

# LIGHT POWER TROWEL 60 cm diam. 4 HP BENZ HONDA GX35

*Light alloy frame concrete finisher*

## USE INSTRUCTIONS AND MAINTENANCE SPARE PARTS



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This handbook must be considered an integral part of light concrete floor finisher and must follow it in case of selling.

## 1 INTRODUCTION

### 1.1 Demonstration

Congratulation for having chosen the new product created for finishing semi-dry or concrete floor surfaces.

Before using the machine it is important to read carefully this manual to prevent tools, things or persons from damaging.

In case you don't understand texts or designs please contact **Isoplam srl's** technical staff.

This operation manual must always follow the machine and it has to be to the worker's disposal anytime.

In case you lose it or it is deteriorated you must immediately ask for another one.

**Isoplam srl's** society is a projected to a technical and technological finishing of the product. Thank you for having chosen us, Isoplam srl will offer you all its technical experience to better more and more the performance of the machine

We hope you will take care of the machine by following carefully the maintenance instructions to use it properly.

Technical features	Width	Unit of measure
Machine body weight	22	kg
Maximum overall	0,60 x 3.80 X 0,5	m
Minimum overall	0,60 x 1,65 x 0,5	m
Fuel tank capacity	0,65 - 650	l - cm <sup>3</sup>
Piston displacement	33.5	cm <sup>3</sup>
Maximum power (according to ISO 8893)	1,18	kW
Engine rating speed	5000	min <sup>-1</sup>
Engine speed to the max power	8000	min <sup>-1</sup>
Specific consumption engine to the max power (according to ISO 8893)	340	g/kW*h
Acoustic pressure level (L <sub>pa av</sub> )	84	dBA
Acoustic power level (L <sub>Wa av</sub> )	100	dBA
Vibration level	< 2,5	m/s <sup>2</sup>
Disk rotation speed	30-80	min <sup>-1</sup>

## 1.2 How to use

The machine is built to be used for sanding, smoothing and surfaces finishing semy-dry floors or concrete floors. It can be used for level or sloped surfaces also with reduced operational spaces.



**Caution:** The manufacturer won't be guilty, if the user doesn't follow the instructions and he damages tools or injures workers.

The machine must be used by well-informed workers. They must read this manual and the rules dealing with building materials, safety and working hygiene.

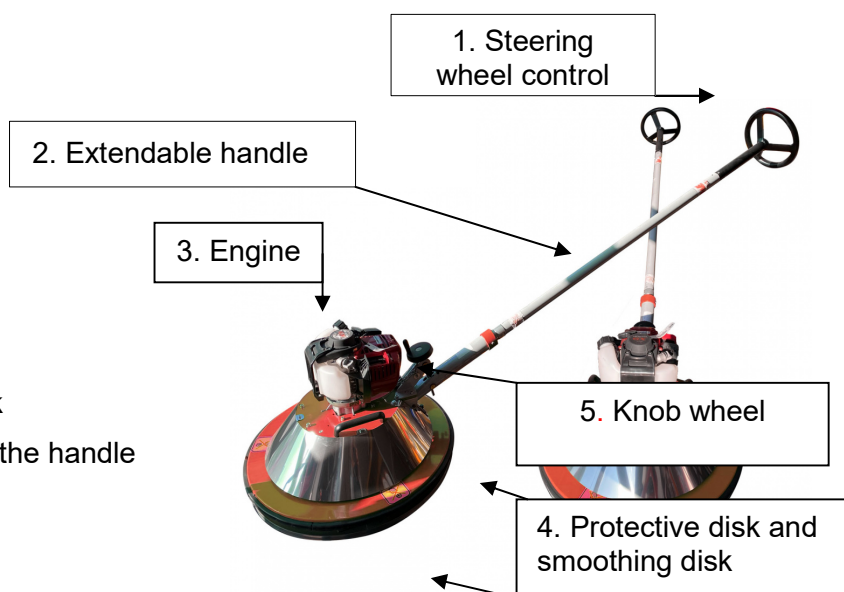
It is very important for the last user to respect such rules and it is also important to wear boots, gloves, caps, safety helmet, glasses, overalls, etc...

Routine and extraordinary maintenance must be done by qualified staff. They must follow carefully all the information written in this manual and use their good sense..

## 2 DESCRIPTION OF THE MACHINE

### 2.1 Components

- 1 Steering wheel control
- 2 Extendable handle
- 3 Engine
- 4 Smoothing disk and protective disk
- 5 Knob wheel to adjust the height of the handle



**It** is equipped with a knob wheel which adjusts the height of the handle. This device allows you to use the handle with different lengths by using the not standard extensions available as spares.

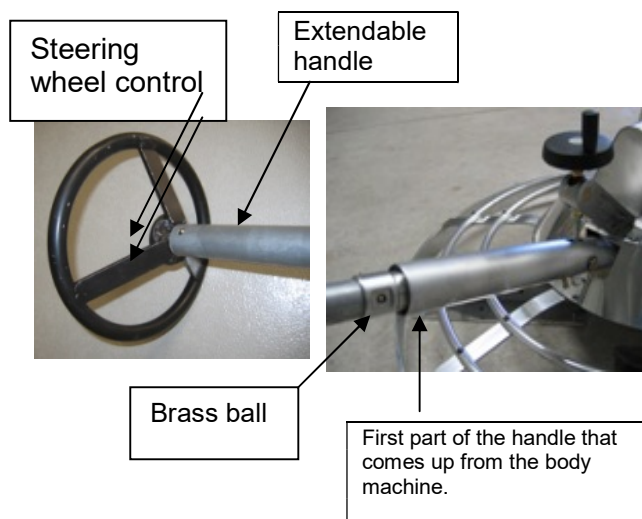
### 3 ASSEMBLY

The box contain:

- The machine with a smoothing disk
- The steering wheel control

#### 3.1 Handle and controls assembly

- a) Insert/plug the extension with steering wheel inside the first part of the handle that comes up from the body machine. It is possible to use also more accessory extensions to increase the distance between operator and disk
- b) Taking care to insert firmly the brass ball of each handle inside the apposite housing.



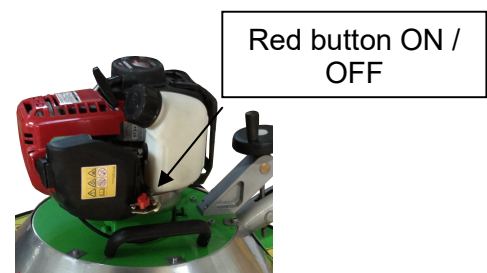
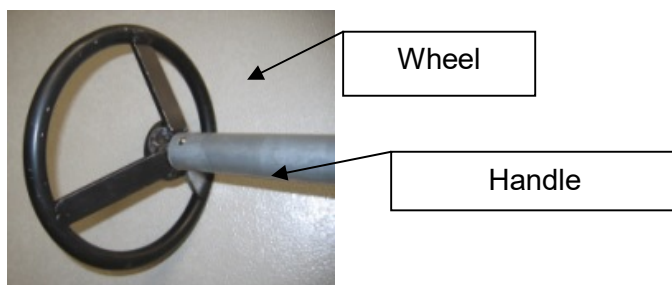
### 4 CONTROLS (For the engine you have to look at the HONDA owner's manual)

The engine is an Honda four stroke GX35. It is in horizontal position and it is connected to the disk between a clutch and a RPM reducing gearbox

The control to switch ON/OFF the engine is sited on a side of the RPM reducing gearbox. The RPM range can be increased and decreased by rotating the wheel on the handle. Anticlockwise to increase RPM, clockwise to reduce RPM.

**a) Starting (look at the HONDA owner's manual):**

- Turn the red button to the position ON;
- Now the machine can be started.



**b) Acceleration when the machine is started:**

- Grip firmly the wheel with both your hands in the same way of a car's steering wheel
- Rotate it clockwise to increase the RPM;

**c) Stop (engine stopping):**

- Rotate the wheel counterclockwise to reach the minimum RPM;
- Turn the red button to OFF position;

to start the machine again it is important turn the red button on the position named START.

## 5 STARTING (for the engine you have to look at the HONDA owner's manual)

### 5.1 Fuel

**Look at the HONDA owner's manual .**

It is very important using only a good quality of fuel.

#### Refuelling



**Caution:** do such operation of refuelling in the open air, possibly in a windy area away from heat sources, sparks or flames, do not smoke and the engine must be switched off.

- a. unscrew slowly the bung of the tank;
- b. pour the fuel, by using a right shaped funnel , please do not spill over it;
- c. by screwing again the bung of the tank, check it is well closed;
- a. if necessary dry the external part of engine.



#### Caution:

- Change your clothes immediately if the fuel falls down on them;
- Start the machine at least three meters away from the place you refuel the machine to prevent possible fire risks.
- Don't fill up the tank if the machine is hot.
- The fuel must not wet the skin and its steam must not be breath.



**Caution:** keep away from children.

## 5.2 Engine starter (look at the Honda owner's manual)

Lay the **finisher** in its normal working position ( do not turn upside down)

After having done carefully all the operations of preparation and refuelling, turn the red button on **START** situated on a side of the RPM reducer Gearbox

Put the lever of the air on the carburettor on CLOSE (**look at the Honda owner's manual**);

**Note** : don't use the air lever if the motor is hot and the temperature of the air is high.

Press many times the priming pump till there is a back flooding of fuel in the pipe of the carburettor.  
(Look at the Honda owner's manual draws)

Don't move **it** keep it still with your hand, while the other one push slowly the rope up to the coupler of the pallet on the fly-wheel.

**Warning:** don't let the handle of the rope hitting the motor. Bring it back slowly to prevent motor from damaging.

**Note:** pull suddenly the handle of the starter. If it is not suddenly pulled among the electrodes of the plug won't pass sparks and the motor doesn't start

After having started the engine, move gradually the lever of the air in the opening position (OPEN). Warm the motor till the normal rev. (**look the the HONDA owner's manual draws.**)

## 5.3 Running in

The first 10 hours that the machine works please try to operate with moderate RPM. anyway it is recommended using the engine not at the maximum, because all the working components must suit each other. After such period the engine will reach the best working conditions.

After the first 2 hours of working please check all the screws and nuts, if they are still fixed: close them if it is necessary.

## 6 USE (for the engine you have to look at the HONDA owner's manual)

### 6.1 Preliminary Operations

You must check the machine at its first start or after a period you didn't use it.

- Have a general look..
- Verify that the engine works well.
- Verify that all cables are in good conditions

### 6.2 Use

1. To operate on flat leveled surface it is advice to use it immediately after having worked on the semi-dry or concrete surface with other Isoplam's finishers.
  - a. A not perfectly screeded surface extend the smoothing period, making the job more difficult;
  - b. The machine can operate on concrete more wet than the traditional one, it is allowed to it's extremely light weight;  
it is possible to increase the length of the handle by adding extra handle extensions to finish the concrete or semi-dry floors staying out from the working area ;
  - c. shoe stamps, on not well dry concrete, can be simply deleted by using cement dust on the operating area before giving the last surface finishing.
2. start the machine as said before. Leave it 2-3 minutes to the lowest RPM. Accelerate the machine a little bit to test that everything works correctly
3. start smoothing all round the worker using the extendable handle length. Thanks to its unique long handle the machine can simply move all around the standing worker.
  - a. Lift up or move down the handle to directing the machine to the left or to the right side.;
  - b. To move the machine to the left and to the right continuously until having reached high quality surface.
  - c. To walk back slowly to reach a new area to finish



**Caution:** when you go back please pay attention where you walk on to prevent from stumbling over, falling down from floor or unprotected openings, etc.



4. after having worked some hours and if outside it is very hot it isn't recommended switching the engine off, it must be on the lowest RPM for some minutes so it cools thanks to draught action coming from fly-wheel.

### 6.3 After using

After the daily works it is important to clean carefully the machine with water and compressed air in order to remove the concrete or aggregate in case it had remained

If the concrete solidifies on the disk, when you will use it again you won't have a good surface finishing. Concrete casually solidified could be removed through solvent of the accessories line

After having used the machine it must be stored in horizontal position. It cannot be stored upside down. The handle can be simply removed to reduce its length.

## 7 Not using period (for the engine you have to look at the HONDA owner's manual)

### 7.1 If you don't use it for a long period follow these precautions:

- a) Clean carefully the machine with compressed air.
- b) Remove the mixture from the tank;
- c) protect the engine and all its not painted metal parts from corrosion with a bit of oil
- d) put the machine in a dry place and away from dust and children;
- e) it is recommended starting the engine for a while every 60 days if you don't use the machine for long periods .

## 8 MAINTENANCE (for the engine you have to look at the HONDA owner's manual)

Easy rules will help the machine to keep itself in a good state.

**Motor** look at the HONDA owner's manual.

**Screws and nuts** Check and close the screws and fixing nuts at least every 25 hours.

**Protective disk** check its entirety monthly, verify also it's bearing

**Use instruction**

**Smoothing disk** check its entirety daily, replace if damaged or worn

Verify every ONE year:

- The mechanical elements must be entire. They must be checked by the manufacturer or an authorised centre..

### Possible anomalies

Switch immediately the engine off if you hear unusual noises or vibrations and try to understand where those problems come from.

In case the engine doesn't start (you have problems to pull the rope) pay attention to :

- a) faulty or seized bearings;
- b) seized cylinder and piston;
- c) interference, contact between drive shaft and oil sump;
- d) the starting spring can be broken or the rope jammed;

In case there is no start or burst, check: (look at the HONDA owner's manual)

- a) electric system (the coil doesn't furnish current, dirty plug with a broken electrode or the distance between the electrodes is too much);
- b) if the cable of the ground cable is switched off or broken;
- c) if the pipe plug is switched off or at ground;

In case the engine loses power or it stops immediately, you must pay attention to: (look at the HONDA owner's manual)

- a) if there is no more fuel;
- b) if the fuel doesn't reaches the carburettor (if it isn't possible to see the fuel flowing through the fuel-oil tube);
- c) control if the filter of the fuel in the tank is obstructed;
- d) if the petrol pipe is obstructed or crushed or disconnected;
- e) water mustn't be in the mixture, if there is some the fuel installation must be completely cleaned
- f) if the jet of the highest gear of carburettor is obstructed;
- g) if the spark advance;
- h) if in the waste pipe of the cylinder and in the silence of the muffler there are some incrustations.
- i) In case of anomalous vibrations, pay attention to:
  - a) RPM reducer gearbox damage
  - b) Cluck bearing damage;

- c) Smoothing disk not correctly thigten
- d) Disk damage or deformation

## **9 NOISE AND VIBRATIONS (for the engine you have to look at the HONDA owner's manual)**

### **9.1 Noise**

When the machine works, it is a source of noise. The equivalent medium level pondered of the noise measured at the same high as the worker's ear is 84 dbA.

It is recommended using ear protections IDP (individual Disposal Protection)cowlings or ear plugs. The obligations coming from the decree-law 277 of 15.8.91 must be paid by the users.

### **9.2 Vibrations**

The worker must control carefully all the movements of the machine while it is working.

Maintain in perfect working conditions all the controls system of the machine .Don't remove the labels where there are danger directions.

The machine is a source of vibrations that are transmitted to the worker's hands.

Frequency between 10÷150 Hz doesn't cause problems to the worker. But it is recommended making 10 minute pause every 2 hours of working.

Periodi più lunghi di riposo possono essere necessari in base alla sensibilità personale dell'operatore.

## **10 TRANSPORT AND SELLING OFF**

### **10.1 Transport (for the engine you have to look at the HONDA owner's manual)**

The machine can be transported without any danger.

Raise the machine and hold both the handles

### **10.2 Selling off (for the engine you have to look at the HONDA owner's manual)**

The machine is made up of:

- |             |                                 |
|-------------|---------------------------------|
| 1. Metal    | 100% recyclable                 |
| 2. Plastics | recyclable foreseen precautions |

The machine can be brought to an authorised centre for recycling the machines out of order

## **11 SAFETY (for the engine you have to look at the HONDA owner's manual)**

Read carefully this manual and be sure to have understood all the instructions and advices written here before starting to work. You must keep this manual for ever and you have to consult it for any problems.

It must be used only by adult and well educated people about how it works or by qualified staff or by your reseller.

Those who are using the machine are guilty if something happens to other people or things in the working area where the machine is operating.

When you work you must be always healthy, you mustn't be tired, you mustn't have alcohol, drugs or medicines influence. It is recommended working only when there is good visibility and with sun light.

Use the right working clothes, and the appropriate protection tools: overalls work, gloves, safety helmet accident-prevention boots, etc.

You must always wear coverings or ear plugs so noise won't be heard.

Don't use elements that don't come from the firm. Use only original elements

Don't use broken or damaged elements with dent, jacks, cracks, etc.

Don't work **with it** in a closed area.

Handle the fuel at the open air, the engine must be off and away from heat sources, sparks, or fire. Don't smoke while you are doing such operations.

All the operations of maintenance, repairing, replacing of the components must be done when the engine is off.

All the safety systems of the machine, the equipment of protection too, must be operative while the machine is working.

Be careful to the effects of vibrations. Stop working to have some rest anytime you need it.

Don't use it in a danger zone.

Be careful with the aggregate if it can irritate both the skin and the eyes.

All the safety systems of the machine, must be operative while the machine is working.

Repair or disassembly the machine when the engine is switched off.