



Ⓒ Operators Manual

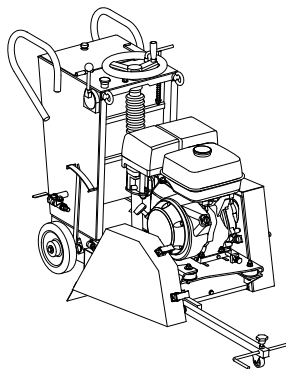
Ⓒ Betjene Håndbok

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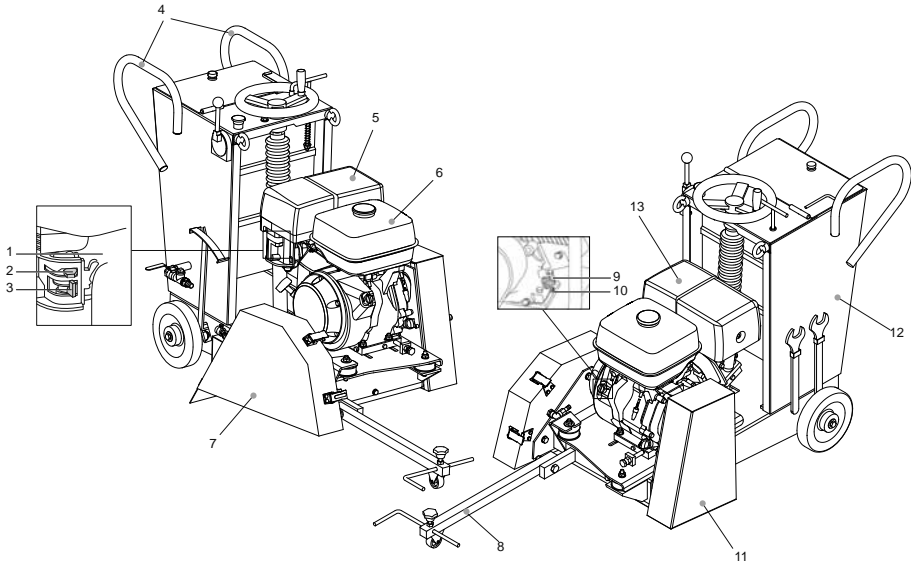
CFS
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- Spare Parts Book
- Bruksanvisning

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Machine Description



- | | |
|-----------------------|----------------------------------|
| 1. Throttle Lever, | 8. Pointer Guide, |
| 2. Choke Lever, | 9. Engine Oil Filler / Dipstick, |
| 3. Fuel ON/OFF Lever, | 10. Engine Oil Drain Plug, |
| 4. Control Handle, | 11. Belt Guard, |
| 5. Exhaust, | 12. Water Tank, |
| 6. Fuel Tank, | 13. Air Filter Housing |
| 7. Blade Guard, | |

Environment



Safe Disposal.



Instructions for the protection of the environment. The machine contains valuable materials. Take the discarded apparatus and accessories to the relevant recycling facilities.



Component	Material
Handle	Steel
Main frame	Steel
Belt Guard	Steel
Blade Guard	Steel
Engine	Aluminium
Flexible Mounts	Steel and Rubber
Various Parts	Steel and Aluminium

General Safety



For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information. It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of the Floor Saw, consult your supervisor or Belle Group.



WARNING

Improper maintenance can be hazardous. Read and Understand this section before you perform any maintenance, service or repairs.

- This equipment is heavy and must not be lifted single-handedly, either **GET HELP** or use suitable lifting equipment.
- Cordon off the work area and keep members of the public and unauthorised personnel at a safe distance.
- Personal Protective Equipment (PPE) must be worn by the operator whenever this equipment is being used (see Health & Safety).
- Make sure you know how to safely switch this machine **OFF** before you switch it **ON** in case you get into difficulty.
- Always switch **OFF** the engine before transporting, moving it around the site or servicing it.
- During use the engine becomes very hot, allow the engine to cool before touching it.
Never leave the engine running and unattended.
- Never remove or tamper with any guards fitted, they are there for your protection. Always check guards for condition and security, if any are damaged or missing, **DO NOT USE THE FLOOR SAW** until the guard has been replaced or repaired.
- Do not operate the Floor Saw when you are ill, feeling tired, or when under the influence of alcohol or drugs.

Fuel Safety.



WARNING

Fuel is flammable. It may cause injury and property damage. Shut down the engine, extinguish all open flames and do not smoke while filling the fuel tank. Always wipe up any spilled fuel.

- Before refuelling, switch off the engine and allow it to cool.
- When refuelling, **DO NOT** smoke or allow naked flames in the area.
- Spilt fuel must be made safe immediately, using sand. If fuel is spilt on your clothes, change them.
- Store fuel in an approved, purpose made container away from heat and ignition sources.

Health And Safety



Vibration.

Some vibration from the floor saw operation is transmitted through the handle to the operator's hands. The Belle Group floor saw has been specifically designed to reduce hand/arm vibration levels. Refer to specifications & technical data for vibration levels and usage times (recommended maximum daily exposure time). **DO NOT** exceed the maximum usage times.

PPE (Personal Protective Equipment).

Suitable PPE must be worn when using this equipment i.e. Safety Goggles, Gloves, Ear Defenders, Dust Mask and Steel Toe capped footwear. Wear clothing suitable for the work you are doing. Tie back long hair and remove any jewellery which may catch in the equipment's moving parts.

Dust.

The sawing process will occasionally produce dust, which may be hazardous to your health. Always wear a mask that is suited to the type of dust being produced.

Fuel.

Do not ingest fuel or inhale fuel vapours and avoid contact with your skin. Wash fuel splashes immediately. If you get fuel in your eyes, irrigate with copious amounts of water and seek medical attention as soon as possible.

Exhaust Fumes.

Do not operate the floor saw indoors or in a confined space, make sure the work area is adequately ventilated.



WARNING

The exhaust fumes produced by this equipment are highly toxic and can kill!

Pre-Start Checks



Pre start-up inspection.

The following Pre-start-up inspection must be performed before the start of each work session or after every four hours of use, whichever is first. Please refer to the service section for detailed guidance. If any fault is discovered, the floor saw must not be used until the fault is rectified.

1. Thoroughly inspect the floor saw for signs of damage. Check components are present and secure. Pay special attention to the blade safety guard.
2. Check fluid lines, hoses filler openings, drain plugs and any other areas for signs of leakage. Fix any leaks before operating.
3. Check the engine oil level and top up as necessary.
4. Check the engine fuel level and top up as necessary.
5. Check for fuel and oil leaks.



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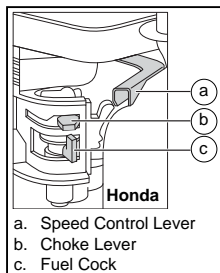
Honda GX390 Petrol Engine

Stopping the Engine

1. Set the Speed control lever to the low speed position and allow engine to idle for 1-2 minutes.
2. Raise the blade fully into the blade guard.
3. Turn the engine switch to the O position.
4. Close the fuel cock.

Starting the Engine

1. Open the fuel cock.
2. Set the throttle to the idle position by moving the throttle lever to the right.
3. Close the choke. If the engine is warm, open the choke lever halfway, or keep it fully open. If the engine is cold, close the choke lever fully.
4. Turn the engine stop switch to the I position.
5. Pull the handle of the recoil starter slowly until resistance is felt. Return the recoil to its original position and repull swiftly.
6. Do not pull the recoil starter rope fully out.
7. After starting the engine, gradually open the choke until fully open.
8. If the engine fails to fire after several attempts, follow the trouble-shooting guide.



Yanmar L100 Petrol Engine

Stopping the Engine

1. Before stopping the engine, move the engine speed lever to low speed and run the engine for about 3 minutes with no load.
2. Return the engine speed lever to the STOP position.



WARNING

If the engine keeps on running even after the speed lever is placed at 'STOP' position, stop the engine either by closing the fuel cock or by loosening the nut of the high pressure fuel pipe on the pump side.

3. Set the fuel cock lever to S (Closed) position.
4. Slowly pull out the recoil handle until pressure is felt (that is to the point in the compression stroke where the intake and exhaust valves are closed), and leave the handle in this position. This prevents rust from forming while the engine is not in use.

Starting the Engine

1. Set the fuel cock to the O (Open) position
2. Put the engine speed lever in the START position.
3. Pull out the recoil starter handle.
4. Pull out the handle to the point where you feel strong resistance, and then return it to the original position.
5. Push down the decompression lever. It will return automatically when the recoil starter is pulled.
6. Pull out the recoil starting handle briskly with both hands.

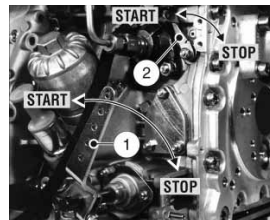
Hatz 1D50 Diesel Engine

Stopping the Engine

1. Move speed control lever „1“ back to the STOP position.
2. On engines with the lower engine speeds not accessible, move speed control lever „1“ back, then move stop lever „2“ in the STOP direction. Hold it there until the engine has stopped.
3. Release the stop lever „2“ when the engine has stopped, making sure that the lever re-returns to its normal operating position.

Starting the Engine

1. Set speed control lever „1“ to a position between 1/2 START and max. START, according to requirements. Selecting a lower engine speed will reduce smoke when starting.
2. Make sure that stop lever „2“ - if fitted - is in the operating „START“ position.
3. Turn the decompression lever until stop „1“ is reached. In this position the automatic decompression system is heard to engage and the engine can then be started.
4. Take hold of the starting handle with both hands and turn it at increasing speed. The maximum speed of rotation must have been reached by the time the decompression lever has returned to the „0“ position (compression). As soon as the engine has started, pull the starting handle out of the guide sleeve.
5. If the engine backfires because the crank handle was not turned firmly enough (the engine may even start to run backwards), release the crank handle immediately and stop the engine.
6. To restart the engine, wait until it has come to a standstill, then repeat the starting preparations.



Start & Stop Procedure



CAUTION

Improper maintenance can be hazardous. Read and Understand this section before you perform any maintenance, service or repairs.

Honda GX620 Petrol Engine

Stopping the Engine

To stop the engine in an emergency simply turn the engine switch to the off position. Under normal conditions use the following procedure.

1. Move the throttle lever to the SLOW position.
2. Turn the engine switch to the OFF position.
3. If the fuel tank is equipped with a valve, turn the fuel valve to the CLOSED or OFF position.

Starting the Engine

1. If the fuel tank is equipped with a valve, be sure the fuel valve is in the OPEN or ON position before attempting to start the engine.
2. To Start a cold engine, pull the choke out to the CLOSED position. To restart a warm engine, leave the choke knob in the OPEN position.
3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.
4. Turn the engine switch to the ON position.
5. Operate the starter. Recoil Starter Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.
6. If the choke knob has been pulled to the CLOSED position to start the engine, gradually push it to the OPEN position as the engine warms up.

Robin FH65 Petrol Engine

Stopping the Engine

1. Set the speed control lever at the low speed position and allow the engine to run at low speed for 2 or 3 minutes before stopping.
2. Close the fuel valve.

Starting the Engine

1. Open the fuel valve.
2. Set the speed control lever 1/3 of the way towards the high speed position.
3. Pull the choke knob.
 - If the engine is cold or the ambient temperature is low, pull the choke knob fully.
 - If the engine is warm or the ambient temperature is high, pull the choke knob half-way, or keep it fully open.
4. After starting the engine, gradually open the choke by pushing the choke knob, and finally keep it fully opened. Do not fully open the choke immediately when the engine is cold or the ambient temperature is low, because the engine may stop.

Running the Engine

1. After the engine starts, set the speed control lever at the low speed position and warm it up without load for a few minutes.
2. Gradually move the speed control lever toward the high speed position and set it at the required engine speed.

NOTE: Whenever high speed operation is not required, slow the engine down (idle) by moving the speed control lever to save fuel and extend engine life.

- **Take the floor saw to where it is required.**

*If the floor saw is to be transported to another location, ensure that the blade is fully raised in the guard and that the engine has been switched off. **NEVER** transport the floor saw with the blade lowered or with the engine still running, even if it is only being moved a short distance.*

- *Check that the water outlet valve is closed, then fill the water tank with clean water. To ensure a steady stream of water, always make sure that the water tank water level is kept constant.*
- **Having carried out the checks listed in the 'pre start' section, you may start the engine.**
*The blade should now be spinning at idle speed. **ALWAYS** check the blade for any signs of wobble, vibration or unusual noise. If any of these occur, stop the machine immediately and refer to the troubleshooting section.*
- **Set the throttle to maximum, use the control lever to gently lower the blade into the cut and use the depth marker to achieve the required depth of cut.**

The saw will then require gentle forward movement to achieve the cut.

The speed of travel will be determined by the condition of the surface being cut.

DO NOT stand in line with the blade and the stream of hot particles whilst sawing.

NEVER plunge the blade harshly into the cut.

If the surface to be cut is very hard, the saw will take longer to cut. Try to make more than one pass as this will reduce otherwise excessive wear of the blade.

DO NOT try to force the saw forwards as this will cause damage to the blade.

DO NOT try to cut curves as this will cause stress cracks or fragmentation of the blade.

- To stop the floor saw - set the throttle to idle, raise the blade fully into the guard, let the engine idle for a couple of minutes and then turn the engine **ON/OFF** switch to 'O'.
- The water spray system is designed to supply a steady stream of water to enable dust suppression whilst the machine is cutting. This prevents clogging of the engine with dust and helps to prevent pollution of the atmosphere.

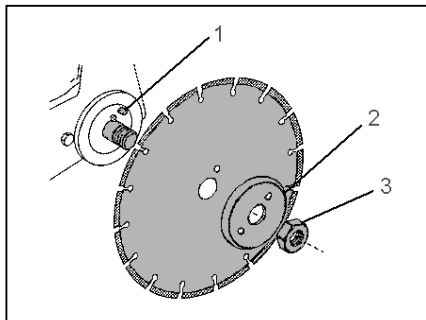
Blade Fitment



CAUTION

Incorrect fitting of a blade can cause serious injury. Ensure that the fitting instructions are followed. If in any doubt, Contact your supervisor or Belle Group.

1. Raise the front of the saw to its maximum height.
2. Open the blade guard by releasing the two clips.
3. Remove the arbor shaft nut (3) and blade clamping plate (2) using the spanners provided.
4. Check the clamping plate and backing plates for damage or wear. Replace if necessary, and fit the blade.
5. Clean the flange before mounting the blade.
6. Be sure that the arrow on the blade points in the same direction as the rotation of the tool.
7. Fit a genuine Belle Group blade on to the arbor shaft making certain that the blade locates on to the arbor shaft boss and is flush with the flange plate.
8. Replace the clamping plate (2) with the dowel pin (1) passing through the blade into the rear flange plate.
9. Replace the arbor shaft nut (3) and secure firmly.
10. Close the blade guard door by clamping the two clips.
11. The machine is now ready to be used.



Start & Stop Procedure



The Belle Group CFS Floor Saws are designed to give many years of trouble free operation. It is, however, important that the simple regular maintenance listed in this section is carried out. It is recommended that an approved Belle Group dealer carries out all major maintenance and repairs. Always use genuine Belle Group replacement parts, the use of spurious parts may void your warranty.

Before any maintenance is carried out on the machine ensure that the machine has been stopped.

- Always set the floor saw on level ground to ensure any fluid levels will be correctly read.
- Only use recommended oils.

Running In Period

When the Floor Saw is first used from new, the engine oil must be changed after the initial running in period (see engine manual for full detail). The belt tension should be checked after 4 hours use.

Drive Belt.

Remove the belt guard then check the belt tension by placing light finger pressure on the top of the belt, as near central between the engine drive and arbor pulley. The belt should deflect by between 5mm and 10mm. If the belt tension requires adjustment, adjust the engine's position by turning the tension bolts clockwise to increase belt tension, anticlockwise to decrease. Once set, retighten the engine mount bolts and check the belt tension a second time. Then check the pulley alignment. If the alignment is incorrect, loosen the taperlock bushes and move the pulley to suit. Once the pulley is aligned, retighten the taperlock bushes. Finally, replace the belt guard ensuring it is correctly and securely fitted.

Routine Maintenance		After first 4 hours	First month / 20h	3 months / 50h	6 months / 100h
Engine Oil	Check Level	✓			
	Change		✓		✓
Air Filter	Check Condition		✓		✓
	Clean / Replace			✓	
Spark Plug	Check / Clean				✓
Drive Belt	Tension	✓	✓	✓	

Oil / Fuel Type & Quantity - Spark Plug Type

	Oil type	Quantity (Litre)	Fuel Type	Capacity (Litre)	Spark Plug Type	Electrode Gap (mm)
Petrol Honda GX390	S.A.E. 10W 30	1.1	Unleaded	6.5	BM6ES or BPR6ES	0.6 - 0.7
Petrol Yanmar L100	Refer to Manual	1.6	Diesel	4.7	N/A	N/A
Diesel Hatz 1D50	Refer to Manual	1.4	Diesel (BS2869)	Refer to Manual	N/A	N/A
Petrol Honda GX620	S.A.E. 10W 30	1.8	Unleaded	Refer to Manual	ZGR5A (NGK)	0.7 - 0.8
Petrol Robin EH65	S.A.E. 10W 30	1.55	Unleaded	Refer to Manual	NGK BP6ES	0.7 - 0.8



Troubleshooting Guide

Problem	Cause	Remedy
Engine will not start.	No fuel getting to engine.	Open fuel tap. Fill fuel tank.
	Engine switched off.	Switch engine on.
	Engine cold.	Close choke.
	Engine flooded.	Honda: Open choke, fully open throttle, pull recoil starter until engine fires. Hatz / Robin / Yanmar: Move Engine speed controller to stop, pull recoil starter 5 times then repeat start procedure.
Blade not turning.	Belts incorrectly tensioned	Re-tension belts.
	Belts broken.	Replace belts.
Excessive Noise, Vibration or wobble from blade.	Check condition of arbor shaft bearings	Replace as necessary.
	Check dowel pin for damage	Replace dowel pin.
	Check tightness of arbor shaft nut.	Tighten as necessary.
	Check condition of Blade flange.	Replace as necessary.
	Check Blade for signs of damage.	Replace blade.



Warranty

Your new Belle Group CFS Floor Saw is warranted to the original purchaser for a period of one-year (12 months) from the original date of purchase. The Belle Group warranty is against defects in design, materials and workmanship.

The following are not covered under the Belle Group warranty:

1. Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow assembly, operation or user maintenance instructions.
2. Alterations, additions or repairs carried out by persons other than Belle Group or their recognised agents.
3. Transportation or shipment costs to and from Belle Group or their recognised agents, for repair or assessment against a warranty claim, on any machine.
4. Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.

The following components are not covered by warranty:

- Drive belt(s)
- Engine air filter
- Engine spark plug

Belle Group and/or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the machine for any purpose.

Warranty Claims

All warranty claims should firstly be directed to Belle Group, either by telephone, by Fax, by Email, or in writing.

For warranty claims:

Belle Group Warranty Department,
Unit 5, Bode Business Park
Ball Haye Green
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Staffordshire
ST13 6BW.
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Tel : +44 (0)1538 380000

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