Original Instructions

FEIDER MACHINES

Instruction Manual
Plunge Saw

FS1612-1

WARNING: Read the instruction manual thoroughly before using this tool.

BUILDER SAS

ZI, 32 RUE ARISTIDE　BERGES 312070 CUGNAUX，FRANCE

Made in P.R.C, 2021

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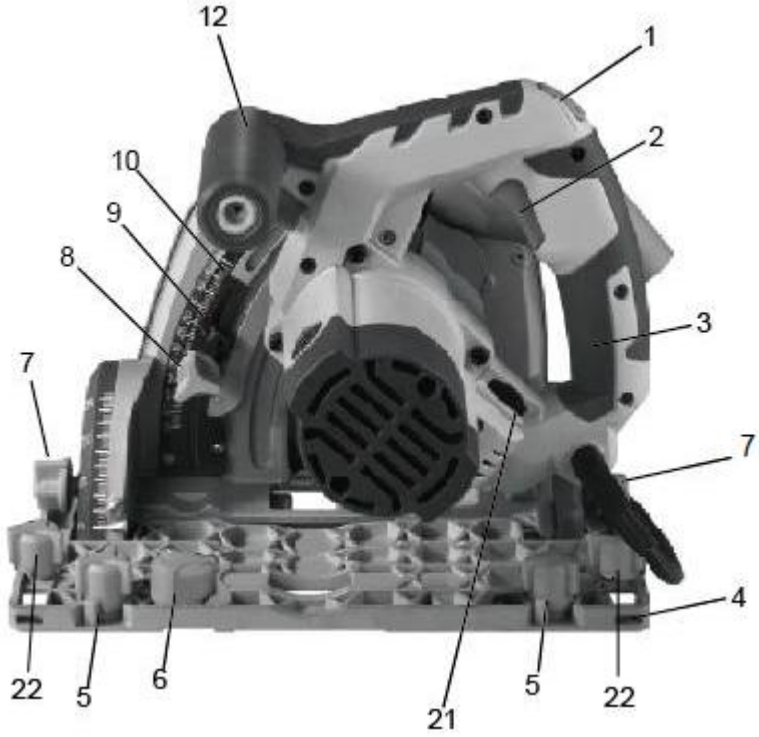
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DESCRIPTION

1. Switch Lock
2. ON/OFF Switch
3. Main Handle
4. Base Plate
5. Fine Adjustment Screw (2x)
6. Guide Rail Lock
7. Cutting Angle Rotary Knob (2x)
8. Depth Limit Stop Knob
9. Guide Rail Track Compensation
10. Graduated Scale
11. Blade
12. Auxiliary Handle
13. Groove
14. Cutting Indicators
15. Cutting Width Marks
16. Dust Extraction Outlet
17. Selector Switch
18. Shaft Lock
19. Carbon Brush Cap (2x)
20. Allen key and storage (depending on the model)
21. Speed Regulator
22. Clamping Screw

DEAR CUSTOMER

Please familiarize yourself with the proper usage of the unit by reading and following each chapter of this manual, in the order presented. Keep these operating instructions for further reference.
This operating instruction contains important details for handling the unit. Please pass it on along with the unit if it is handed over to a third party!
Please read all safety instructions! These instructions will make it easier for you to handle the unit and help prevent misunderstandings and possible damage or injury.

 **Wear protective eyewear**

 **Wear hearing protective equipment**

 **Wear a dust mask**

 **Wear protective gloves**

 **Read instruction manual**

GENERAL POWER TOOL SAFETY WARNINGS

WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. *Failure to follow all 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 the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.
1) Work area safety
a) **Keep work area clean and well lit**. *Cluttered or dark areas invite accidents.*
b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*
2) Electrical safety
a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power 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.*

NOTE The term “residual current device (RCD)” can be replaced by the term “ground fault circuit interrupter (GFCI)” or “earth leakage circuit breaker (ELCB)”.

3) Personal safety

a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*

b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as a 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 tool in unexpected situations.*

f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing 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 dust collection can reduce dust-related hazards*.

h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

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 remove the battery pack, if**

detachable, 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 and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's 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.*

h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

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.*

SAFETY INSTRUCTIONS 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.*

NOTE For **circular saws** with a maximum blade diameter of 140 mm or smaller, the words "Keep your second hand on auxiliary handle, or motor housing" do not apply.

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 the workpiece in your hands or across your leg while cutting. 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 the 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 could give the operator an electric shock.*

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 off-centre, 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.*

Kickback causes and related warnings
– kickback is a sudden reaction to a pinched, jammed 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 jammed 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 a maximum blade diameter of 140 mm or smaller, the words "with both hands" do not apply.
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 so that the saw teeth are not engaged into the material.** *If a saw blade binds, 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 the cut.** *If blade adjustment shifts while cutting, it may cause binding and kickback.*
g) **Use extra caution when sawing into existing walls or other blind areas.** *The protruding blade may cut objects that can cause kickback.*

Guard function
a) **Check the guard for proper closing before each use. Do not operate the saw if the guard does not move freely and enclose the blade instantly. Never clamp or tie the**

guard so that the blade is exposed. *If the saw is accidentally dropped, the guard may be bent. Check to make sure that the 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.** *The guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.*
c) **Assure that the base plate of the saw will not shift while performing a "plunge cut".** *Blade shifting sideways will cause binding and likely kick back.*
d) **Always observe that the guard is covering the blade before placing the 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 the switch is released.*

SAFETY INSTRUCTIONS FOR PLUNGE SAWS

• Make sure that the mains voltage matches the specifications on the type plate.
• Persons with restricted physical, sensory or mental capabilities are not allowed to use the circular saw unless they are supervised and instructed by a guardian.
• Never leave the powered-on saw unattended and keep them out of reach of children and persons in need of supervision.
• Use only approved extension cords with a suitable cable quality.
• Do not bring your hands in the cutting area and the saw blade.
• Wear appropriate work clothing as well as eye protection, hand protection and hearing protection. Always handle the saw blade with gloves.

• Keep in mind that even a worn saw blade is still very sharp. Always grasp the saw blade on the sides. Do not fling the saw blade and do not drop it.
• Never use the circular saw with grinding wheels.
• Do not grip underneath the workpiece. The protective cover cannot protect you from the saw blade under the workpiece.
• Adjust the cutting depth to the thickness of the workpiece. It should be visible less than a full tooth height under the workpiece.
• Do not cut very small workpieces. When cutting round wood, use a device which secures the workpiece from twisting. Never hold the workpiece to be cut in your hand or across your leg. It is important to secure the workpiece properly to minimise the risk of physical contact, jamming of the saw blade or loss of control.
• Hold the saw only by the insulated gripping surfaces when performing an operation where the cutting tool may come into contact with hidden power lines or its own device cable. Contact with a live wire also exposes the metal parts to tension and leads to an electric shock.
• When cutting longitudinally, always use the parallel stop or a straight edge guide. This

improves the cutting accuracy and reduces the possibility that the saw blade gets jammed.
• Use always saw blades in the correct size and with suitable locating bore. Saw blades that do not match the mounting parts of the saw will run unevenly and lead to loss of control.
• Never use a damaged or incorrect outer flange or a damaged clamping screw. The outer flange and the clamping screw have been specially designed for your saw for optimum performance and reliability.
• Start the circular saw and begin cutting when it reaches the full idling speed.
• Never brake the saw blade using lateral pressure after switching it off.
• Set the saw aside only when the saw blade comes to a standstill.
• Do not expose the saw to high temperatures, humidity and strong shocks. The saw can be damaged as a result.
.• Use only blade diameters that conform to the markings;
• Identify the correct saw blade to use for the material to be cut
• Use only saw blades marked with a speed greater than or equal to the speed marked on the tool.
• Use only saw blades recommended by the manufacturer, and in accordance with EN 847-1, if intended for wood or similar materials.
• Check that all guards are working properly; the protector must open and close properly.
• Avoid overheating the ends of the blade to prevent melting of the plastic;
• Use a dust collection system with the tool. To do this, connect a dust collector to the outlet nozzle of the machine.
• Always wear a dust mask

BEFORE FIRST USE

Remove the plunge saw and the accessories from the packaging. Check the saw for transport damage and do not use the saw in case of damages. Keep the packing materials away from children, risk of suffocation!

INTENDED USE

The plunge saw is intended to cut wood and similar materials, gypsum and cement-bonded fiber materials and plastics.
The plunge saw is only to be used with a specifically designed guide rail. Installation in a different or homemade guide rail or workbench can cause serious accidents.

PLUNGE SAW FEATURES

The plunge saw comes with solid shaft electronics with following features:
Smooth start: The electronically controlled smooth start ensures a start of the plunge saw without kickback.

Thermal fuse: The saw is equipped with a thermal fuse to protect against overheating (motor burn-out). The protection circuit turns the motor off before reaching a critical motor temperature. After cooling down for approx. 3 – 5 minutes the plunge saw is again ready to

use and fully operational. In idle speed the cooling period of the plunge saw is considerably reduced.

Current limitation: The current limitation prevents too high current draw during extreme overload. This can cause reduced motor speed. After load relief the motor starts up again immediately.

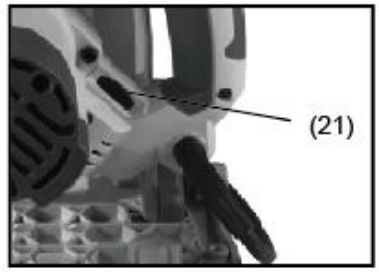
Constant speed: The preset motor speed is electronically kept. This allows for continuous cutting speed even under load.

Selector switch: Use the selector switch (17) to set the respective operation mode.


Change Saw Blade


Plunge Cut


Marked Cut



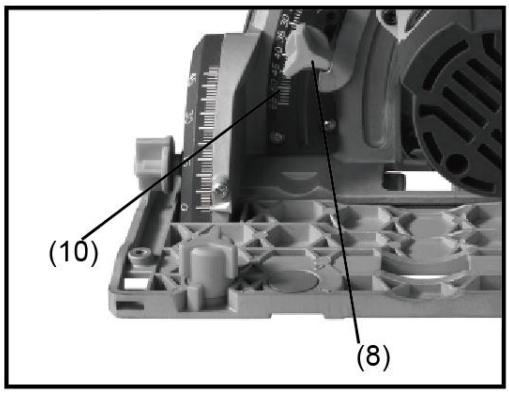
Speed setting:
The speed regulator (21) allows setting the motor speed infinitely variable between 2000 and 5300 min-1. The cutting speed can be optimal adjusted for the respective materials. Turn the speed regulator (21) towards 1 to reduce the motor speed; turn the adjusting wheel towards 6 to increase the speed.
The respective motor speed depends on type and thickness of the work piece. Observe directions below for cutting materials with the appropriate speed:
Speed range 1–3:
Gypsum and cement-bonded fiberboard, plastics (soft), non-ferrous metals
Speed range 4–5:
Plastics (hard), fiber-reinforced plastics (GRP), paper and fabrics, particle and hard boards, acrylic glass (Perspex)
Speed range 5–6:
Solid wood (hard, soft), plywood, core boards, veneered and coated boards, plastic-coated boards, MDF boards
Notes: At higher speed settings you cut the material faster, but this reduces the life cycle of the saw blade.
Reduce the speed for clean cuts in heat-sensitive and soft materials.
Do not use the speed regulation to use saw blades for lower nominal speed. Only use saw blades with a minimum speed of 5300 rpm.

Switch plunge saw on/off
1. Press the switch lock (1) and then the ON/OFF switch (2) to switch the plunge saw on.
2. Release the ON/OFF switch (2) to switch the plunge saw off.

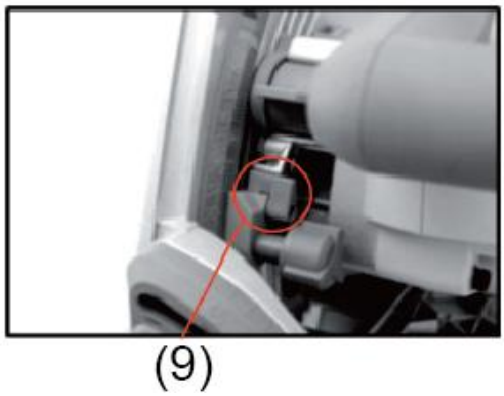
Notes: Pressing the switch lock (1) unlocks the plunge cut mechanism at the same time, so that the motor can be moved downwards. The saw blade emerges from the protective cover. When lifting the saw the motor slides back into the initial position.

SET CUTTING DEPTH

The cutting depth can be set between 0 - 54 mm:
1. Loosen the cutting depth limit stop knob (8) and slide it to the desired cutting depth according to the graduated scale (10) to set the cutting depth.
Note: The graduated values on the scale (10) apply for straight cuts (90°cut).
The guide rail track compensation (9) must be tilted up when using the plunge saw without guide rail. Only when using the plunge saw with guide rail the guide rail track compensation is used to compensate for the thickness of the guide rail.
Using the guide rail = guide rail track compensation down.
Not using the guide rail = guide rail track compensation lever up.



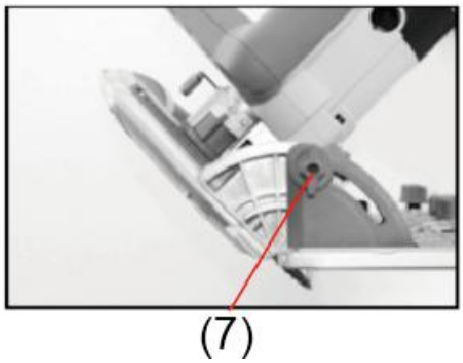
2. Tighten the cutting depth limit stop knob (8). The motor or respectively the saw blade can now be pushed down to the set cutting depth.
For a clean, safe cut set the cutting depth in such way that only max. one saw blade tooth protrudes under the work piece.



SET CUTTING ANGLE

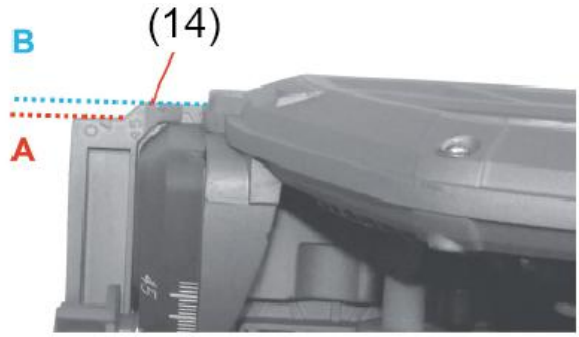
The plunge saw can be swiveled between 0°and 48°:
1. Loosen both rotary knobs (7). Swivel the motor to the desired cutting angle on the cutting angle scale.

2. Tighten the rotary knobs (7) again.



DETERMINE CUTTING LINE

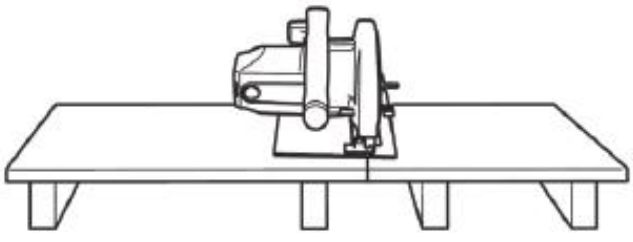
Two cutting lines are marked on the base plate (4) of the plunge saw.
1. Align position A (0 mark on base plate) at the front of the base plate with your marked cutting line when using the plunge saw without guide rail for straight cuts.



2. For 45 ° bevel cuts, align the B position (45-mark on the base plate) on the front of the base plate with its drawn cut line.

PREPARATION

• Before each use check the proper function of all installation fixtures of the plunge saw and only use the plunge saw if everything works properly.
• Attach the work piece in such way that it cannot move or bend during work. Line the work piece respectively.



CORRECT WORKING WITH THE PLUNGE SAW

• Always hold the plunge saw with both hands at the handles (3) and (12).
• Always guide the plunge saw forward. Never draw the plunge saw back!
• Place the plunge saw with the front part of the base plate (4) on the work piece. Guide the

plunge saw only against the work piece during operation.
• With the correct forward speed you prevent overheating of the saw blade, and melting when cutting plastics.

STRAIGHT CUTS (90° CUT)

1. Loosen both rotary knobs (7) and swivel the saw to 0° position on the scale. Tighten the rotary knobs again.
2. Turn the selector switch (17) to plunge cut function.

3. Set the desired plunge depth. Ensure that the guide rail track compensation (9) is up when using the saw without guide rail.
4. To switch on the saw press the switch lock (1) and the ON/OFF switch (2) and push the motor down. Guide the saw forward to cut.

MITER CUTS (UP TO 48°)

1. First loosen both rotary knobs (7) and swivel the plunge saw to the desired graduation. Tighten the rotary knobs again.

2. Switch the plunge saw on.
3. Turn the selector switch (17) to plunge cut function.

4. Set the desired plunge depth. Ensure that the guide rail track compensation (9) is in up position when using the saw without guide rail.
5. To switch the saw on press the switch lock (1) and the ON/OFF switch (2) and push the motor down. Guide the saw forward to cut.
The cutting indicator (14) shows the cutting path for 90° and 45° miter cuts (without using the guide rail).

MARKED CUTTING

1. Turn the selector switch (17) to marked cut function.

2. Press the switch lock (1) and push the motor down. The casing stops in 2.5 mm cutting depth position.
Note: The marking line should be aligned with cutting line A (0 mark).

PLUNGE CUTS

1. For a straight cut first loosen both rotary knobs (7) and swivel the plunge saw to 0° position on the scale. Tighten the rotary knobs again.
2. Turn the selector switch (17) to plunge cut function.

3. Set the desired plunge depth. Ensure that the guide rail track compensation (9) is up if not using the guide rail.

4. Press the switch lock (1) and the ON/OFF switch (2) and push the motor down. Guide the saw forward to cut.

Note: To prevent the saw from kicking back during plunge cuts follow these steps:

• Always place the plunge saw with the rear edge of the base plate (4) against a fixed limit stop.

• Hold the plunge saw in both hands and slowly lower the saw blade.

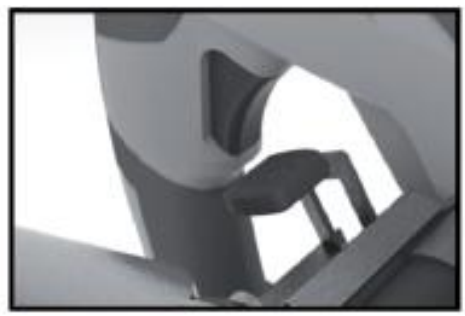
• The cutting width marks (15) show the most foremost and rearmost cutting points of the saw blade (Ø 165 mm) at maximum cutting depth and when using the guide rail.

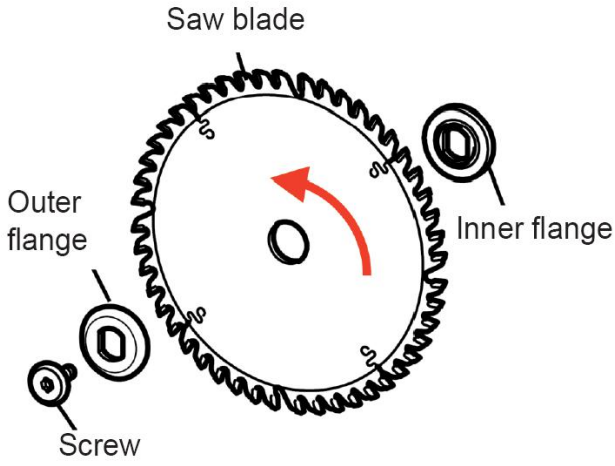
CHANGE SAW BLADE

Before any maintenance work always switch off the plunge saw and disconnect from mains power!

1. Loosen both rotary knobs (7) and swivel the plunge saw to 0° position before changing the saw blade. Tighten the rotary knobs again.
2. Set the selector switch (17) to the change saw blade icon.

3. Press the switch lock (1) down and push the motor down.
4. Press and hold the shaft lock down.
5. Use a 5 mm Allen key to turn the screw at the saw blade slightly clockwise or counter-clockwise until the spindle clicks into place.





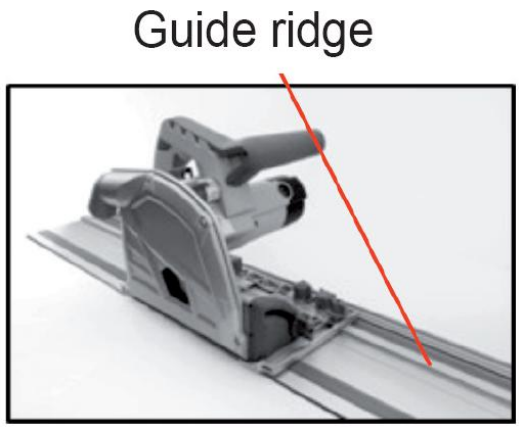
6. Use the Allen key to loosen the screw counter-clockwise. Remove the outer flange and the saw blade.
7. Clean both flanges and replace the saw blade.
Note: The rotation direction arrows of saw blade and saw must be aligned!
8. Replace the outer flange in such way that the slaving pins sit in the recesses of the inner flange.
9. Press and hold the shaft lock and tighten the screw. Press the switch lock (1) for the casing to swivel up again.

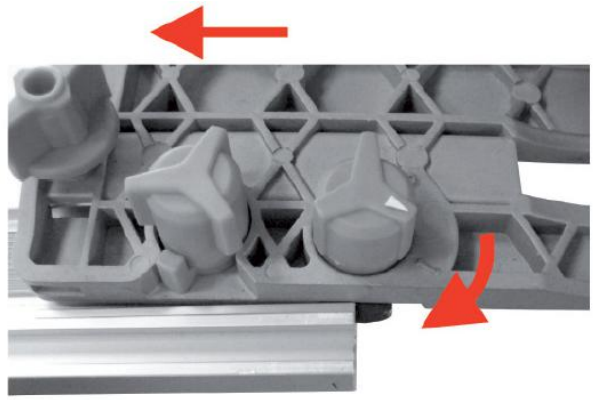
GUIDE RAIL(S) AND CLAMPS

The guide rails allow precise and clean straight cuts, miter cuts and fitting. The rails also protect the work piece surface from damages.
Fixing with the clamps ensures solid grip and safe work.

1. Open the clamps according to the thickness of the work piece.
2. Place the guide rail on the work piece and fix the guide rail with the clamps. Slide the bar into the groove of the guide rail and tighten the clamp with the lever.
Note: Place the guide rail with the black foam strips on the work piece.

3. Place the plunge saw on the guide rail. The base plate has a groove (13), which exactly fits into the guide ridge of the rail.





4. Guide the plunge saw from the edge of the guide rail and turn the guide rail lock (6) towards I to connect the plunge saw to the rail. Connecting the base plate to the guide rail is important when doing miter cuts. This prevents the plunge saw from tilting over.
5. Disconnect the plunge saw by turning the locking mechanism back towards 0 and taking the saw off the guide rail.

FINE ADJUSTMENT OF PLUNGE SAW PLAY ON GUIDE RAIL

The play of the base plate on the guide rail can be reduced to minimum with the fine adjustment screws (5).
1. Loosen the fine adjustment screws counter-clockwise.
2. Turn both fine adjustment screws (5) clockwise to minimize the play between base plate and guide rail, if necessary.
3. Fasten the fine adjustment screws clockwise.

CONNECTING RODS FOR GUIDE RAILS

1. To connect both guide rails slide the first connecting rod from the bottom into the groove of the guide rail.
2. Slide the other connecting rod into the second groove.
3. Use the 3 mm Allen key to tighten the stud screws to the limit stop to connect the rails.

DETERMINE CUTTING LINE

When using the saw with guide rail always align position A (0 mark on base plate) at the front of the base plate with your marked cutting line for straight cuts and 45° miter cuts.

GUIDE RAIL SPLINTER GUARDS

The guide rails come with a splinter guard (black protruding rubber lip). The splinter guard should be cut to size before first use. The splinter guard ensures a tear-free cut, since the wood fibers at the top of the work piece are torn without splinter guard. This is due to the saw blade teeth being directed upward.
After cutting the splinter guard to size it also shows the precise cutting path of the saw blade.

1. Mark a cutting line on the work piece and align the guide rail exactly with this cutting line.
2. Fix the guide rail with clamps on the work piece.
3. Set the selector switch to marked cut function. Set the plunge saw speed to 6.
4. Place the plunge saw at the rear end of the guide rail.
5. Switch the plunge saw on and push the saw down. Cut the splinter guard continuously over the entire length. The edge of the splinter guard now exactly matches the cutting edge.

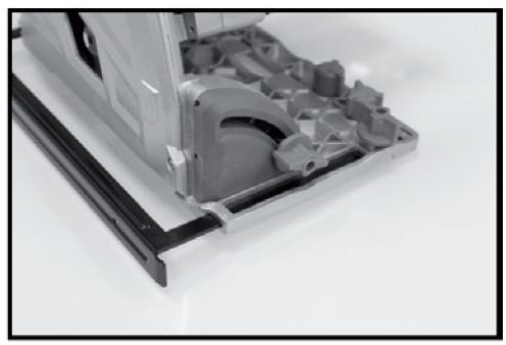
PLUNGE CUT WITH GUIDE RAIL

1. Hold the plunge saw with both hands at handles (3) and (12).
2. Switch the plunge saw on and wait until it runs on full speed.
3. Push the saw slowly down and guide the saw towards the plunge position.

Note: The cutting width markings (15) at the side of the protective cover show the foremost and rearmost cutting points of the saw blade at maximum cutting depth when using the guide rail and a 165 mm diameter saw blade.

PARALLEL GUIDE AND/OR TABLE EXPANSION

For cut-off widths up to 180 mm a parallel guide can be used. The guide can also be used as table expansion.



1. Slide the parallel guide into the respective guides at the front and rear of the base plate.
2. Measure the desired distance and fix the parallel guide with the clamping screws (22).

SAW BLADES

Compatible saw blades are necessary for the plunge saw to cut different materials fast and clean.

Saw blades with few teeth (approx. 12 – 18 teeth) are suitable for longitudinal cuts.

For cross cuts saw blades with at least 32 teeth are suitable; better are saw blades with 48 teeth.

For cutting other materials such as aluminum special saw blades are necessary.

CLEANING AND MAINTENANCE

Disconnect from mains power before carrying out any maintenance work on the plunge saw! All maintenance and repair work involving opening the motor casing must be carried out by an authorized service center.

Always keep the plunge saw clean. Clean the plunge saw after every use with a dry cloth or compressed air. Do not use any aggressive chemicals for cleaning.

CHANGE CARBON BRUSHES

The saw is equipped with self-isolating special brushes. They are automatically isolated when worn, and the tool stops. Check the carbon brushes regularly. Replace the carbon brushes with genuine spare parts if they are worn to the wear limit (approx. 50% of the block). Always replace the carbon brushes in pairs.

FINE ADJUSTMENT CUTTING PRECISION

The cutting precision for straight cuts (90° cuts) is factory-set. Use a 3mm Allen key to adjust the cutting precision at the bottom of the base plate.

1. Use a setsquare to adjust the saw blade to the 90° angle.
2. Swivel the plunge saw to the side and set the cutting precision by means of the stud screws.

The cutting precision for straight 45° miter cuts is factory-set.

1. Swivel the plunge saw to 45° position to set the 45° mark arrow (see circle).

2. Use a setsquare to check the angle.
3. Swivel the plunge saw to the side and set the cutting precision by means of the stud screws.

TECHNICAL DATA

Mains power :	220-240 V~ 50 Hz
Power :	1400 W
No load speed :	2000-5000 min^{-1}
Miter setting :	0° - 48°
Saw blade dimensions :	165 x 2,2 x 20 mm
Weight :	5,4 kg
Protecting class :	II
Max. cutting depth with guide rail :	54 mm at 90°
Max. cutting depth without guide rai :	59 mm at 90°
Max. cut with guide rail :	38 mm at 45°
Max. cut without guide rail :	42 mm at 45°
Miter cut :	0 - 48°
Noise pressure level (LpA):	77,03dB(A),
Uncertainty	K = 3 dB(A)
Sound power level (LWA):	88,03dB(A),
Uncertainty	K = 3 dB(A)
Vibration main handle :	4,544 m/s^2
	K = 1,5 m/s^2
Vibration auxiliary handle :	3,637 m/s^2
Protecting rating :	IP20

The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another; The declared vibration total value may also be used in a preliminary assessment of exposure.
Warning:
that the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

DISPOSAL

Do not dispose of electric power tools with domestic refuse.
The electric power tool is shipped in packaging to reduce transport damage.
This packaging is a raw material and as such can either be reused or can be fed back into the raw material cycle. The electric power tool and its accessories are made from various materials such as metals and plastics. Take defective components to a special refuse collection point. Ask about these at your specialist shop or local council.

CE Declaration

CE Declaration CE of conformity

BUILDER SAS
ZI, 32 RUE ARISTIDE BERGES – 312070 CUGNAUX – France
Declares that the machinery designated below :

Plunge saw
Ref : FS1612-1

Serial number: 20210501925-20210502424

Complies with the provisions of the Directive «Machine» 2006/42/EC and national laws transposing it:

Also complies with the following European directives :

The EMC Directive 2014/30/EU
The ROHS Directive (EU)2015/863 amending 2011/65/EU

Also complies with European standards, with national standards and the following technical provisions :

EN62841-1:2015, EN62841-2-5:2014
EN55014-1:2017
EN55014-2 :2015
EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1

RESPONSIBLE OF TECHNICAL FILE : OLIVIER PATRIARCA

Cugnaux,09/03/2021

Philippe MARIE / PDG

WARRANTY

WARRANTY

The manufacturer guarantees the product against defects in material and workmanship for a period of 2 years from the date of the original purchase. The warranty only applies if the product is for household use. The warranty does not cover breakdowns due to normal wear and tear.

The manufacturer agrees to replace parts identified as defective by the designated distributor. The manufacturer does not accept responsibility for the replacement of the machine, in whole or in part , and/or ensuing damage.

The warranty does not cover breakdowns due to:

- insufficient maintenance.
- abnormal assembly, adjustment or operations of the product.
- parts subject to normal wear and tear.

The warranty does not extend to:

- shipping and packaging costs.
- using the tool for a purpose other than that for which it was designed.
- the use and maintenance of the machine done in a manner not described in the user manual.

Due to our policy of continuous product improvement, we reserve the right to alter or change specifications without notice. Consequently, the product may be different from the information contained therein, but a modification will be undertaken without notice if it is recognized as an improvement of the preceding characteristic.

READ THE MANUAL CAREFULLY BEFORE USING THE MACHINE.

When ordering spare parts, please indicate the part number or code, you can find this in the spare parts list in this manual. Keep the purchase receipt; without it, the warranty is invalid. To help you with your product, we invite you to contact us by phone or via our website:

- **+33 (0)9.70.75.30.30**
- **https://services.swap-europe.com/contact**

You must create a "ticket" via the web platform.

- Register or create your account.
- Indicate the reference of the tool.
- Choose the subject of your request.
- Describe your problem.
- Attach these files: invoice or sales receipt, photo of the identification plate (serial number), photo of the part you need (for example: pins on the transformer plug which are broken).

PRODUCT FAILURE

WHAT TO DO IF MY MACHINE BREAKS DOWN?

If you bought your product in a store:

a) Empty the fuel tank.

b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.

Go to the store with the complete machine and with the receipt or invoice.

If you bought your product on a website:

a) Empty the fuel tank.

b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.

c) Create a SWAP-Europe service ticket on the site: https://services.swap-europe.com When making the request on SWAP-Europe, you must attach the invoice and the photo of the nameplate (serial number).

d) Contact the repair station to make sure it is available before dropping off the machine.

Go to the repair station with the complete machine packed, accompanied by the purchase invoice and the station support sheet downloadable after the service request is completed on the SWAP-Europe site

For machines with engine failure from manufacturers BRIGGS & STRATTON, HONDA and RATO, please refer to the following instructions.

Repairs will be done by approved engine manufacturers of these manufacturers, see their site:

- http://www.briggsandstratton.com/eu/fr
- http://www.honda-engines-eu.com/fr/service-network-page;jsessionid=5EE8456CF39CD572AA2AEEDFD290CDAE
- https://www.rato-europe.com/it/service-network

Please keep your original packaging to allow for after-sales service returns or pack your machine with a similar cardboard box of the same dimensions.

For any question concerning our after-sales service you can make a request on our website https://services.swap-europe.com

Our hotline remains available at +33 (9) 70 75 30 30.

SWAP EUROPE
LA PIÈCE QUI CHANGE TOUT

WARRANTY EXCLUSIONS

THE WARRANTY DOES NOT COVER:

- Start-up and setting up of the product.
- Damage resulting from normal wear and tear of the product.
- Damage resulting from improper use of the product.
- Damage resulting from assembly or start-up not in accordance with the user manual.
- Breakdowns related to carburetion beyond 90 days and fouling of carburetors.
- Periodic and standard maintenance events.
- Actions of modification and dismantling that directly void the warranty.
- Products whose original authentication marking (brand, serial number) has been degraded, altered or withdrawn.
- Replacement of consumables.
- The use of non-original parts.
- Breakage of parts following impacts or projections.
- Accessories breakdowns.
- Defects and their consequences linked to any external cause.
- Loss of components and loss due to insufficient screwing.
- Cutting components and any damage related to the loosening of parts.
- Overload or overheating.
- Poor power supply quality: faulty voltage, voltage error, etc.
- Damages resulting from the deprivation of enjoyment of the product during the time necessary for repairs and more generally the costs related to the immobilization of the product.
- The costs of a second opinion established by a third party following an estimate by a SWAP-Europe repair station
- The use of a product which would show a defect or a breakage which was not the subject of an immediate report and/or repair with the services of SWAP-Europe.
- Deterioration linked to transport and storage*.
- Launchers beyond 90 days.
- Oil, petrol, grease.
- Damages related to the use of non-compliant fuels or lubricants.

* In accordance with transport legislation, damage related to transport must be declared to carriers within 48 hours maximum after observation by registered letter with acknowledgement of receipt.

This document is a supplement to your notice, a non-exhaustive list.

Attention: all orders must be checked in the presence of the delivery person. In case of refusal by the delivery person, it you must simply refuse the delivery and notify your refusal.

Reminder: the reserves do not exclude the notification by registered letter with acknowledgement within 72 hours.

Information:

Thermal devices must be wintered each season (service available on the SWAP-Europe site). Batteries must be charged before being stored.