

# PROFINISH WALK BEHIND TROWEL

FP436 - FP440 - FP446

# **OPERATING INSTRUCTIONS**





# **WARNING**

To reduce the risk of injury, all operators and maintenance personnel must read and understand these instructions before operating, changing accessories, or performing maintenance on this power equipment. All possible situations cannot be covered in these instructions. However care must be exercised by everyone using, maintaining or working near this equipment.



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# **INTRODUCTION**

Thank you for your selection of Parchem equipment.

Parchem have specialised in the design and manufacture of quality products since 1951.

We have taken care in the assembly and testing of this product. Should service or spare parts be required, prompt and efficient service is available from our branches.

General Safety Instructions for the Operation of Power Equipment

The goal of Parchem is to produce power equipment that helps the operator work safely and efficiently. The most important safety device for this or any tool is the operator.

Care and good judgement are the best protection against injury. All possible hazards cannot be covered here, but we have tried to highlight some of the important ones. Individuals should look for and obey Caution,

Warning and Danger signs placed on equipment, and displayed in the workplace. Operators should read and follow safety instructions packed with each product.

Learn how each machine works. Even if you have previously used similar machines, carefully check out each machine before you use it. Get the "feel" of it and know its capabilities, limitations, potential hazards, how it operates, and how it stops.

# **APPLICATIONS**

- Tilt panels
- Warehouse floors
- Bridge decks
- House slabs

# **FUNCTION**

The trowelling machine reproduces the action of hand trowelling while giving a high quality dense finish with wear resistance.

The angle of the blades is adjustable during operation from a floating position, with the full blade area in contact to flatten the surface, to a finishing position with the blades tilted to give a finished surface.

# **FUNCTIONS AND CONTROLS**

Set the runaway protection switch to the "ON" position.

Operate choke as required (according to climatic conditions).

Turn the throttle control to approximately 1/4 throttle and proceed to pull the starter rope or recoil starter. Having started the engine, move choke to full open position.

Allow engine to warm up before operating.

It is important that the operator retains a firm grip with the left hand on the handle when starting engine

#### TO STOP

- 1. Throttle engine down.
- 2. Turn off at switch.

# **HAZARDS AND RISKS**

NEVER allow any person to operate machine without adequate instruction.

ENSURE all operators read, understand and follow the operating instructions.

SERIOUS INJURY may result from improper or careless use of this machine Power trowels are heavy units and require a multiple person

lift, using correct lifting techniques and people of appropriate strength. If provided, use the lifting eye for a mechanical lift using approved lifting devices.

# ! MECHANICAL HAZARDS

DO NOT operate the machine unless all protective guards are in place

ENSURE that the motor operation switch is in the OFF position and the spark plug ignition lead is disconnected before removing the guards or making adjustments.

DO NOT increase the governed no-load motor speed above 3,600 r/min. Any increase may result in personal injury and damage to the machine.

Be sure the runaway protection switch provided is working properly so that if the handle should slip away from your control, the ignition supply will be cut off. However momentum may cause the handle to rotate one full turn, so watch your back.

Be careful not to come in contact with the muffler when the engine is hot, since it can cause severe burns.

Keep hands and feet clear of rotating or moving parts as they will cause injury if contacted.

It is important that the operator retains a firm grip with the left hand at some point on the handle when starting the engine, preferably close to throttle control.

When starting the trowel do not exceed 1/4 throttle setting.

A higher setting could engage the centrifugal clutch causing the handle to rotate.

Be careful with the trowel around pipes sticking out of the floor or other obstacles. Should the trowel blades catch on these, serious damage to the machine or harm to the operator may result.

ENSURE that repairs to the motor and machine are carried out by COMPETENT personnel.

# ! FIRE & EXPLOSION HAZARDS

PETROL is extremely flammable and explosive under certain conditions.

ENSURE that petrol is only stored in an approved storage container.

DO NOT refuel the motor while it is in operation or hot.

DO NOT refuel the motor in the vicinity of sparks, a naked flame or a person smoking.

DO NOT overfill the fuel tank and avoid spilling petrol when refuelling. Spilled petrol or petrol vapour may ignite. If spillage occurs, ensure that the area is dry before starting the motor.

ENSURE that the fuel tank cap is securely fitted after refuelling.

#### ! CHEMICAL HAZARDS

DO NOT operate or refuel a petrol motor in a confined area without adequate ventilation.

CARBON MONOXIDE exhaust gases from internal combustion motor driven units can cause death in confined spaces.

#### ! NOISE HAZARDS

EXCESSIVE NOISE can lead to temporary or permanent loss of hearing.

WEAR an approved hearing protection device to limit noise exposure, as required by Occupational Health and

Safety regulations.

#### PROTECTIVE CLOTHING

ALWAYS wear approved hearing protection. Protective goggles, clothing and footwear may also be necessary.

#### ! ADDITIONAL HAZARDS

Slip/Trip/Fall is a major cause of serious injury or death.

Beware of obstacles or water left on the walking or work surface.

Exercise caution and ensure that the perimeter of elevated formwork or platforms is protected.

Always maintain good footing so that you do not slip and lose control of the handle when starting or operating the trowel.

# **OPERATION**

# THE FLOATING OPERATION

When the slab has set sufficiently firm that the operator's footprint leaves a very slight depression on the surface of the slab, it is ready for the floating operation.

Under normal operating conditions the machine should cover as much as 1000 sq. ft. in about 15 minutes. It is recommended that a slight tension on the trowel control cable during the floating operation will cause the machine to operate much smoother. After the floated slab has set sufficiently it is ready for the finishing operation.

CAUTION: Do not let the machine stand in one spot on the soft cement. Lift from the slab when the floating is done.

# THE FINISHING OPERATION

When starting the finishing operation set the trowel to a 1/4" pitch. This is important. Guiding the machine on the slab is very simple, a slight upward lift of the handle causes the machine to travel to the left. Holding the handle in neutral position, the machine rotates in one spot.

Slight downward pressure on the handle causes the machine to travel to the right. Best results are obtained by covering approximately 4" on each turn. In other words, let the machine move right or left, backwards or forwards, approximately 4" with each revolution of the trowels. To fill a hole or cut down a hump, move the unit back and forth over the hole or hump.

After the first pass over the slab, the waiting time between operations is determined in the same manner as if you were hand troweling. The pitch of the trowel is also determined by the hardness of the slab in like manner.

To repeat; the entire application and action of the troweling machine in regard to getting on the slab, and the correct pitch of the trowels, is determined in the same manner as would be used by a cement finisher when troweling by hand.

#### TROWEL PITCH SETTING

The trowel pitch adjustment feature of the Power Trowel permits quick and accurate pitch changes of the finishing trowels, without having to stop the machine. Turning the adjustment knob at end of handle enables the operator to change the trowel pitch whenever necessary to take care of varying conditions over the slab surface, and thus do the work faster and more expertly.

# **CARE AND PREVENTIVE MAINTENANCE**

ENSURE that repairs to the motor and machine are carried out by COMPETENT personnel.

Check the oil level in the motor crankcase daily.

Check the oil level sight plug to make regular inspections of the gearbox oil level. If a sight glass is fitted, maintain the oil level at the half way level on the sight glass.

Keep the unit clean and free of concrete residue.

Ensure the cooling fins on the motor are kept unobstructed.

# **SERVICING**

Change the oil in the motor crankcase regularly to minimise wear.

On models with grease nipples fitted, lubricate the spider plate daily.

Inspect, clean and/or replace the motor air cleaner regularly, particularly when operating in a dusty environment.

Inspect, clean and/or replace the spark plug regularly

Check that the vee belt is running true, adjust or replace as required.

# **TROUBLESHOOTING**

SYMPTOM	POSSIBLE CAUSES AND CORRECTION
Motor will not start	■ Check the ON/OFF switch to ensure that it is switched 'ON'.
	■ Check the fuel supply.
	■ If a Honda motor is fitted check the crankcase oil level as an oil sensor device is fitted to these motors which prevents starting and stops the motor when oil level is low
	■ Ensure the spark plug ignition lead is connected
	■ Check the carburettor jet and bowl to ensure they are clean
Motor stops	■ Check the fuel suppy
	■ Check that the fuel cock is turned on
	■ Check the condition of the air filter
Petrol Motor lacks power	■ Check the condition of the air filter
	■ Check the condition of the spark plug





