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USER'S MANUAL

Ferm 10" Compound Mitre Saw

FKZ-250

CE



Ferm[®]

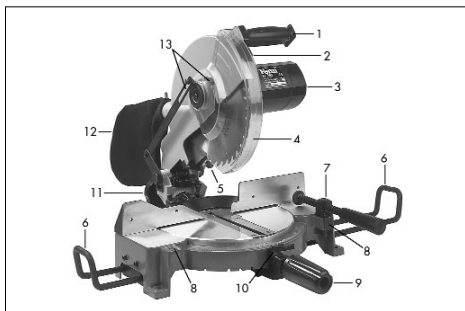
Art.nr. 727250
Screwfix Art.nr. 19638

**FERM 10" COMPOUND MITRE SAW
FKZ-250
USERS MANUAL**

TECHNICAL SPECIFICATIONS

Voltage	230 V~
Frequency	50 Hz
Power input	1400 W
No load speed	3800/min
Saw blade dimensions	250 x 16 mm
Max. cutting depth 90°	70 x 120 mm
Max. cutting depth 45°	50 x 120 mm
Weight	15.1 kg
Lpa (sound pressure)	88.9 dB(A)
Lwa (acoustic power)	101.9 dB(A)
Vibration	2.5 m/s ²


PRODUCT INFORMATION



1. Handgrip with switch
2. Guard unlock button
3. Motor housing
4. Protective blade guard
5. Saw head lock button
6. Extension pieces for workpiece support
7. Workpiece clamp
8. Holes for workpiece clamp
9. Rotating handgrip
10. Table lock button
11. Rotary knob for head adjustment
12. Dust collector bag
13. Blade guard screws

SAFETY INSTRUCTIONS


The following symbols are used in these instructions for use:

 Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

 Denotes risk of electric shock.

Carefully read this manual before using the machine. Make sure that you know how the machine functions and how to operate it. Maintain the machine in accordance with the instructions to make sure it functions properly. Keep this manual and the enclosed documentation with the machine.

Ferm products are manufactured to high quality standards, they are safe and fit for purpose at time of sale, but all tools can be dangerous if the correct precautions are not taken. Always follow these instructions, do not carry out the operation until you are sure you can do so in safety. Remember to consider the work environment for safe operation as well as safety for tool use.

 **Warning!** When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate this product. Save these instructions for future reference.

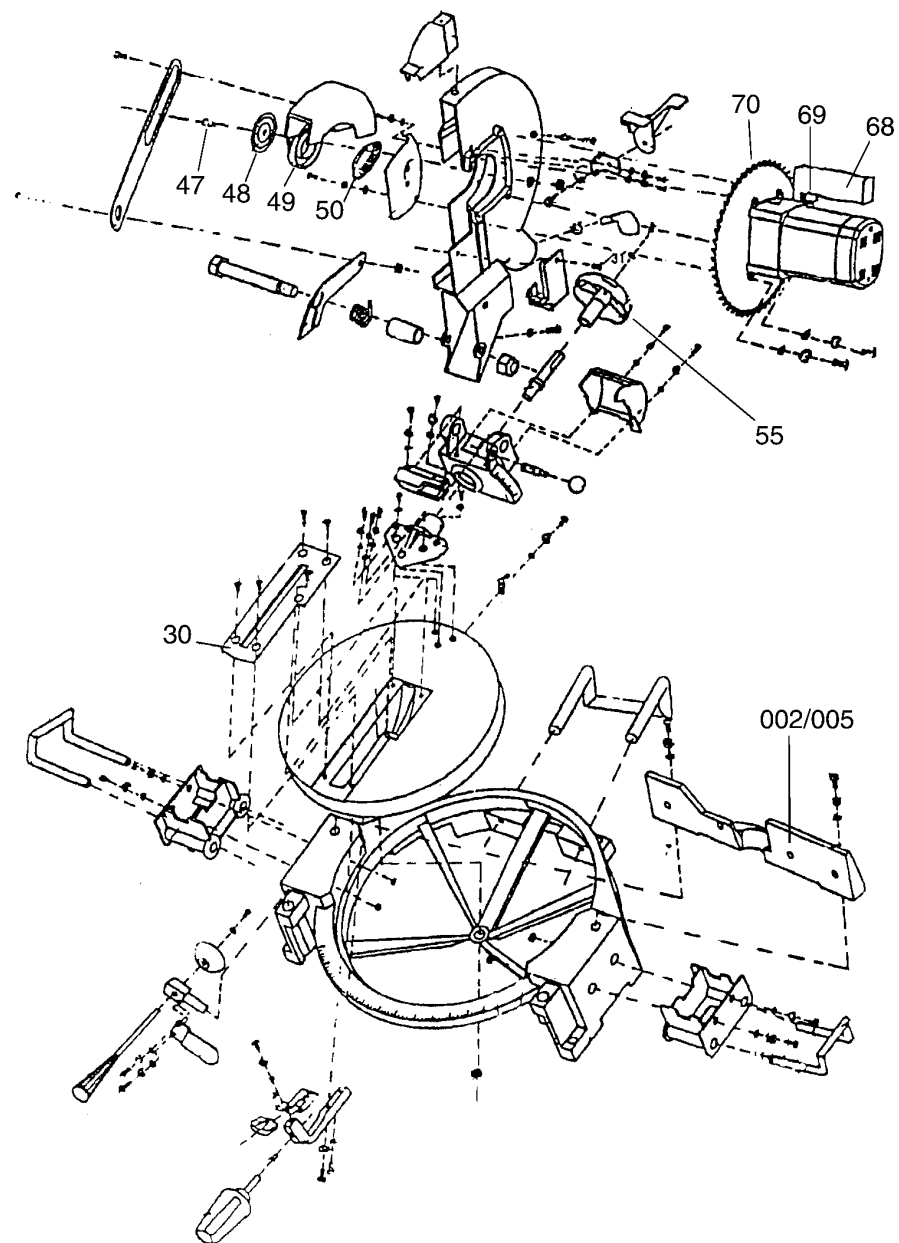
**PERSONAL SAFETY
Use Personal Protection Safety Equipment**

Protect eyes with safety glasses or goggles note: the use of safety protective eyewear without the CE mark can lead to serious injury if the lens breaks. A suitable dust mask should be worn if cutting, drilling or sanding is dusty, in particular chipboard or MDF. Approved safety footwear and headgear should worn as appropriate, for example on building works or when heavy weights are involved. Wear suitable gloves and apron to protect against sparks/debris. Wear earplugs or ear defenders.

Dress properly
Do not wear loose clothing or jewellery. It can get caught in moving parts. Non-skid footwear is recommended when working out doors. Wear protective hair covering to contain long hair.

Stay alert
Watch what you are doing Use common sense. Do not operate tools when tired or after taking alcohol or prescription/ non-prescription drugs.

EXPLODED VIEW



SPARE PARTS LIST FKZ-250

REF NR	DESCRIPTION	FERM NR
002/003/004/005	LOCATION PLATE COMPLETE	402515
030	INLAY	402506
047	SOCKET HEAD BOLT M8X35	402517
048	FLANGE	402495
049	MOVABLE GUARD	402502
050	EXTENSION SPRING	402516
055	KNOB	402535
068	HANDLE HOUSING	402534
069	SWITCH	402501
070	CARBON TIPPED SAWBLADE	310360
-	ROTOR	402497
-	STATOR	402496
-	CARBON BRUSH SET	402498
-	CARBON BRUSH HOLDER	402533
-	GEAR	402518
-	DRIVESHAFT	402519
-	CAM WRENCH	402503
-	SOCKET SPANNER	402504

OPERATIONAL SAFETY



Warning! This machine can produce fine dust, which can be harmful to your health – always wear a suitable dust mask and other protection equipment as appropriate. Use dust extraction.

Concentrate

Routine and repetition can lead to mistakes. Remember that a slight lack of concentration can result in serious injuries in a split second.

Keep work area clean

Cluttered areas and benches invite injuries. Consider the work environment. Do not expose power tools to rain or use them in damp or wet locations. Keep work area well lit. Do not use power tools in the presence of flammable liquids, vapours or gases.

Guard against electric shock

This unit contains dangerous voltages. Use a RCD (residual current device) to provide protection against electrical shock. Prevent body contact with grounded surfaces (e.g. pipes, radiator, ranges or refrigerators).

Keep children and pets away

Do not let children or pets come into contact with the tool, extension cable or work area.

Do not force the tool

It will work better and safer at the rate for which it was intended.

Use the right tool

Do not force small tools or attachments to do the job of a heavy-duty tool. Do not use tools for purposes for which they were not intended; for example do not use a circular saw for cutting trees or logs.

Do not abuse cable

Never carry the tool by the cable or pull it to disconnect it from the power socket. Keep the cable away from heat, oil and sharp edges. Do not touch the metal plug pins when connecting or removing the plug.

Secure Work

Use clamps or a vice to hold work. It is safer than using your hand and it frees both hands to operate the tool.

Do not over-reach

Keep a proper footing and balance at all times.

Disconnect tools from power supply

When not in use, before servicing and when changing accessories such as blades, bits and cutters.



Always switch off and unplug the saw from the power supply before making adjustments or changing blades.

Remove adjusting keys and wrenches

Ensure that they are removed from the tool before switching on.

Avoid unintentional starting

Do not carry plugged in tools with your finger on the switch. Check that the switch is off before plugging in to socket.

Outdoor use extension cables

When the tool is used outdoors use only an extension cable intended for outdoor use and marked accordingly. Use a RCD (residual current device) to provide protection against electrical shock. Do not use in rain or damp conditions.

Connect a dust extraction device

Whenever there are facilities for fitting a dust or fume extraction system, make sure it is connected and used.

Use recommended accessories

The use of any other accessory or attachment other than recommended in the instructions or catalogue may present a risk of personal injury.

When using a cable reel unwind the cable fully.

INSTALLING AND SETTING UP THE SAW



Ensure the saw is unplugged from mains.

Refer to illustration.

Check package contents

Check contents against the list in this manual to make sure each item is present.

Check for damage

Before assembling or using this saw check each part listed is undamaged.

Save packaging

Save major packaging for return of product for service or repair.

Fit the workpiece supports

Slide the extension pieces (6) into the holes on either side of the saw base. Lock in position by tightening the hex headed grub screw (on the underside of the saw base) with a 2.5mm Allen wrench.

Mount the saw

Place the unit on a level stable bench or surface; make sure that the rubber feet grip on the surface and that the saw cannot slip.

The holes in the plastic base are for fixing the unit to the bench with bolts (recommended).

Fit the workpiece clamp

Push the workpiece clamp (7) into one of the holes (8) on either side of the saw base.



Route the mains lead away from the saw and work area.

Dust collector bag

The unit is equipped with a dust collector bag -it is strongly recommended it is used while operating this saw.

Note: The dust bag does not give complete protection from fine dust. Always wear a suitable dust mask and other protective equipment when using the saw and emptying the bag.

Fit the dust bag

Clip the dust bag assembly (12) to the nozzle on the rear of the blade guard. Ensure the bag is fully onto the nozzle and that the zip faces downwards.

The 48mm nozzle is also suitable for connection to a dust extractor (not supplied).

UNLOCKING THE SAW HEAD



Ensure the saw is unplugged from mains.

Refer to the illustration page 2.

- Press the saw head downwards with your left hand and pull the headlock button (2) out with your right hand.
- Allow the saw head to rise up and lock in its upper position.
- The saw head should be relocked in the down position during transportation.

Note: To unlock blade guard you must depress the unlock button (2) each time the saw head is moved downwards.

CHANGING/FITTING SAW BLADES



Ensure the saw is unplugged from mains.

Refer to the illustration page 2.

- Use suitable gloves. Saw blades are very sharp.
- Unscrew the three screws (13) securing the arm/protective cover (4) with a suitable screwdriver and remove the cover.
- Hold the outer flange washer with the wrench supplied and turn the blade securing nut clockwise with the 13mm box spanner also supplied.
- Remove the screw and black plastic indicator tip from the saw housing.
- Remove the blade securing nut, outer flange washer and saw blade (if fitted) and replace with new blade.
- Make sure the inner flange washer is in place and on the shaft the correct way round (chamfered side faces motor).
- Make sure the direction arrow on the blade points in the same direction as the arrow on the protective cover, the teeth point downwards towards the front of the saw.
- Replace the outer flange making sure that the flats on the shaft line up with those in the flange.
- Screw the nut with its washer in hand tight anticlockwise, hold the outer flange with the wrench and tighten the nut securely with the box spanner.
- Replace the black plastic indicator tip and screw and tighten.
- Replace the arm/protective cover and screws with their washers/lock washers and tighten.
- Check that the safety device and blade covers are fitted properly and working.
- Do not use the saw without these items fitted and working properly.

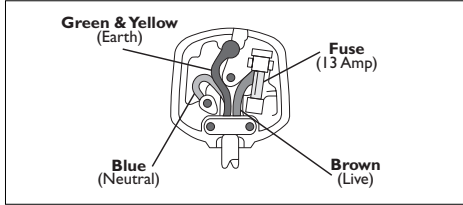
ELECTRICAL INFORMATION

This product is complete with a pre-wired mains plug, it is double insulated in accordance with EN 61029 – no earth wire is required
If the plug needs replacing follow these instructions.

Wire correctly

The wires in the mains lead are coloured in the following way:

- BLUE** • Neutral
- BROWN** • Live



Secure wires

Secure wires carefully and firmly to the correct terminals. Secure the mains cable in the plug cord grip firmly. Fit a 13-amp fuse. If a 13amp (BS1363) plug is used a (BS 1362) ASTA approved 13-amp fuse must be fitted.

Extension cables

Use extension cables suitable for the power input of the saw (minimum cable size 1.5mm²). For cable lengths over 15 metres to a maximum of 40 metres use 2.5mm². When using a cable reel unwind the cable fully.

Recycle/Dispose of old plug and cable

Prevent inadvertent connection to socket and risk of electric shock

ENVIROMENT

Recycle the packaging according to the identification marks on it.

At the end of the product or its accessories life please recycle where facilities exist - phone the Helpline for current advice on recycling.

Helpline

For any questions relating to operational or safety matters contact:

Ferm Customer Helpline on: **0115 966 1199**
Monday-Friday **8am – 6pm**
Saturday **9am – 1pm**

GUARANTEE

The guarantee conditions can be found on the separately enclosed guarantee card.

CE DECLARATION OF CONFORMITY (UK)

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

**EN61029-1, prEN61029-2-9,
EN61000-3-2, EN61000-3-3,
EN55014-1, EN55014-2**

in accordance with the regulations:

**98/37/EEC,
73/23/EEC,
89/336/EEC**

from 07-12-1998
GENEMUIDEN NL
W. Kamphof
Quality department

TO ADJUST THE HEAD AND TABLE ANGLES



Ensure the saw is unplugged from mains.

Refer to the illustration page 2.

The unit can saw horizontally and diagonally at any angle up to 45 degrees or a combination of these.

The degree scales are for indication only

For accurate angles test the set angle by sawing a piece of scrap first, measuring and adjusting the saw as required.

To adjust the angles proceed as follows:

- The head angle is adjusted by reference to the degree scale on the rear of the head bracket.

To adjust the head angle

Slacken the rotary knob (11) at the rear of the head bracket and set the head to the angle required. Tighten the rotary knob to secure.

To adjust the head angle stop screws

The stop screws have been adjusted in the factory to stop the head at a 45 and 90 degrees angle.

- To adjust, slacken the lock bolt on the head adjustment screw and turn the set screw with a suitable 5mm Allen wrench to stop the head at the angle required, tighten the lock bolt after adjustment.
- Check for accuracy with setsquare or protractor and set the red indicator to read correctly on the degree scale.

To adjust the table angle

Slacken the rotating handgrip (9) depress the lock button (10) with your thumb and turn the saw head to the desired angle, which is indicated on the degree scale on saw base.

To adjust proceed as follows:

- Tighten the rotating handgrip to lock.
- The fence is secured by two 6mm Allen bolts, it can be adjusted to exactly 90 degrees with the saw blade.
- Slacken the two 6mm Allen bolts securing the fence with a suitable Allen wrench.
- Rotate the saw head downwards and measure the angle between the blade and fence with a setsquare, adjust the fence to exactly 90o with the blade and retighten the bolts firmly.

BEFORE USING THE SAW



Ensure the saw is unplugged from mains.

- Check the voltage on the saw corresponds with your power supply voltage and that the plug and lead are in good condition.
- Check you have a blade suitable for the saw and the material being cut and that it is in good condition and secure. If any teeth are missing or the blade shows cracks or other damage -replace immediately.
- Do not use parts other than supplied with the machine to make the blade fit properly.
- The blade must conform to EN-847-1 and be of the correct dimensions, see technical data section.
- Turn the saw blade by hand to see that it turns freely in all head/table positions – if the blade touches any part of the table, fence or guards the saw must be readjusted before use. Recheck with the head in the 45o position
- Check all adjusting screws are secure
- Run the saw idle for 30 seconds - if there is any abnormal vibration or other fault – switch off, inspect and rectify before continuing

USING THE SAW



This saw is intended for use on wood and wood derived products.

OPERATION

Refer to the illustration page 2.

Plug into a suitable mains supply and switch on.

To switch the saw ON

Depress the trigger switch on the saw handle (1) with your forefinger.

To switch OFF

Release the trigger switch

To rotate the saw head downwards to cut the workpiece

- Switch on and press the guard unlock button (2) with your thumb. Press the saw head gently downwards to cut the workpiece.
- Return the saw head to its upper position gently after use and release the motor switch, wait until the blade stops before moving your hand.

HORIZONTAL MITRE CUTTING

- The saw table mitre angle can be adjusted between -45 and +45 degrees adjust the table as previously described and cut a piece of scrap to check the angle before cutting the workpiece.
- Make sure all the clamps are tight and the workpiece is fully supported during cutting.

VERTICAL (BEVEL) CUTTING

- The saw head bevel angle can be set between 0 and 45 degrees.
- Adjust the head as previously described and cut a piece of scrap to check the angle before cutting the workpiece. Make sure all the clamps are tight and the workpiece is fully supported during cutting.

COMPOUND CUTS

Set both the table and head angles and proceed as horizontal/bevel cutting.

DURING USE

- Let the blade come to full speed before cutting the work piece.
- Do not force the saw. Press the saw head downwards with gentle pressure. Let the saw do the work.
- Check material for foreign bodies. For example check for nails screws etc.
- Clamp material properly. Do not use hand or foot to support the work piece. Use the clamp to secure the workpiece against the fence/table, use additional support for long lengths. Use packing to support uneven shapes when clamping them
- Be aware that this is a powerful saw. Unclamped or unsupported workpieces can kick causing injury.
- Never saw several workpieces at the same time.
- Use constant gentle pressure. If the blade seizes in the cut, switch off, unplug and open the cut with a suitable tool before pulling the blade out. Never switch the saw on with the blade jammed.
- Do not use the machine without the guards in position. Do not override the blade guard, it will open as you press the unlock button and rotate the saw head downwards.
- Regularly inspect the blade (unplug first) during use for signs of damage or wear and sharpen/replace when required. Only use the recommended saw blades.
- Replace the plastic insert in the saw table if it becomes worn, it can be ordered from the Helpline as a spare.
- Clear sawdust from saw base regularly (switch off/unplug first). During use do not let sawdust and debris build up on and around the saw, this is a hazard. Keep the motor inlet clear of sawdust; this will prevent the motor overheating.
- Switch the machine off before removing the plug from the mains socket.
- Be careful. Keep your hands away from the blade.

MAINTENANCE, CARE AND REPAIR



Switch off and unplug the machine before carrying out any cleaning, adjusting or changing blades.

CLEANING

Clean the saw with a soft brush.

Keep the motor ventilation slots clean.

Do not use flammable liquids to clean the saw, they can damage the plastic parts and are a fire risk.

FAULTS

Switch OFF immediately at the mains plug and remove the plug when:

- The plug or cable is damaged.
- The switch on the machine is defective.
- You smell or see smoke caused by scorched insulation in the machine.

The motor runs hot (over 70 degrees C)

- The motor has been overloaded, cut more slowly.
- Clean the motor air slots
- The motor is defective.

Take to your local dealer for repair.

The saw does not work when switched on

- Damaged plug/fuse, replace as required.
- Defective switch.

Take to local dealer for repair.

The saw does not cut cleanly and wanders off line

- The blade is blunt or bent.

Replace blade with suitable resharpened or new one.

The saw makes a lot of noise and does not run smoothly.

- Take to your local dealer for inspection or repair.
- The carbon brushes are worn and need replacing; they should only be replaced by a competent person or your Ferm dealer.

The dust is not being extracted

- Clean the dust extractor port
- Empty the dust bag

There are no user serviceable/repairable parts inside this unit. Qualified service engineers must carry out repair and servicing.

MAINTAIN TOOLS WITH CARE

Keep the tool clean for better and safer performance.

Store the blades properly in accordance with the maker's instructions.

Follow instructions for changing accessories. Inspect tool and extension cables periodically and if damaged, have them repaired by a qualified person or authorised service body. Keep handles free from oil or grease. Keep the ventilation slots clean to prevent the motor overheating.

Check for damaged parts

Do not use a tool with damaged parts, before further use a damaged tool must be carefully checked by a qualified person to determine that it will operate properly. Check for alignment of moving parts, binding or breakage of parts, mounting and other conditions that may affect its operation.

A damaged part or guard should be properly repaired by an authorised service centre, unless indicated otherwise in the instruction manual. Have defective switches replaced by an authorised service centre. Do not use a tool if the switch does not turn on and off.

Have your tool repaired by an expert

This appliance is manufactured in accordance with relevant safety standards. Only experts must carry out repairing of electrical appliances, otherwise considerable danger for the user may result.

Storing tools

When not in use tools should be stored in the dry, out of reach of children.

Lubrication

The machine requires no user lubrication.