



ALLSAW

Used on many heritage sites



APPLICATION MANUAL

AS175 BRICK & MORTAR SAW

**CUTS BRICKS, MORTAR,
SOFT STONE, PLASTIC & WOOD**



TAKE THE PLUNGE,
IF YOU DON'T BELIEVE IT...
TRY IT!

NEW POWERFUL HEAVY DUTY MOTOR

1400 Watt with 20% more power for improved cutting performance. Dust resistant heavy duty design ensures long motor life, even in the toughest working environments.

Please refer to pages 24-26 for essential operating tips and techniques.

AS175 TECHNICAL INFORMATION

ITEM	SPECIFICATION
Cutting depth/width	120mm (4 3/4")/6.5mm (1/4") depending on blade
Weight, with cutting blades	4.3kg (9.5lb)
Dimensions without blades	610 mm (24") L 75 mm (3") W 342 mm (13.5") H
No load speed No.	5100 rpm
Power	1400W
Electrical rating, nominal	ALL.FG.175240.40 - 230V~, 50Hz ALL.FG.175240.60 - 230V~, 50Hz ALL.FG.175110.40 - 110V~, 50Hz
Dust extraction vacuum hose interface	Suits vacuum hose with 35mm diameter internal taper fitting, or 38mm diameter external taper fitting.
Maximum mid-span belt deflection	2mm (1/16") with 15 N (1.5 kg) (3.4 lb) deflection force
Blade mount bolt torque	18 Nm (1.8 kg-m), (13.2ft-lb),
Vibration emissions GP Blade (k=1.5)	7.7m/s ²
Vibration emissions Plunge Blade (k=1.5)	5.9m/s ²
Vibration emissions Switch Blade (k=1.5)	4.8m/s ²
A-Weighted sound pressure level KPA	92dB (A)
Uncertainty KpA	5dB(A)
A- Weighted sound power level LWA	103 dB(A)
Uncertainty LWA	5dB(A)

VIBRATION REDUCING HANDLE

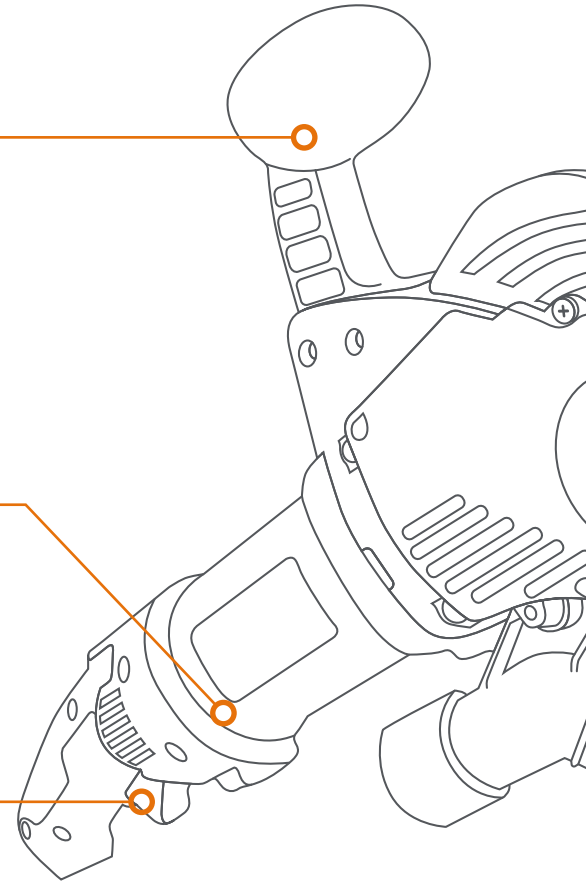
Ergonomic soft grip handle significantly reduces vibration to increase user comfort.

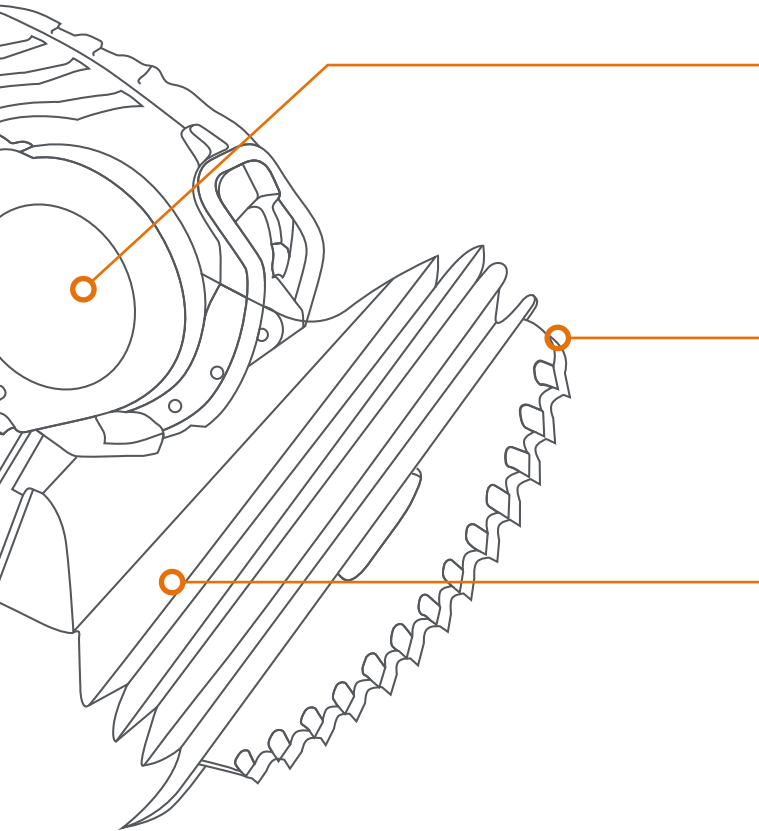
AUTO CUT OFF BRUSHES

The brushes are enclosed in a cassette to prevent the build-up of dust and includes an auto cut-off to prevent motor damage.

ERGONOMIC HANDLE

Positive, soft feel ergonomic handle with superior trigger system.





PROVEN DRIVE SYSTEM

Adjustable belt drive, acts as a clutch. Sealed dust proof bearings, designed to withstand tough work. Heavy duty sprung loaded cams.

TUNGSTEN CARBIDE BLADE

Resharpenable tungsten carbide teeth, long lasting, designed specifically for cutting bricks and mortar to 50 mpa.

DUST BOOT

Dust boot with vacuum attachment, efficient dust control for jobs in sensitive environments.

AS175 STANDARD KIT & ADDITIONAL BLADES

CONTENTS OF THE STANDARD KIT



AS175 ALLSAW

ALLSAW Available in 110 volt and 240 volt, 1400 Watt motor.



A17567 ALLSAW ZIP UP BAG

ALLSAW Strong durable hold-all kit bag, with custom security foam saw & attachments.



BL175GHP GENERAL PURPOSE BLADE

Brick and mortar cutting to 50 mpa. Ideal for raking out mortar and cutting openings through brickwork, tree roots, see page 8 for more detail.



BL175PHP PLUNGE BLADE

Brick and mortar cutting to 50 mpa. Ideal for fast single brick removal, raking out mortar in purp-joints and cutting small openings through brickwork, see page 12 for more detail.



A17074 IAN KEY (18NM)

ALLSAW Ian Key is a specially designed 'torque key' to be used when changing the blades so that the bolts can be easily tightened to the correct torque setting of 18Nm.



A17524 - HEAVY DUST BOOT

ALLSAW Heavy Dust Boot connects to the ALLSAW surrounding the blades and creating a vacuum to help capture more dust.



A17080 VACUUM ADAPTOR*

ALLSAW Vacuum adaptor, enables the saw to be connected to most dust extraction units on the market today.
Optional Extra



A17020 DUST EXTRACTION FUNNEL*

ALLSAW Dust extraction funnel, for use when connecting the saw to a dust extraction unit. THIS IS NOT A SAFETY GUARD and should be removed when dust extraction is not needed.
Optional Extra

ADDITIONAL BLADES



BL175HJ TCT HEAD JOINT BLADE*
 Head Joint Blades D: 75mm W: 7.2mm
 For raking out mortar from standard mortar joints in brick and stonework to a max of 65mm, ideal for structural bar installations.



BL175SHP SWITCH-BOX BLADE*
 High Performance TCT Switchbox Blades D: 120mm W: 7.2mm.
 For making smaller plunge cuts e.g. for electrical switchboxes or around handmade bricks with smaller perp-ends.



BL175HN TCT HERITAGE*
 Heritage Narrow Blades
 D: 30mm W: 3.2mm
 For raking out mortar from fine joints in brick or stonework.



BL175THP TUCK POINTING BLADE*
 D: 35mm W: 3.2mm
 Ideal for raking out mortar, cleaning out cracks in plaster prior to filling, cutting out and preparing for new stonework, removing old tile grout, removing putty and jointing compounds.



BL175GXL, EXTRA LARGE GENERAL PURPOSE BLADE*
 D: 170mm W: 7.2mm
 For general cutting of brick and mortar up to 170mm depth. XL blades can also be used for cutting tree-roots, wood, plastic and soft stone.
Only recommended for AS170 & AS175.

*Note: All masonry blades can effectively cut materials up to 50 mpa. *Note: Not included in the AS175 Standard Kit*

AS175 GENERAL PURPOSE BLADE



**CUTS CLEAN THROUGH
BRICKWORK, WITH
LOW DUST.**

General Purpose Blade
designed for longer cuts.

Cuts brick, mortar, soft stone,
concrete blocks up to 50
(mpa), plastic, wood and
composite materials.

120mm cutting depth

Order code BL175GHP



Raking out for re-pointing and
brickwork repair

Cutting out openings in masonry,
for doorways, windows, electrical
cabinets with very little dust

Damp proof membrane replacement

Cuts roofing felt - blades move at low
speed to prevent tar from melting

Cutting out expansion joints in
brickwork

Cutting trees, tree roots or AstroTurf

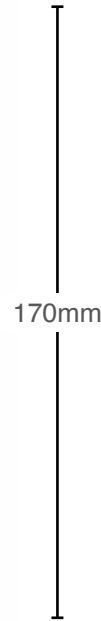
Removing and cleaning out expansion
joints in concrete

Chasing out for cables, pipes and
reinforcement

Cutting out for cavity trays

Raking out for lead flashings

AS175XL GENERAL PURPOSE 170MM TCT BLADE



THE ALLSAW GOES LARGE

Faster and deeper cutting, for doorways, window openings, meter boxes and much more.

170mm cutting depth

Order code BL175GXL



Cutting out openings in masonry, up to 170mm deep

Cutting out openings in masonry, for doorways, windows, electrical cabinets with very little dust

Cuts roofing felt - blades move at low speed preventing the tar from melting

Cutting out for cavity trays

Ideal for cutting old and new railway sleeper

Removing and cleaning out expansion joints in concrete

Cutting out expansion joints in brickwork

Chasing out for cables, pipes and reinforcement

Cutting trees, tree roots or AstroTurf

AS175 PLUNGE BLADE



**REMOVES BRICKS SO
CLEANLY YOU CAN
RE-USE THEM**

Plunge Blade designed for fast
single brick removal.

Cuts brick, mortar, soft stone,
concrete blocks up to 50
(mpa), plastic, wood and
composite materials.

120mm cutting depth

Order code BL175PHP



Raking out perp-joints for re-pointing
and brickwork repair

Fast single brick removal, removes
bricks with-out damaging the brick,
enabling you to reuse the bricks

Damp proof membrane replacement

Fitting cavity trays and weep holes

Raking out for lead flashings

Chimney work, removing brickwork to
gain access into the chimney flue, e.g:
installing flue liners

Cutting out expansion joints in
brickwork

Cutting out for electrical boxes,
shower valves and pipework

Cutting out for bonding in brickwork

AS175 SWITCH BOX BLADE




SMALL ENOUGH TO GET INTO THE DETAILS

Switch Box Blade designed for narrow purp-joints.

Cuts brick, mortar, soft stone, concrete blocks up to 50 (mpa). Ideal for cutting plastic, wood and composite materials.

120mm cutting depth

Order code BL175SHP



Cutting small holes in brickwork

Letter box and ventilation grill installations

Fast single brick removal for smaller bricks, removes bricks without damaging, enabling you to re-use the same bricks

Chimney work, removing plaster and bricks to gain access into the chimney flue, e.g.: when installing flue liners

Cutting out for switch boxes, shower valves and pipe work

Toothing out for bonding in brickwork

Toothing around smaller hand made bricks, flints, tile creases and architectural details

AS175 HEAD JOINT BLADE



**NEW TECHNOLOGY FOR
RE-POINTING, CLEAN,
SAFE AND FAST!**

The fastest way to re-point.

Head Joint Blade designed for
Raking out joints in masonry.

75mm cutting depth
6mm cutting width

Order code BL175HJ





Raking out for re-pointing and brickwork repair to a maximum depth of 75mm

Perfect for fast raking of horizontal and vertical (purp) mortar joints

Ideal for raking out to a depth of 75mm for lead flashings

Chasing out for cables and pipes

Ideal for raking out mortar joints to controlled depth, both bed and purp-joints

AS175 HERITAGE NARROW BLADE



**SUITABLE FOR NARROW
RE-POINTING, CLEAN,
SAFE AND FAST!**

Heritage Narrow Blades
designed for raking narrow
joints in masonry.

Providing the accuracy
required for restoration work.

35mm cutting depth
3.2mm cutting width

Order code BL175HN



Designed for cutting & raking out of joints as narrow as 3mm, often found on older and historic properties

▣ Raking out of narrow mortar joints less than 3.2mm can be achieved by using one blade

Cutting out old lead joints

Removing putty and jointing compounds

Cleaning out cracks in plaster prior to filling

Cutting out and preparing for new stone work

Removing old tile grout

AS175 TUCK POINTING BLADE



**GET TO THE POINT WHEN
RAKING OUT MORTAR
& COMPOUNDS!**

Tuck Point Blades are ideal for raking out mortar and compounds within Brick & Stone masonry joints, providing the accuracy required for restoration work.

35mm cutting depth
7.2mm cutting width

Order code BL175THP

Ideal for cutting out and raking out as narrow as 7.2mm with no overcut

Low dust and ultimate speed

Cutting out old lead joints

Removing putty and jointing compounds

Cleaning out cracks in plaster prior to filling

Removing old tile grout

Tuck Pointing with accuracy and ease

ALLSAW TECHNOLOGY

Engineered to significantly improve safety and efficiency when cutting brick walls, mortar and more.

Cut square, cut deep and cut with precision.

The Allsaw AS175 is ideal for Trade Professionals and DIY Enthusiasts, there is a number of specialised blade options for specialised trade applications.

ARBÖRTECH™





Cut Dry. Cut Clean.

For the first time you can cut dry and cut clean at the same time. Inside jobs are now possible without the usual painstaking clean up time.

Performance

Powerful, heavy duty **1400 Watt motor**. Long lasting motor life even in the toughest working environments. All ALLSAW compatible blades have high quality **Tungsten Carbide teeth** that are also **re-sharpenable**.

Safety

The clever **ergonomic design** improves **balance** and **control**, whilst preventing dangerous and deadly kickbacks. The unique patent cutting technology produces little airborne dust which creates a **safer environment** for the operator and bystanders. The engineered design allows the operator **clear visibility when cutting**.

Versatility

With a number of specialised Allsaw AS175 compatible blades available, including Tuck Point Blades, Heritage Blades, Switchbox Blades, Headjoint Blades and more. **We have the blade for the job.**

USING THE ALLSAW

FIVE ESSENTIAL TIPS for successful use

1. **Keep Me Moving** -The Allsaw must be used at all times with a 'Sawing' or 'Rocking' Action.

As the blades are not spinning like an angle grinder, and only move 15mm overall, there is nothing to drive the dust out from under and around the blades. 'Sawing' and 'Rocking' the Allsaw, clears the dust out from under and around the blades as they come out of the cut, keeping the blades cool, and increasing cutting speed.

NOTE: Please watch the training videos below, if not possible see diagrams and text on page 25.

2. **The Scratch Test** - Know what you are cutting. The Allsaw cuts: mortar, soft bricks & stone, light density concrete blocks up to 50mpa, tree roots, wood, composite materials and plastics, but will not cut concrete or very hard bricks, such as engineering bricks. By 'Rule of Thumb', if the material you wish to cut will scratch with a nail, to remove mortar, or leave an impression in the masonry, then the Allsaw should cut it when used with a 'Rocking /Sawing Action'.

Plunge Blade Cutting Technique

www.youtube.com/watch?v=X7cjBGmCy_Q



General Purpose Blade Cutting Technique

www.youtube.com/watch?v=5QaA-3XnE2U



3. **The Ian/Torque Key** - Use only the Ian/Torque Key to tighten the Blade Bolts to 18Nm and to change the Blades. The Ian/Torque Key tightens the Blade Bolts to the correct torque 18Nm, this is achieved when the long shaft of the Ian/Torque Key meets and touches the short shaft going into the Blade Bolt as you tighten the bolts. (See fig. 14)
4. **Power Supply** - Ensure the Allsaw is supplied with sufficient power.

110 volt power supply: Use a 3.3KVA transformer or 3KVA Generator (minimum supply required per AS170 / 175 Allsaw). 110v Extension Leads: The use of 2.5mm 16amp Extension Leads is recommended. However, 1.5mm 16amp Extension Leads can be used up to a maximum length of 25 metres.

NOTE: All cable reels must be fully unwound before use.

5. **Drive Belt** -The AS170 / 175 Allsaw uses a drive belt, which will slip if the blades should jam.

Excessive slipping will wear the belt prematurely. Ease jammed blades out by gently rocking the saw manually without the motor running. Do not force the tool when cutting, and keep 'Rocking' or 'Sawing' the blades back and forth to keep them free in the cut, especially in damp materials.

GENERAL PURPOSE BLADES

- To start the cut, hold the Allsaw firmly in both hands and with the saw running, gently apply the middle of the blade cutting edge to the work surface, keeping in mind that the direction of cut is towards the rear of the blades.
- While cutting, move the Allsaw and blades in a slow 'sawing' motion, this improves the cut rate, clears the debris from under the blades, reducing concentrated heat build-up and evens the wear on the blades. (See figs. 8 & 9)

PLUNGE BLADES

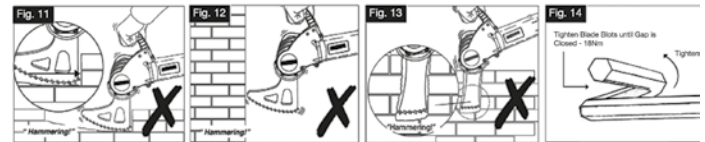
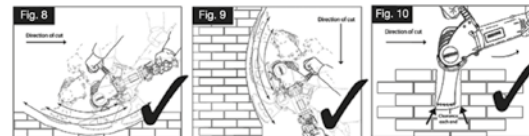
- Must be constantly moved 'back and forth' along the mortar joint, and 'rocked' when cutting the 'Perp' - vertical joint, or into square corners, being moved constantly in and out to clear the dust, when cutting to full depth. Always maintain a breathing space around blades bearing in mind that only the teeth do the cutting. (See fig. 10).

CAUTION: Do not allow the forward or rear ends of the blades to hammer onto hard surfaces (as figs. 11, 12 & 13). This will damage the blades and tool. If unintentional hammering occurs, withdraw blades from the cut immediately and investigate the cut for an obstruction i.e. metal wall tie, nail, stone, etc... and work around it.

NOTE: FAILURE TO ADHERE TO THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE BLADES & MACHINE

TIPS AND HINTS FOR CORRECT USE AND CARE

1. Safety Check. Gloves and Eye Protection should be worn at all times.
2. The blades should be running before touching the work surface, then apply gentle pressure as you rock the saw back and forth from the front to the back of the blade. (as figs 8, 9 & 10)
3. The deeper you cut, the more you should rock the saw back and forth. (as figs 8, 9 & 10)
4. Allow the blades to do the work, using the rocking motion to clear the dust from the cut. (as figs 8, 9 & 10)
5. The Dust Boot Code A17020 / A17524, is designed to 'squash' flat when in use, enabling you to continue to use the saw with the essential 'sawing or rocking' motion.



ARBORTECH HELPLINE: 0800 980 0998

AS175 SCRATCH TEST

TIPS & HINTS FOR CORRECT USE & CARE

KNOW WHAT YOU ARE CUTTING - The Allsaw cuts: Mortar, Soft Bricks & Stone, Light Density Concrete Blocks up to 50mpa, Tree Roots, Wood, Composite Materials and Plastics, but will not cut concrete of very hard bricks, such as engineering bricks. By "Rule of Thumb", if the material you wish to cut will scratch with nail, to remove mortar, or leave an impression in the masonry, then the Allsaw should cut it when used with a 'Rocking / Sawing action'.

NOTE: FAILURE TO ADHERE TO THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE BLADES & MACHINE

Fig 1. Brick with scratch mark



Fig 3. Mortar with scratch mark



AS17090 - Masonry Scratch Test Nail



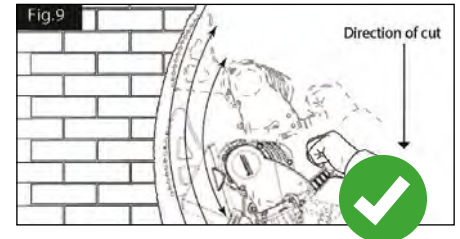
Fig 2. Brick without scratch mark



Fig 4. Mortar without scratch mark



Fig 9. Direction of use of Allsaw from incumbent graphic. Keep me moving - Sawing and rocking!







ALLSAW



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