

OPERATOR'S MANUAL



®

**Hydraulic Powerpacks
Models FP9/20 (Honda)
FP11/20 (Honda)
FP12/20 (Kohler)
FP13/30 (Honda)
Operators Manual**

FAIRPORT

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1. INTRODUCTION

This manual provides information on the safe operation and general maintenance of the following models of Fairport petrol engined hydraulic power packs:

FP9/20
FP11/20
FP12/20
FP13/30

The first number denotes the horsepower of the engine fitted to the power pack and the second number denotes the flow in litres per minute. The 20 liter power packs are suitable for operating Fairport breakers that require a flow of 20 l/min: The 30 liter pack is for operating equipment rated at 30 liter (EHTMA cat D)

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

2. TECHNICAL DATA

	FP9/20	FP11/20	FP12/20	FP13/30
Eng. make	Honda	Honda	Kohler	Honda
Eng. model	GX270	GX340	CS12	GX390
Fuel	Petrol	Petrol	Petrol	Petrol
Flow, l/min	20	20	20	30
at approx. eng. speed, rpm	3400	3400	3400	3400
Pressure, bar	138	138	138	138
Weight, kg	65	71	71	73

Length, mm	690	690	690	690
Width, mm	520	520	520	520
Height, mm	610	610	610	610
Guaranteed Sound power, dB(A)	104 Lwa			
EHTMA category	C	C	C	D

3. HYDRAULIC OILS

A wide range of compatible hydraulic oils is available. Ensure the product purchased is of good quality from a reliable source. Products from dubious sources must be avoided as they could adversely affect the reliability and operating efficiency of the hydraulic power pack and tool. The grade of hydraulic oil used will depend on ambient temperature as follows:

- Below 0°C use a grade ISO 22 hydraulic oil.
- Between 0°C and 30°C use a grade ISO 32 hydraulic oil.
- Above 30°C use a grade ISO 46 hydraulic oil.

The capacity of the oil tank including priming the pump and pack hoses is 2.5 litres.

4. SAFETY PICTOGRAMS USED ON THIS EQUIPMENT



Read the manual before operating or servicing this equipment.

5. SAFETY

Read the safety instructions in the manual supplied with the equipment that this power pack is driving.

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

Do not run engine in confined space.

Do not run engine unless all guards are in position.

Do not carry out any maintenance whilst engine is running.

Disconnect spark plug on petrol engines before carrying out any maintenance.

Do not fill fuel tank with engine running.

Wipe up spilt fuel. Dispose fuel contaminated wipes safely

Do not smoke while refuelling.

Do not run engine in areas that have a hazardous or explosive atmosphere.

Turn fuel tap off when not in use.

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.

Always comply with site safety regulations.

Inspect the machine for damage or improper function

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.

Do not attempt to fill fuel tank or oil sump while the machine is running.

When operating machines in confined areas, the exhaust fumes must be ventilated. Do not operate in an explosive atmosphere.

Understand and obey the safety labels and instructions attached to the equipment.

Do not attempt to operate defective equipment. Check that hoses and fittings are in good condition.

Ensure maintenance procedures are carried out as specified.

Do not attempt to operate this equipment on a greater hydraulic flow than that specified.

Fine jets of hydraulic oil can penetrate the skin. Check for leaks by holding a piece of cardboard near to the suspect area. If hydraulic oil does penetrate the skin or is ingested seek medical help immediately.

Always isolate hydraulic supply before making a disconnection or connection.

Always comply with local and site safety regulations.

6. OPERATION

Ensure the power pack is positioned safely.

Check the hydraulic oil in the power pack is suitable for the ambient temperature. See section on recommended hydraulic oils.

Check hoses and machine for damage.

Check hydraulic level.

Check operation and cleanliness of couplings.

Check that any hydraulic tools to be used are compatible with the flow and pressure available from the power pack. Do not use hydraulic tools if they require a lower flow than that provided by the power pack, the resulting over speed could be extremely dangerous.

Check oil level in the engine and that the grade of oil being used is as recommended for the ambient temperature according to the engine manufacturers' handbook.

Check the condition of the couplings both for cleanliness and damage.

Connect the hose couplings to the power pack couplings male to female.

Start the engine in accordance with the manufacturers' handbook.

Allow the engine to warm up for 3 to 4 minutes.

Move the flow control handle on the power pack from the 'off' position to the 'on' position.

Note that if the hoses and/or the tool are new or have been emptied of oil prior to use, the level of hydraulic oil in the tank will drop and may need topping up.

The tool may now be operated using the controls on the tool. Note that the 9, 11 and 12 hp engines fitted to power packs are fitted with 'power on demand' operated throttle controls. This control speeds up the engine when the tool is being used and allows the engine to slow down to tick-over when the tool control is released.

Never disconnect couplings with the flow control handle in the on position as the hoses will remain pressurised and it will be impossible to reconnect. If this does happen inadvertently the only way of releasing the pressure is to unscrew a coupling from the hose.

To shut down, first move the flow control lever to the 'off' position and then turn the engine switch to the off (0) position. After the engine has stopped turn the fuel tap to the off position.

When disconnecting couplings pull back the outside sleeve. Some couplings may require the sleeve to be rotated into its unlocked position before it can be slid back.

7. FAULT DIAGNOSIS

- ENGINE TURNS OVER BUT WILL NOT START

Check: ignition switch is on (position 1)
fuel tap is on
there is fuel in tank
engine oil level is correct
the choke is in correct position (closed if engine is cold, open if engine is hot).

If engine still does not start refer to engine manufacturer's handbook.

- ENGINE IS DIFFICULT TO TURNOVER

Check that the flow control lever is in the 'off' position.

If the engine will not turn over refer to the engine manufacturer's handbook.

- LOSS OF HYDRAULIC OIL

Check for damaged hoses, loose connections faulty couplings.

- POOR TOOL PERFORMANCE

Check that the power on demand cylinder is working.
Check for low pressure relief valve setting. This unit is pre-set at the factory and should require no further attention unless it has been tampered with. Reset as instructed in the workshop manual.
Check that the suction strainer is not blocked.
Check that the hoses are not blocked.
Check for correct flow with a flow/pressure test unit and adjust engine speed and throttle setting as required. This procedure is described in the workshop manual.
If engine speed needs to be set higher than 3600 rpm to achieve the required flow this indicates that the pump and/or diverter valve may be worn.

Tool fault – check tool handbook.

- FOAMING OR MILK COLOURED HYDRAULIC OIL

Air or water in the oil. Check filler cap is tight.
If associated with poor breaker performance the breaker accumulator may have degassed.

- TOOL RUNNING HOT

Check that the power pack has good access to cooling air.
Check that the oil cooler matrix is not blocked with debris.
Excess back pressure, check hoses for blockage.

Check cooling fan is not damaged.
Tool fault – check tool handbook.

- **ENGINE STOPS SUDDENLY**

Check fuel level in tank.
Check oil level.

8. ROUTINE SERVICING

8.1 Engine:

Refer to engine manufacturer's handbook.

8.2 Powerpack:

Before Starting:

Check engine oil level.
Check hydraulic oil level.

At End of Shift:

Clean the machine using water and/or steam. Ensure water does not enter breather on hydraulic oil tank. Check that the air cooler matrix is clear of debris.
Check for oil leaks.

Every 1000 Hours or 6 Months

Change hydraulic oil.
Change suction strainer.
Change filter.
Check flow and pressure output.

9. 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 authorised 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 hours 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

10. 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.