

UK Subject to change

Document Ref:
FBDS-350/12147/PMR137issue 1/May 02

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USER'S MANUAL

Ferm Bench Sander

FBDS-350

CE



Ferm[®]

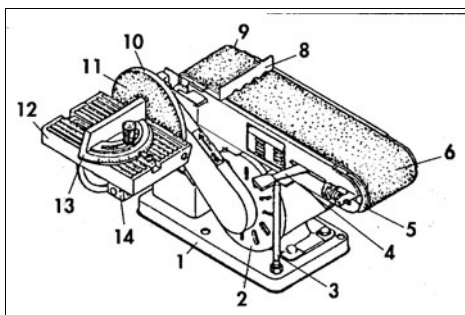
Art.nr. 730700
Screwfix Art.nr. 12147

**FERM BENCH SANDER FBDS-350
USERS MANUAL**

TECHNICAL SPECIFICATIONS

Voltage	230 V~
Frequency	50 Hz
Power input	350 W
No load speed disc	1450/min
No load speed belt	275/min
Saw blade diameter	150 mm
Sanding belt dimensions	100 x 915 mm
Lpa (sound pressure)	71 dB(A)


PRODUCT INFORMATION



1. Machine base
2. Motor
3. Belt assy. support arm
4. Tension lever
5. Transport roller
6. Sanding belt
7. Not used
8. Belt fence
9. Drive roller
10. Aluminium backing disc
11. Sanding disc
12. Sanding rest
13. Mitre guide
14. Support arm

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.

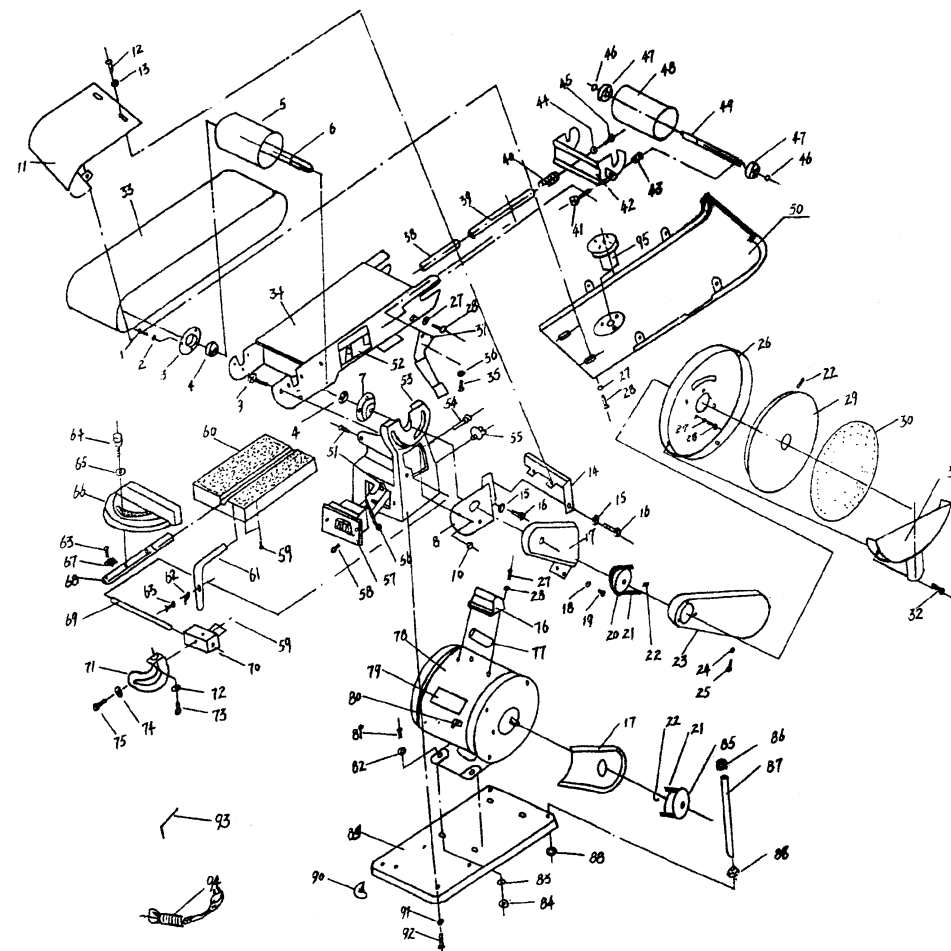
Dress properly

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 FBDS-350

REF NR	DESCRIPTION	FERM NR
4	BALL BEARING 6201 ZZ	806201
5	DRIVE ROLLER	402800
41	ADJUSTMENT BOLT	402801
48	IDLER ROLLER	402802
14	PLATE TABLE	402803
20	DRIVE PULLEY	402804
78	MOTOR	402805
89	BASE PLATE	402806
57	SWITCH	402807
69	BAR	402809
70	ADJUSTMENT BLOCK	402810
85	MOTOR PULLEY	402811
21	V-BELT M2I	402812
29	ALUMINIUM DISC	402815
61	TABLE BRACKET	402816
71	TABLE TILT TRUNION	402817
68	MITRE BAR	402818
64	KNOB/BOLT FOR MITRE BAR	402819
60	TABLE	402820
66	MITRE GAUGE	402821
6	SHAFT FOR DRIVER ROLLER	402822
49	SHAFT FOR IDLER ROLLER	402823
47	BALL BEARING 6201 ZZ	806201
67	INDICATOR	402824
77	CAPACITOR (6 µF = 450 VAC)	402825
90	RUBBER FOOT	402826

OPERATIONAL SAFETY



Warning! Be aware this sander can produce fine dust, which can be hazardous to your health.

Some older painted surfaces may contain harmful lead. Clean the area and tool thoroughly after sanding.

Always use a suitable mask, eye protection, gloves and use dust extraction during sanding and cleaning.

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 the 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.

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 sander from the power supply before making adjustments or changing abrasive belts.

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.

Extension cables

Use only three core earthed extension cables suitable for the power input of the tool (minimum cable size 1.5mm²). Plug into an earthed socket only.

When using a cable reel unwind it fully. Do not use long extension cables.

Outdoors use

If the tool is suitable to be used outdoors, only use 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. Use an extension cable with a minimum conductor size of 1.5mm².

When using a cable reel unwind it fully.

BEFORE USING THE BENCH SANDER



Ensure the sander is switched off and unplugged.

Refer to illustrations below.

Check package contents

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

Check for damage

Before using this item check each part listed is undamaged.

Save packaging

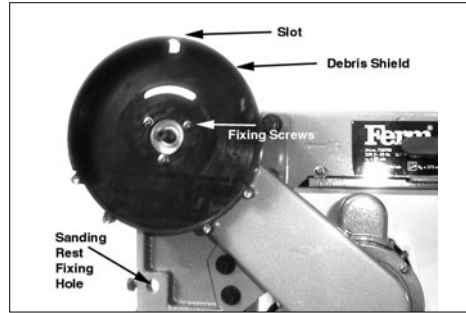
Save major packaging for return of product for service or repair.

FIT THE RUBBER FEET

- Turn the machine upside down.
- Locate the four rubber feet (supplied separately) and push them on to the corners of the metal base, it's easier to push them on at an angle to locate the rim of the base in the slot in the rubber.

FIT THE SANDING DISC AND ITS DEBRIS SHIELD

- Turn the machine the right way up.
- Locate the Aluminium disc (10) and the debris shield (2 pcs.).
- Remove the three screws and their washers from the belt cover.
- Fit the debris shield as shown below, the slot on the shield points upwards.
- Replace the screws with their washers and tighten with a suitable screwdriver (not supplied).
- Check that the flat on the drive shaft faces upwards towards the hole, if not rotate the shaft until it does.
- Put the aluminium disc (10) onto the shaft with the Allen head grub screw facing upwards, there is a reference mark on the edge of disc to help locate it. The flat surface of the disc faces outwards.
- Put the 4mm Allen wrench (supplied) through the slot and tighten the grub screw.
- Push the half-moon part of the debris shield onto the main shield and make sure the lugs of both parts are together.
- Install the four fixing screws and tighten with a suitable screwdriver.



FIT THE SANDING REST AND MITRE GUIDE

The sanding rest can be used with the sanding disc or the belt when it's in the vertical position.

To fit the rest (sanding disc)

- Push the arm of the sanding rest assembly into the hole shown in illustration above, make sure the flat on the arm faces the bolt. Leave a gap of approx. 3mm between the disc face and the edge of the sander rest.
- Tighten the bolt with the 14mm open-end spanner (supplied).
- Tighten the other fixings on the sander rest assembly with the 4mm Allen wrench.
- Using a set square check the sander rest is at 90° angle to the sander disc, if it's not, adjust it with the thumbscrew and when it's correct set the calibration indicator to read zero.

To fit the mitre guide

- Slide the mitre guide into the dovetail track in the sander rest and adjust as required.

Note: The angle scales are for indication only, always check the angle required with a setsquare or protractor before sanding the workpiece.

FIT THE BELT SANDER FENCE

Use this fence when the belt is in its horizontal position. Refer to illustration below.

- Locate the belt fence (8).
- Remove the fence-fixing bolt and put the belt fence onto the casing as shown, make sure the two screw ends locate in the holes of the plastic shield.
- Reinstall the bolt with its washers and tighten with the 14mm open-end spanner.

GUARANTEE

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

CE DECLARATION OF CONFORMITY (UK)

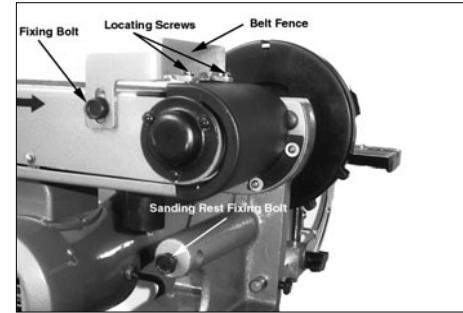
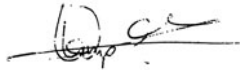
We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

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

in accordance with the regulations:

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

from 01-06-2001
GENEMUIDEN NL
W. Kamphof
Quality department



TO PUT THE BELT ASSEMBLY IN THE VERTICAL POSITION

- Loosen the two lock nuts at the back of the sanding disc with the 14mm open-end spanner.
- Raise the belt assembly to the vertical position by hand.
- Tighten the two locknuts firmly with the spanner

To fit the sanding rest (sanding belt – vertical position).

- Remove the belt sander fence (8).
- Put the belt in its vertical position.
- Loosen the sanding rest fixing bolt shown in the illustration above.
- Install the sanding rest (12) with the flat on the fixing leg facing the bolt.
- Adjust the rest so that there is approx. 2mm gap between the rest and the belt.
- Tighten the bolt with the 14mm open-end spanner.

FIXING THE BELT SANDER

The sander should be placed on a level stable non-slip surface. Make sure there is enough room round the machine to operate and service it easily.

- Position the machine and mark the fixing holes with a pencil. Drill suitable diameter holes.
- Secure the machine with suitable bolts/nuts/washers through the four holes in the footplate.
- Route the mains cable well away from the sander, ensure that it cannot get caught in moving parts or the workpiece.

USING THE BENCH SANDER



The sander is designed for sanding wood, removing rust, sanding metal and polishing only. This machine is designed to be fixed to a bench or other stable surface only. It must not be used hand held or free standing

BEFORE OPERATING

- Check the voltage on the sander corresponds with your power supply voltage and that the plug and lead are in good condition.
- You have the correct type of abrasive. Depending on the finish required use coarse grade P50 for rough/uneven surfaces and medium grade P80 for more even surfaces, finally finish with fine grade P120.
- The sander is only for use on dry surfaces. It is not designed to be used in wet or damp conditions. Do not use water as a lubricant/cutting medium or wet and dry abrasive paper.
- Use abrasive belts designed for the sander. Install facing the right way
- Ensure you have and wear suitable personal protection equipment during sanding and cleaning.
- Route the mains lead away from work area.
- Run idle for 30 seconds. If there is any abnormal vibration or other fault, switch off, inspect and rectify before continuing

FITTING A DUST EXTRACTOR



Ensure the sander is switched off and unplugged.

- The belt housing is fitted with a 40mm connector for a dust extractor (not supplied).
- The use of dust extraction while using this machine is strongly recommended in addition to the use of a suitable dust mask and other personal protection equipment.

FITTING/REPLACING THE ABRASIVE BELT AND DISC



Ensure the sander is switched off and unplugged.

Refer to illustration page 2.

To replace the abrasive belt

Only use abrasive belts that are suitable for this sander. Do not cut belts, which are too wide to fit, it is dangerous and will result in damage to the transport mechanism.

- Remove the sanding belt fence.
- Remove the four-crosshead screws holding the metal belt cover and the two screws holding the plastic guard to the support arm.
- Pull tension lever (4) to the right to release belt tension.
- Remove the old belt from machine.
- Position the new belt on to the sander making sure that direction arrows on inside of the belt face the same way as the direction indicator on the machine.
- Line up the belt so that it sits squarely on the front and rear rollers and is fully home.
- Close the lever (4) to the left to lock the belt in place.
- Replace the cover and the screws with their washers and tighten securely.
- Replace the fence as required.

ALIGNING THE BELT

- If the belt does not run parallel to the outside edge of the machine adjust it by turning the adjustment knob by the right roller to make the belt run parallel.
- Make sure the machine is turned off and unplugged during this adjustment.

To replace the sanding disc

- Remove the sanding rest and the half moon part of the debris guard.
- Remove the old disc, pull off if using Velcro backing or tear off if self-adhesive (remove traces left with a scraper).
- Fit the new disc; be sure to line up with edges of backing disc and push firmly into place.

OPERATION



Make sure the switch on the sander is OFF

- Plug into a suitable mains supply. Check the cable is routed well away from moving parts and switch on at plug.

To switch the sander ON

Press the green switch button "I"

To switch OFF

Press the red switch button "O"

Note: This is a NVR (no volt release) switch and requires the power connected to work.

DURING USE

- Let the machine come to full speed before using. This helps to stop the belt getting clogged
- Use gentle pressure. Excessive pressure will clog the abrasive paper and slow the sanding action.
- Regularly inspect the abrasive during use (switch off first) for signs of damage or wear and replace as required.
- Keep the workpiece moving. This allows the debris to be cleared easily and increases the life of the abrasive.
- Sand wood directly up and down the grain. Keep the workpiece straight on the belt.
- Raising the grain, if you are sanding bare softwood you can achieve a fine finish by raising the grain prior to sanding.
- First coat the surface with water and let dry thoroughly; this will raise up the high spots on the surface.
- Then sand off the high spots with medium/coarse abrasive.
- Finally finish with fine paper for a really smooth finish.
- Do not use this method with harder or coated surfaces.
- Keep the ventilation slots clear. Clean dust and debris with soft brush (switch off and unplug first)
- Dust collection. Always use dust extraction, it does not provide complete protection from very fine dust, therefore it is strongly recommended that a suitable dust mask should be worn in addition to other personal protection items

MAINTENANCE, CARE AND REPAIR



Switch off and unplug the machine before carrying out any cleaning or maintenance work.

CLEANING

Wear personal protection equipment during cleaning. Do not use water or flammable liquids to clean the sander, clean with a soft brush.

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.

Overheating

- Put less pressure on the workpiece.

The dust is not removed

- Clean the dust extraction opening.

The machine does not start when switched on

- Check the mains lead and the fuse/plug.
Take to your Ferm Dealer for repair.

The motor is defective

- Take to your Ferm Dealer.

There are no user serviceable/repairable parts inside this machine. **Qualified service engineers must carry out repairs and servicing.**

MAINTAIN TOOLS WITH CARE

Keep the tool clean for better and safer performance. 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.

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.

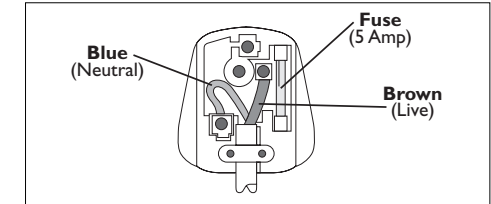
ELECTRICAL INFORMATION

This product is complete with a pre-wired mains plug. 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 |
| YELLOW/GREEN | • Earth |



Secure wires carefully

Secure wires firmly to the correct terminals. Secure the mains cable in the plug cord grip firmly. Fit a 5-amp fuse. If a 13amp (BS1363) plug is used a (BS1362) ASTA approved 5-amp fuse must be fitted. If in doubt always consult a qualified electrician.

Recycle/Dispose of old plug and cable

Prevent inadvertent connection to socket and risk of electric shock.

ENVIRONMENT

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