或佩帶飾品。讓你的頭髮、衣服和袖子遠離運動部件。**寬鬆衣服、配飾或長髮可能會捲入運動部件。
g. **如果提供了與排屑裝置、集塵設備連接用的裝置，則確保他們連接完好且使用得當。**使用這些裝置可減少碎屑引起的危險。

4. **電動工具使用和注意事項**

a. **不要濫用電動工具，根據用途使用適當的電動工具。**選用適當的電動工具會使你工作有效、更安全。
b. **如果開關不能接通或關斷工具電源，則不能使用該電動工具。**不能用開關來控制的電動工具是危險的且必須進行修理。
c. **在進行任何調節、更換附件或貯存電動工具之前，必須從電源上拔掉插頭和 / 或將電池盒脫開電源。**這種防護性措施將減少電動工具突然起動的危險。
d. **將閒置電動工具貯存在兒童所及範圍之外，並且不要讓不熟悉電動工具或對這些說明不了解的人操作電動工具。**電動工具在未經訓練的用戶手中是危險的。
e. **保養電動工具。**檢查運動部件的安裝偏差或卡住、零件破損情況和影響電動工具運行的其它條件。如有損壞，電動工具必須在使用前修理好。許多事故由維護不良的電動工具引發。
f. **保持切削刀具鋒利和清潔。**保養良好的有鋒利切削刃的刀具不易卡住而且容易控制。
g. **按照使用說明書以及打算使用的電動工具的特殊類型要求的方式，考慮作業條件和進行的作業來使用電動工具、附件和工具的刀頭等。**電動工具用作那些與要求不符的操作可能會導致危險情況。

5. **維修**

a. **將你的電動工具送交專業維修人員，必須使用同樣的備件進行更換。**這樣確保所維修的電動工具的安全性。

6. **電器安全**

本工具為雙重絕緣，因此無須接地線。使用前，切記檢查並確保電源電壓與銘牌上的使用電壓相符。

警告！為防止財產損壞或人身傷害，如果電源線損壞，必須由廠商、百得授權服務中心的人員負責更換。如果電源線被未經百得授權的人員更換，將導致工具保固失效。

7. 工具上的符號

本工具上可能有如下符號：

V	.....	伏特
A	.....	安培
Hz	.....	赫茲
W	.....	瓦特
min	.....	分鐘
∼	.....	交流電
⎓	.....	直流電
n_0	.....	空載速度
⧈	.....	II 級結構
⏚	.....	接地終端
⚠	.....	安全警告標誌
.../min	.....	每分鐘轉數或往復次數
	.....	請參閱使用說明書

- 對於鋸切木材的工具，請注意說明書中有關吸塵系統的正確使用。
- 對於鋸切木材的工具，請注意說明書中佩戴防塵面罩的內容。
- 僅可使用說明書中推薦的鋸片。
- 請務必佩戴聽力防護裝備。

電鋸通用安全守則
鋸切順序

a. ⚠ **警告！雙手要遠離切割區域和鋸片。第二隻手要放在副手柄或馬達殼上。**如果雙手持鋸，就不會被鋸到。

b. **不要伸到工件下面。**在工件下面，防護裝置無法提供保護。

c. **根據工件厚度調整切割深度。**在工件下面能夠看到的部分應該小於一個完整鋸齒的長度。

d. **嚴禁手持待切割工件，或把工件橫在腿上。**把工件可靠地固定在穩定的平臺上。妥善支撐工件非常關鍵，可以減少身體暴露、卡鋸或失控。

e. **在工具可能接觸隱藏電線或自身導線時，要握住絕緣手柄表面。**接觸“帶電”導線將導致電動工具暴露的金屬部分“帶電”，並且使操作人員觸電。

f. **縱割時，一定要使用縱解規或直邊導向規。**這能夠提高鋸割準確性，並且降低卡鋸的幾率。

g. **確保使用的鋸片具有正確尺寸和形狀的軸心孔。**安裝與硬體不匹配的鋸片會離心運行，造成失控。

h. **嚴禁使用損壞的或不正確的鋸片墊片或螺栓。**鋸片墊片和螺栓為您的電鋸專門設計，可以達到最佳性能以及最安全的運行狀態。

所有電鋸的高級安全指南

反衝原因以及操作人員對反衝現象的預防措施：

- 反衝是鋸片被夾住、卡住或未對準時的突然反應，它可導致失控的工具突然彈起，離開工件，並且衝向操作人員。
- 當鋸片被封閉的鋸縫緊緊夾住、卡住時，鋸片停止轉動。馬達的反作用力驅使工具迅速後撤，衝向操作人員。
- 如果鋸片在鋸縫中扭曲或偏離鋸縫，鋸片背部的鋸齒會掘進木材的上表面，導致鋸片攀出鋸縫，朝後彈向操作人員。
- 反衝是由於使用不當和/或不正確的操作程式或條件造成的。適當採取下列預防措施，可避免反衝現象：

a. **雙手緊握工具並調整好身體和手臂的位置以確保您能夠承受反衝力。**保持身體在鋸片的一側，而非成一直線。反衝能引起鋸片後彈，但是只要採取適當的預防措施，操作人員可以控制住反衝力。
注意：對於使用直徑小於等於185毫米鋸片的圓鋸機，“使用雙手”的說法可以忽略。

b. **如果鋸片卡住，或由於任何原因與鋸縫干涉，那麼鬆開扳手開關，保持電鋸不動，直至鋸片在材料中完全停止。**在鋸片還在運轉時，切勿嘗試從加工件中取下工具或向後拔出工具，否則有可能出現反衝現象。仔細觀察卡鋸的原因並採取糾正措施。

c. **如果需要在加工件中重新啟動工具繼續切割，請把鋸片與鋸縫中心對準，檢查並確保鋸齒沒有卡在材料裏。**如果鋸片被卡住，那麼在重新啟動工具時，鋸片會上跳或反衝。

d. **支撐好大型板材，將卡鋸和反衝的風險最小化。**大型板材常常會由於自身重量而有下陷傾向。因此必須在板材下面靠近切割線的兩側以及靠近板材邊緣的兩側提供支撐物。

e. **請勿使用鈍的或損壞的鋸片。**不鋒利或鋸路未適當調整的鋸片會產生狹窄鋸縫，引起過度摩擦、卡鋸及反衝。

f. **在鋸割前，鋸片深度調節與角度調節器必須牢固上緊。**如果鋸割過程中鋸片調節器移動，則會造成卡鋸及反衝。

g. **“插切”已有的牆體或是其他死角時, 要特別小心注意,** 鋸片可能會鋸到能夠引起反衝的物體。

圓鋸機安全指南
下護罩的功能

a. **每次使用前，要檢查下護罩是否能夠正確閉合。**如果下護罩不能自由運動並即時關閉，切勿使用電鋸。禁止把下護罩夾住或綁到打開位置。如果不小心跌落電鋸，下護罩可能彎曲。用收縮杆升起下護罩，確保在鋸割的任何角度、任何深度，下護罩都能夠運動自由，並且碰不到鋸片或任何其他部件。

b. **檢查下護罩彈簧的狀況。**如果護罩和和彈簧的運行情況不良，必須在使用前進行維修。部件損壞、樹脂堆積或鋸屑堵塞都會造成下護罩反應遲鈍。

c. **只有在特殊鋸割如“插切”或“複合切割”時，才允許手工收起下護罩。**用收縮杆升起下護罩，鋸片一進入材料，即放開下護罩。所有其他鋸割情況下，下護罩均應自動運行。

d. **把電鋸放到工作臺或地板上之前，切記觀察下護罩是否蓋住鋸片。**未保護的慣性運動的鋸片會導致電鋸後退，切割所有觸及之物。應該清楚開關鬆開後鋸片停止所需要的時間

圓鋸機安全指南

a. **每次使用前，要檢查護罩是否能夠正確閉合。**如果護罩不能自由運動並即時關閉，切勿使用電鋸。禁止把護罩夾住或綁綁住，使鋸片外露。如果不小心跌落電鋸，護罩可能彎曲。請檢查並確保在鋸割的任何角度、任何深度，護罩都能夠運動自由，並且碰不到鋸片或任何其他部件。

b. **檢查護罩歸位彈簧的狀況。如果護罩和彈簧的運行情況不良，必須在使用前進行維修。**部件損壞、樹脂堆積或鋸屑堵塞都會造成護罩反應遲鈍。

c. **進行鋸片傾角非90°的“插切”時，請確保護罩板不會移動。**鋸片側向移動會導致卡鋸，而且很可能造成反衝。

d. **把電鋸放到工作臺或地板上之前，切記觀察下護罩是否蓋住鋸片。**未保護的慣性運動的鋸片會導致電鋸後退，切割所有觸及之物。應該清楚開關鬆開後鋸片停止所需要的時間

安全準則/定義

關鍵問題是您必須閱讀並理解本手冊內容。手冊的編製目的是**保護您的安全並預防事故。**下列符號有助於您識別相關資訊。

⚠ **危險！**表示緊急的危險情形，如不加以阻止，將導致死亡或嚴重傷害。

⚠ **警告！**表示潛在的危險情形，如不加以阻止，可能導致死亡或嚴重傷害。

⚠ **注意！**表示潛在的危險情形，如不加以阻止，可能導致輕度或中度傷害。

⚠ **注意！**使用時不帶安全警示標誌，表示潛在的危險情形，如不加以阻止，可能導致財產損壞。

圓鋸機安全附加指南

⚠ **警告！**使用本工具可能會產生和/或散發灰塵，從而造成嚴重的永久性呼吸系統傷害或其他傷害。切記使用經NIOSH/OSHA認可的、適合防塵的呼吸保護裝置，並且使塵粒遠離臉和身體的方向

⚠ **注意！**使用過程中，請佩戴合適的聽力保護裝置。在某些情況下使用時，本產品發出的噪音可能導致聽力損傷。

- **如果下護罩緊在待鋸工件下面的表面上，會暫時性降低控制能力。**電鋸會部分地從工件中升起，有可能扭曲鋸片。請確保工件下面有足夠的間隙。
- **需要手動抬起下護罩時，請使用收縮杆。**
- **保持切割刀具鋒利乾淨。**鋒利的刀鋸片會降低卡鋸或反衝的風險。如果使用遲鈍的和/或髒汙的鋸片，會增加鋸片負載，使操作人員增加推力，從而增加鋸片扭曲的風險。

⚠ **警告：割傷風險。請雙手遠離鋸割區域。**雙手遠離鋸片。鋸切時，切勿將雙手置於鋸片前後的行進路線上。鋸片仍在轉動時，禁止將手伸到工件下面。鋸片未靜止時，不得試圖清除鋸屑。

- **支撐好大型板材。**必須按照本手冊（圖A）所示，支撐大型板材，以盡可能降低卡鋸及反衝的風險。僅在材料兩端支撐板材時（圖B），會導致夾鋸。鋸割作業時，如果必須將電鋸停靠在工件上，請將電鋸停靠在工件較大的部分上，將較小的部分鋸掉。
- **安裝鋸片時，鋸片及安裝部件必須正確。**鋸片軸孔尺寸不正確時，禁止使用。不得使用損壞的或不正確的鋸片墊片或螺栓。請按鋸片安裝順序操作。
- **調整。鋸割前，請確保鋸片深度和角度調整正確。**
- **正確支撐並牢固固定工件。**確保待鋸材料正確夾持（如圖C所示），並且牢固、平衡地支撐在堅固、穩定且水準的工作面上。支撐時，應避免使鋸腳板的寬邊位於鋸切後會掉落的部分上。嚴禁用手扶持將要鋸掉的部分（圖D），否則會導致卡鋸與反衝。雙手始終不離開電鋸。
- **保持警惕並注意控制。**身體應處於鋸片的一側。始終雙手緊握並控制電鋸。電鋸運轉時，不得換手或改變身體位置。注意避免鋸屑或其他掉落材料可能造成的損傷。

⚠ **危險！**如果鋸片卡住或電鋸失速，請立即鬆開開關。

部件名稱（圖E）

1. On/Off開關
2. 主手柄
3. 副手柄
4. 鋸腳板
5. 鋸片 (包裝內未提供, 需另外訂購)
6. 鋸片護罩
7. 鋸片護罩收縮杆
8. 鋸片活動扳手
9. 角度調整旋鈕
10. 外墊圈
11. 鋸片固定螺絲
    鋸片六角扳手（見圖I(15)）
    靠尺（見圖M（18））
    內法蘭（見圖J（20））

組裝/調節設定

⚠ **警告！**在進行如下任何操作前，請務必拔下電鋸電源插頭。

鋸切深度調整步驟（圖F和圖G）

應根據工件厚度調整鋸切深度。

- 鬆開撥杆（12），釋放鋸腳板。
- 將鋸腳板（4）移動到所需位置。從刻度尺（13）上可以讀出相應的深度。
- 上緊撥杆，把鋸腳板鎖定到位。
- 深度設定後，鋸片的一個鋸齒應能夠從工件下面伸出，如圖G所示。

調整角度（圖H）

本工具的角度範圍為0°至45°。

- 鬆開鎖定旋鈕（9），釋放鋸腳板。
- 將鋸腳板（4）移動到所需位置。從刻度尺（14）上可以讀出相應的角度角度。
- 上緊旋鈕，把鋸腳板鎖定到位。

鋸片安裝步驟（圖I和圖J）

- 為防止軸心轉動，請把活動扳手（8）的凸起插入外墊圈（10）的孔中，如圖I所示。
- 逆時針轉動六角扳手（15），鬆開並取下鋸片固定螺絲（11）。
- 取下外墊圈。
- 在軸心（16）上檢查並重新安裝內法蘭（20）。請確保內法蘭（20）正確的一側朝外並與鋸片配合。
- 將鋸片（5）置於內法蘭（20）上，確保鋸片上箭頭所指方向與工具上的箭頭方向一致。
- 把外墊圈（10）安裝到軸心上。
- 把鋸片固定螺絲（11）插入軸心的孔中。
- 把活動扳手插入外墊圈的孔中，防止軸心轉動。
- 握住活動扳手，同時順時針旋轉六角扳手，緊固鋸片固定螺絲，將螺絲鎖緊。

⚠ **警告！**內法蘭（20）分別標有“19”和“20”，分別與鋸片（5）軸孔直徑19毫米或20毫米相匹配。

鋸片拆卸步驟

- 為防止軸心轉動，請把活動扳手（8）的凸起插入外墊圈（10）的孔中。
- 逆時針轉動六角扳手（15），鬆開並取下鋸片固定螺絲（11）。
- 取下外墊圈（10）。
- 取下鋸片（5）。

⚠ **警告！**為降低嚴重人身傷害風險，在使用本工具前，請閱讀、理解並遵守所有重要安全警告與說明。

普通鋸切作業

防止反衝

拔下工具電源插頭，按照所有安裝、調節與設定說明操作。確保下護罩正常工作。為待鋸材料選擇合適的鋸片。

- 測量並劃出鋸切線。
- 適當支撐並固定工件（見安全守則與說明）。
- 使用必需的、適當的安全裝備（見安全守則）。
- 保護並維持工作場所安全與秩序（見安全守則）。
- 插入電源插頭，閉合護罩，檢查電鋸開關是否能夠正常動作。

⚠ **警告！**重點之一是適當支撐工件並緊握電鋸，防止工具失控，否則會導致人身傷害。圖C中提供了手的位置建議。

操作步驟

開關

- 要啟動工具，按下觸發開關（1）。在觸發開關處於按下狀態時，工具保持運轉。
- 鬆開觸發開關（1），工具停止運行。工具沒有常開鎖定設計，切勿通過任何其他手段將工具鎖定在常開位置。

鋸切作業

⚠ **警告！**為降低嚴重人身傷害風險，請始終雙手握住工具。

- 開始鋸切之前，讓鋸片空轉數秒鐘。
- 鋸切過程中，僅對工具輕緩用力。
- 鋸切時，鋸腳板應緊貼工件。

最佳應用提示

- 鑒於工件頂部鋸線上某些開裂不可避免，請在可接受開裂的面上鋸切。
- 需要盡可能減少開裂時，例如鋸切多層板等時，可在工件頂部夾上一張膠合板。

開口鋸切（圖K）

開口鋸切是指在工件材料內部開孔，而不從邊緣鋸切。

- 測量並劃出鋸切線。
- 把電鋸向前傾斜，直至鋸腳板的前部停靠在工件表面上。對準時，使鋸切在圖K所示的矩形的後部開始。
- 操縱收縮杆，把鋸片護罩向上回收，讓鋸片處於剛剛離開材料的位置；啟動馬達並逐漸降低工具，切入材料中。

⚠ **警告！**鋸片開始切割材料時，應立即釋放收縮杆。

- 禁止把鋸片護罩綁定在提起位置。
- 當鋸腳板與鋸切的材料平貼時，向前完成鋸切作業。
- 讓鋸片完全停止後，再從材料中拿起電鋸。
- 每次開始鋸新線時，重複以上步驟。

扳手的存放（圖L）

活動扳手（8）可存放在鋸腳板內，如圖L所示。

縱解規的安裝與拆卸步驟（圖M）

縱解規用於鋸切與工件邊緣平行的直線。

安裝步驟

- 鬆開鎖定旋鈕（17）。
- 通過開口（19）插入縱解規（18）。
- 把縱解規滑入所需的位置。
- 緊固鎖定按鈕。

拆卸步驟

- 鬆開鎖定按鈕。
- 從工具上把縱解規拉出。注意：如果您沒有合用的縱解規，可使用直邊規與鋸腳板接觸，可提高精度並降低卡鋸和反衝的風險。

配件

本工具的性能表現取決於您使用何種配件。百得配件品質標準高，其設計有利於提高工具性能。這些配件能夠把本工具的優點發揮得淋漓盡致。

⚠ **警告！**使用非本工具推薦的配件存在隱患。僅可使用軸心直徑為19毫米或20毫米的185毫米鋸片。不可使用任何砂輪。

維護

本電動工具設計精良，可以長期運作，而只需極少的維護。要取得連續的令人滿意的工作效果，需要您做合適的保養和定期的清潔。

⚠ **警告！**維護工具前，必須切斷電源，拔下插頭。

- 定期使用軟刷或幹布清潔工具的通風槽。
- 定期使用濕布清潔馬達外殼，但不得使用任何研磨性或溶劑型清潔劑。

⚠ **重要提示：**為了確保本產品的安全性和可靠性，工具的維修、維護和調整（本手冊列出的內容除外）應由授權服務中心或其他合格服務人員進行。請始終使用相同的備件。

潤滑

出廠前，百得電動工具已進行正確潤滑，可供隨時使用。

保護環境

個別收集。本產品必須與一般家庭廢物分開處理。

如果您發現您的百得產品需要進行替換，或您已經不再需要使用這些產品，請不要將它們與家庭廢物一起處理。務必將本產品送往個別收集處。

個別收集用過的產品和包裝允許材料再循環利用。重新使用迴圈利用的材料有助於防止環境污染，並減少原始材料的需求。

當您購買新產品時，可能通過零售商提供從家用、城市垃圾站個別收集電氣產品的當地法規。

經銷商: 特力股份有限公司
地址: 台北市內湖區新湖三路23號1.2.5樓
電話: 0800-552888

進口/委製廠商: 新加坡商百得電動工具(股)公司台灣分公司
地址: 台北市北投區裕民六路120號4樓
電話: 02-2820-1065