# **OPERATOR'S MANUAL**



# Floor Saw Models BFS35 & BFS45 Operator's Manual

# **FAIRPORT**

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#### 1. DESCRIPTION

The BFS35 and BFS45 hand feed floor saws are designed for sawing expansion and contraction joints, slots for the insertion of traffic control cables, outline cutting of trenches etc in concrete and asphalt. The BFS35 uses a 350mm-diameter blade and is powered by a 9-hp petrol engine; the BFS45 uses a 450mm blade and is fitted with a 13-hp petrol engine. A 350mm blade may be fitted to a BFS45, but a 450mm should not be fitted to a BFS35 as the engine has insufficient power. A water tank is an integral part of the machines providing a water supply to both cool the blade and damp down dust produced while cutting. A wheel brake is fitted to prevent the machine running away if left unattended on a slope. A lifting eye is provided as part of the machine.

# 2. TECHNICAL SPECIFICATION

<u>DIMENSIONS</u>	BFS35	BFS45	
Length without handle Width Height without handle Weight with water tank empty Weight with water tank full Water tank capacity	1020mm 560mm 810mm 120kg 157kg 37 litres	1020mm 560mm 810mm 126kg 163kg 37 litres	
<u>ENGINE</u>			
Make Type Max horse power At operating speed of	Honda petrol GX270 9.0 3600rpm	Honda petrol GX390 13.0 3600	

# **PERFORMANCE**

Blade speed 2750rpm 2750rpm
At engine speed of 3600rpm 3600rpm
Max depth of cut 100mm 150mm

# **BLADE DATA**

Maximum diameter: 350mm for the BFS35

450mm for the BFS45

Bore diameter 25.4mm

Guaranteed Sound Power, 108 Lwa

dB(A)

#### 3. SAFETY PRECAUTIONS AND INFORMATION

Read these operating and safety instructions before using the machine and operate the machine in accordance with these instructions.

- 1. Inspect the machine for damage or improper function
- 2. Make sure the blade is securely fitted in the correct position and with the correct blade clamping flanges.
- 3. Before use, visually examine blades for cracks and other damage. Do not use if damage suspected. Ensure shaft and shaft bearings are not worn.
- 4. Before starting the machine make sure the blade is clear of the ground.
- 5. Never force the blade into the cut. Ease blade into the cut gently and push machine forward with a constant force.
- 6. Press the stop button to stop the engine. After the engine has stopped turn the engine switch to off (0).
- 7. Do not alter the hole in the blade this will create an out-of-round condition resulting in blade wobbling, pounding or cracking which could be hazardous.
- 8. Do not move the machine around the site with the engine running.
- 9. Before performing any cutting operations, let the tool run for a few seconds without load. If blade wobble, vibration or unusual noise occurs, stop the tool immediately. Inspect the blade for damage or incorrect mounting.
- 10. Do not use side pressure or grind with the side of the blade.
- 11. Ensure that the arrow on the blade corresponds with the direction of rotation of

- the machine spindle as indicated by the arrow on the blade guard.
- 12. Ensure that the speed marked on the blade is not less than the no-load blade speed of the machine.
- 13. Ensure that the blade is of the correct type for the material to be cut.
- 14. To prevent accidental starting of the machine the spark plug lead must be removed before any maintenance or adjustments are carried out on the machine.
- 15. Do not attempt to fill fuel tank or oil sump while the machine is running.
- 16. When operating machines in confined areas, the exhaust fumes must be ventilated. Do not operate in an explosive atmosphere.
- 17. Always use blade guard and check for proper function of all guards. Never defeat the purposes of guards by tying back or removing.
- 18. Keep bystanders and/or animals out of the work area, particularly at the front of the machine.
- 19. Always allow a small amount of water to flow when cutting 'dry' to dampen airborne dust.
- 20. Always wear ear protectors.
- 21. Always wear eye protection.
- 22. Always wear protective footwear.
- 23. Place guide arm in raised position when not in use.
- 24. Check area being cut has no live buried cables at depth being cut.
- 25. Do not smoke whilst refuelling. Wipe up spilt fuel. Dispose fuel contaminated wipes safely
- 26. Ensure work area is well illuminated.
- 27. Always comply with site safety regulations.
- 28. This machine is to be used only for cutting concrete, reinforced concrete and asphalt. It must not be used for cutting any other material or for any other purpose.
- 29. This machine must not be modified in any way without written permission of the manufacturer. Unauthorised modifications are likely to invalidate the warranty and also result in the machine not conforming to safety regulations.

# **Safety Pictograms Used on this Equipment**



Wear ear protectors



Wear safety boots



Wear eye protection



Read manual before using this equipment

#### 4. REMOVAL AND FITTING OF BLADES

Remove spark plug lead from petrol engine.

Raise the front of the saw to its maximum height.

Slacken front fixing of blade guard and pivot front of guard upward. It may be supported in this position with the guide bar arm.

Fit the smaller of the two spanners over the flats in the middle of the drive shaft.

Remove the blade lock nut with the other spanner, turning clockwise. (Left hand thread).

Remove the outer blade clamping flange and the blade from the drive shaft.

Check the clamping and backing flanges for damage and wear, replace where necessary.

Ensure that tolerance between spindle and spindle hole in blade is not more than 0.1mm.

Ensure flanges are clean before mounting the blade.

Fit the blade onto the spindle making certain that the blade locates on the spindle boss and is flush with the backing flange and the arrow on the blade points in the same direction as arrow on blade guard. If the arrow is unreadable the direction of rotation is clockwise looking onto the blade side of the machine.

Replace the clamping flange; check it fits snugly against blade.

Replace the blade nut and tighten securely (left hand thread).

Remove spanner holding the drive shaft.

Refit the blade guard and make secure.

Replace spark plug lead (petrol engines).

Check that the sawing guide is in alignment with the blade. Adjust guide if necessary.

# 5. OPERATING INSTRUCTIONS

Draw a chalk line along the line of the cut to act as a guide.

Ensure blade is well clear of surface.

Fill the water tank.

Start the engine according to the engine manufacturer's instructions.

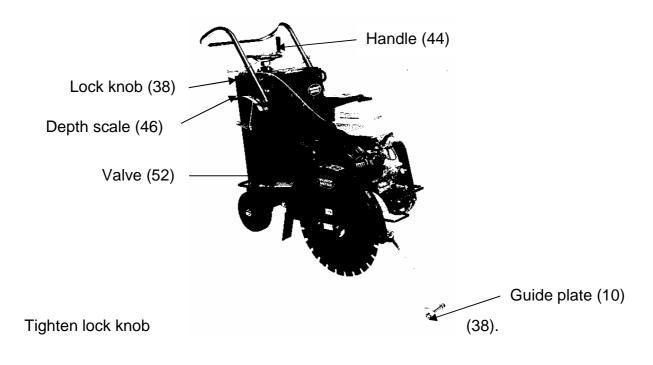
Position the saw, lining up the guide plate (10) on the blade guard with the chalk line.

Move saw forward a few feet and back to check alignment with chalk mark.

Open valve (52) ensuring adequate water is hitting blade.

Loosen cutting depth control lock knob (38).

On full revs lower the blade slowly into the cut to desired depth, indicated on the appropriate cutting depth scale (46), by rotating handle (44) counter clockwise.



Push saw forwards, gently but firmly following the chalk line.

At the end of the cut loosen lock knob and wind the blade out of the cut by turning handle clockwise. Slow engine and reposition for subsequent pass.

Stop the engine by slowing to tick-over and pressing the stop button. Turn the engine switch to off (0) when the engine has stopped.

#### 6. HINTS ON CUTTING

Never plunge the blade harshly into the cut.

The machine can be used with dry and wet cutting blades. Water MUST be used with wet cutting diamond blades. If using 'dry' cutting blades allow sufficient water to flow to just damp down the dust.

Do not apply downward pressure; the weight of the machine is sufficient for efficient cutting.

If there is a loss of cutting action check the blade for wear and that it is the correct type for the material being cut or refer to blade supplier.

Always wear protective goggles, ear defenders, safety footwear and protective clothing.

The blade is intended for straight line cutting only. Cutting curves can cause stress cracks or fragmentation of the blade.

If water stops flowing stop cutting until adequate flow is restored.

# 7. MAINTENANCE

Carry out necessary checks and maintenance on the engine according to the engine manufacturer's manual.

If cutting dry, due to the dusty conditions, the air filter will need cleaning/changing much more often - check twice daily - and engine oil will need changing every 20 hours, however, see section 3, para. 19.

Grease blade spindle bearings and tilting yoke bearings weekly.

Check engine and guard nuts and bolts for tightness monthly.

Check drive belts monthly. Retighten if movement at centre of belt span is more than 4mm Replace all belts if any are worn or damaged. See full manual.

Monthly apply a few drops of oil to elevating screw thread.

A more comprehensive manual suitable for workshop use is available from Fairport Construction Equipment Ltd.

#### 8. WARRANTY CONDITIONS AND CLAIMS PROCEDURE

All products supplied by Fairport Construction Equipment Ltd (hereafter referred to as FCE) are warranted to be free of defects due to faulty materials or workmanship for a period of 12 months from the date of original despatch from FCE or as specified below:

Hydraulic hoses and hydraulic couplings – 3 months.

Hydraulic accumulators – 6 months.

Flexible drives – 6 months.

All spare parts used in repairs carried out by FCE or an authorized dealer or repairer – 3 months.

If the goods have been purchased through a stockist the above warranty periods also apply from receipt of the goods by the user of the equipment up to a total of a further 6 months from date of despatch from FCE whichever is earlier.

Filter elements, gauges and oils are specifically excluded from this warranty.

FCE shall at their option repair or replace during normal working hour's goods accepted as faulty free of charge to the user.

For proprietary items such as engines, the original manufacturer's warranty and conditions shall apply.

#### **CONDITIONS**

The goods shall be returned at the purchaser's expense to FCE or to a destination FCE may reasonably direct. Carriage costs will be refunded if warranty is accepted.

Warranty claims will not be considered where there is evidence that failure has been caused by carelessness, improper use, negligence, inadequate servicing, incorrect engine speeds, fair wear and tear or non-compliance with instructions issued by the manufacturer.

To the extent permitted by law, the liability of FCE under this section is confined only to providing a remedy for defective goods and does not extend to any consequential loss, loss of profit, injury or damage suffered.

Warranty will not be accepted on dismantled goods unless dismantling was carried out with the written permission of FCE.

No claim shall be considered if other than genuine parts supplied by FCE have been used.

Products are only covered by this warranty in the country to where they were supplied by FCE.

Warranty on products applies only to the original user of the equipment.

This warranty shall not apply if the serial number or other identifying numbers or marks applied by FCE have been removed, defaced or are otherwise illegible.

#### CLAIMS PROCEDURE

Check that the goods are still under warranty before returning them to FCE (see above for warranty periods).

Return the goods to FCE with an order number for the work to proceed. If warranty is accepted no charge will be made. If warranty is not accepted a quotation will be given for the repair and the conditions under the section headed REPAIRS AND ESTIMATES will apply.

In the customer's interest, goods must be accompanied by documentation detailing the nature of the fault or its symptoms. Phrases such as 'Faulty' are unacceptable and will result in delays and possible charges to defray costs incurred in identifying the fault.

In the case of hydraulic breakers and power packs, both the breaker and the pack should be returned

### 9. REPAIRS AND ESTIMATES

When returning a machine, or an assembly for repair, always include an Advice Note quoting model and serial number of the machine.

An official order must also be forwarded to FCE giving detailed instructions. No repair work can be carried out unless covered by an official order.

An estimate will be submitted before proceeding with any repair. To partly cover the cost in dismantling, cleaning and inspection, a small charge will be made; this however will be waived upon receipt of your official instructions to proceed with the repair.

In the event of the estimate not being accepted, a further charge will be made to defray the rebuilding of the machine.

Estimates must be treated as approximate only as it may be found necessary to use additional parts on further examination.

# **EC Declaration of Conformity**

We Fairport Construction Equipment Limited				
Blagden Street				
Sheffield				
S2 5QS				
Declare that the Product BFS 35/45				
Manufactured from 1 Sept 2004				
conforms to the following Directives:	:			
89/336/EEC, 89/392/EEC, 91/36	8/EEC, 2000/14/EC			
uses the following standards:				
BS EN 292-1, BS EN 292-2, BS	EN 60204-1, BS EN 294			
•	al health and safety requirements of the ormity with the protection requirements of			
Technical Construction File no.92953				
Competent Body (name, address)N/A				
Certificate/report no.	Certificate/report date:			
Refatte				
V	Technical Manager			
Signature	Position			