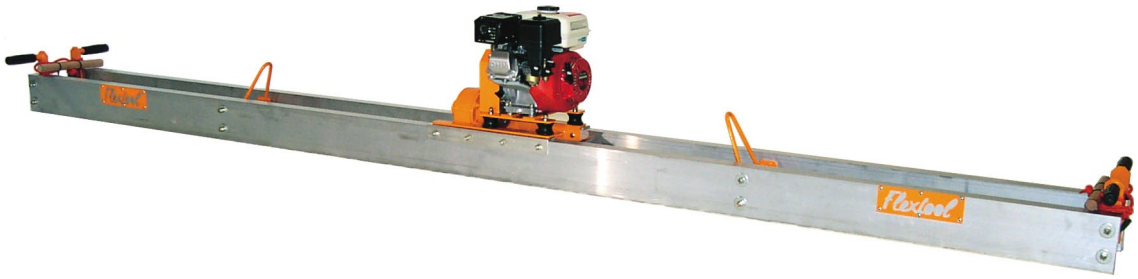
DOUBLE BEAM VIBRATING SCREED (PETROL)

4.1m / 6.5m / 8.2m

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.

CONTENTS

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 design, manufacture 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 items, 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

- Compaction of concrete slabs
- Precast sections
- Roadways
- Light rail tracks
- Bridge decks
- Aquaducts
- Airport aprons
- Warehouse floors
- Spillways

FUNCTION AND CONTROLS

MOTOR

The motor is controlled by an ON/OFF switch or push button which is mounted on the motor below the fuel tank.

Applicable only for units fitted with pre-tensioned beams.

ruler against the nut fitted to the threaded end of Cable, and rotating the nut clockwise until the distance between the nut and end of thread is 40 mm. With one nut fitted to threaded end of Cable, this should achieve a concave lower Beam surface of 6 mm. This should be checked with a string line and adjusted further if required until a 6 mm deflection is achieved (Maximum projection of thread from one nut should not exceed 50 mm). The second nut can be fitted and tightened. To protect the exposed thread place a piece of hose in boiling water and push over the thread.

HAZARDS AND RISKS

NEVER allow any person to operate the machine without adequate instruction.

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

SERIOUS INJURY could result from improper or careless use of this machine

Vibrating screeds are heavy units and should be positioned by four people of appropriate strength. Using the lifting handles provided on the machine, along with correct lifting techniques.

MECHANICAL HAZARDS

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

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

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 leavet he machine in operation while it is unattended.

EXERCISE CARE when operating unit. Exposure to vibration or repetitive work actions may be harmful to hands and arms.

NEVER stand on the unit while it is operating.

DO NOT increase the governed no-load motor speed above

3,000 r/min. Any increase may result in personal injury and damage to the machine.

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

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 over fill 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 or diesel 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 regulation.

PROTECTIVE CLOTHING
ALWAYS wear protective clothing and footwear to prevent the skin coming into contact with wet concrete.

PROTECTIVE FOOTWARE should be worn to reduce injuries from penetration through the sole, contact with cutting objects, slipping,c ontactw ith wet concrete and electrical hazards.

GOGGLES for eye protection may also be necessary.

USE waterproof protection for hands and knees (if kneeling) when concreting. If your clothing becomes wet from concrete contact make sure you change the clothing. Do not walk about waiting for it to dry.

ADDITIONAL HAZARDS
Slip/Trip/Falils a major cause of serious injury or death.

Beware of uneven or slippery work surfaces.

OPERATION

USING THE VIBRATING-BEAM SCREED
The effectiveness of vibration and, hence degree of compaction increases with an increase of the beam weight, the amplitude and the frequency, and decreases with an increase in forward speed. Forward speed is critical in the correct use of vibrating-beams creeds and should be limited to between 0 .5 and 1.0 m per minute. Generally speaking the screed will have a self propelling motion resulting from its vibratory action. It should be positioned on the slab so that its natural direction of travel is away from the finished area. The drag ropes and handles at the end of the beams should be used to control the direction and to supplement the self propelling motion of the screed beams.

Once the concrete, with its surcharge, has been spread, start the motor and manually pull the beam along the slab. Make sure that there is always a continuous surcharge along the entire length of the leading edge, and that the ends of the beam ride on the edge forms.

Generally one steady pass with a double vibrating beam should be enough to compact and level the concrete. However stiff mixes may require a second pass. Extra passes might bring laitance to the surface.

Use unleaded grade petrol and ensure that the fuel is free from contamination.

Start the motor using the recoil starter. (If the motor is fitted with an on/off switch this must first be turned to ON before starting.)

For more information on starting and correct operating procedures of the motor, refer to the motor operation manual supplied with the unit.

Increase the motor speed to the maximum setting using the throttle lever, before commencing screeding.

ALWAYS maintain good footing so that you do not slip and loose control when starting or operating the machine.

CARE AND PREVENTIVE MAINTENANCE

Check the oil level in the motor crankcase daily.

Check the vibrator oil level weekly.

Inspect the rubber anti vibration mounts for wear or deterioration.

Clean the aluminium beams regularly to prevent a build up of concrete residue.

SERVICE

Change the oil in the motor crankcase regularly to minimise

wear. When servicing the vibrator replace the oil with 40mL of 20W-

40 motor oil.

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

Inspect, clean and/or replace the spark plug regularly

Check all fasteners for tightness as the machine is subject to vibration.

Check vee belt tension, wear and that it is running true, adjust or replace as required.

To test run the screeds upportt he beamso n a resilients upport at each end. (eg. use two car tyres.)

CLEANING AND STORAGE

Keep the unit clean and free of concrete residue.

Ensure the cooling fins on the motor are kept unobstructed.

SPECIFICATIONS

MOTOR
Petrol

Honda GX160’ 4.1 kW output

Robin EY20 3.7 kW output

GOVERNED SPEED - 3,000 R/MIN

WEIGHT	4.1 M	6.5 M	8.2 M
Std beams	82 kg		
Pre-tensioned		117 kg	131 kg

SHIPPING	**S I Z E (L X W X H)**
	4100 mm x 500 mm x 570 mm
	6500 mm x 500 mm x 570 mm
	8100 mm x 500 mm x 570 mm

DRIVE BELTS
1 x’A’section vee belt

VIBRATOR
Frequency - 4,500 vibrations/min

Centrifugal force - 2.7 kN

Note: Standard product provides optimum vibration for screeding floor slabs with timber forms. Pre-cast panels and floor slabs with steel forms may require the use of lower amplitude vibrators. Details on application.

BEARINGS
The following bearings are sealed:

Centrifugal clutch - grease lubricated

Vibrator - oil bath lubricated

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 or Robin 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
Insufficient vibration	■ Check for a slipping or a missing vee belt ■ Check the motor governed speed is 3,000r/min

FLEXTOOL DOUBLE BEAM VIBRATING SCREED

ADJUSTING PRE-TENSIONED BEAMS (8.2M)

Flextool screeds are factory set with a convex, lower beam surfaced eflection of 5 mm. During the break-in period the cables providing the beam tension will stretch and effect the deflection of the beams.

The cable tension can be adjusted back to the factory setting by under taking the following procedure. (This should achieve a floor flatness result of or better than + /- 3 mm per metre.)

Start by placing two saw horses or similar supports approximately 300 mm in from each end of the screed, ensuring that they are level.

Run a string line end to end on the lower beam surface, ensuring that it is taught. (Referd iagram)

Select one end of the screed and remove the protective hose covers from the adjusting screws. (These adjustments are only necessary on one end of the screed, but they must be mirrored on each of the beams.) Using two 15/16A/ F spanners undo the locking nut on both beams.

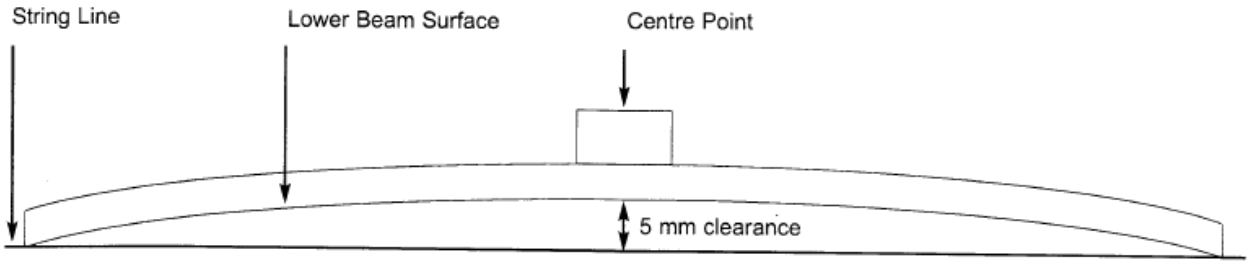
By rotating the adjusting nut one full turn in a clockwise direction on each beam, you should increase the clearance between the string line and the lower beam surface by approximately 1mm.

By rotating the nut one full turn in a counterclockwise direction on each beam, you should reduce the clearance by approximately 1mm.

To achieve the factory setting of 5 mm, rotate each nut the same number of turns, to achieve a clearance of 5 mm between the string line and the lower beam surface measured at the centre point of the beam.

Given different operating conditions, the tension can be fine tuned after pour results are obtained to achieve the desired tolerance.

Damage to the screed may occur if the beams are over tightened. Maximum projection of the adjusting screw thread from the nut face should not exceed 50 mm. When adjustments have been completed, fit the locking nut and tighten, and fit the rubber hose protective covers. If flatness is critical, we recommend checking the screed deflection before starting a concrete pour.



Parchem Construction Supplies Pty Ltd
7 Lucca Road, Wyong NSW 2259
Phone: 1300 737 787
www.parchem.com.au
ABN 80 069 961 968

February 2012