



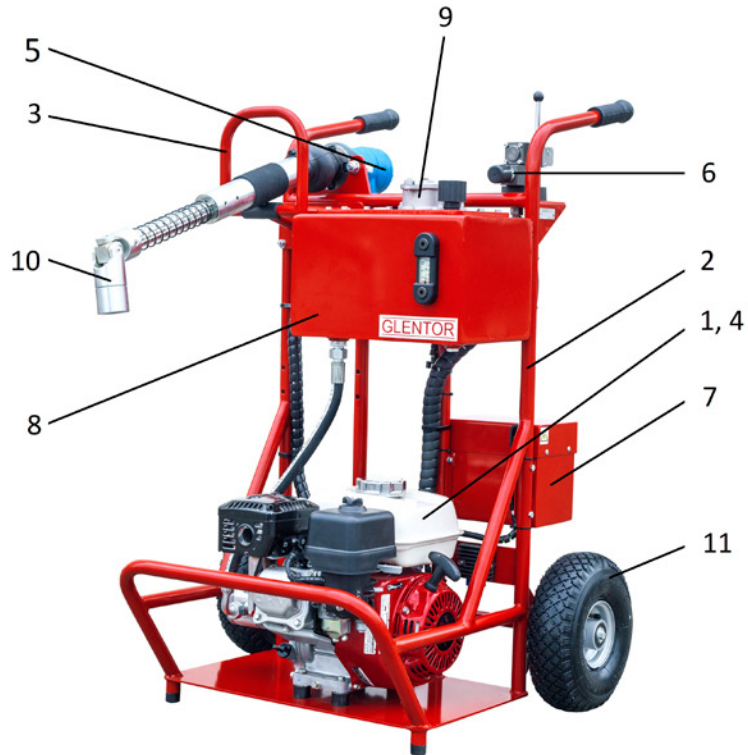
The operations manual contains all information necessary for proper and safe use of mobile hydraulic power unit HA 8-110-II. Read this manual carefully before using the machine and make sure you understand everything. GLENTOR Company Ltd. reserves all right to change any of the specifications described in this manual at any time, without prior notice, without bearing any responsibility. An integral part of this manual is a user's manual of internal combustion engine Honda GX160. Reproduction of any part of this manual without prior written consent is prohibited.

## Technical Data

|                         |                      |
|-------------------------|----------------------|
| Overall length          | 1000 mm              |
| Overall width           | 770 mm               |
| Overall height          | 1060 mm              |
| Max. operating pressure | 110 bar              |
| Operating temperature   | -20°C to 50°C        |
| Hydraulic oil           | ISO VG 46            |
| Engine oil              | SAE 10W-30 – API SJ  |
| Fuel                    | unleaded petrol      |
| Torque on the shaft end | 115 N·m              |
| Volume of hydraulic oil | 10 dm <sup>3</sup>   |
| Volume of engine oil    | 0,58 dm <sup>3</sup> |
| Volume of fuel          | 3,1 dm <sup>3</sup>  |
| Weight                  | 100 kg               |

Dimensions of the power unit can be customized according to customer requirements.

## Description of the power unit



- 1 - internal combustion engine
- 2 - frame
- 3 - protective frame
- 4 - pump
- 5 - hydraulic motor
- 6 - directional control valve with pressure relief valve
- 7 - battery
- 8 - hydraulic oil tank
- 9 - oil filter
- 10 - cardan shaft
- 11 - wheels with bantam tyres

## Safety rules

- Before using the power unit, read carefully all information contained in this manual, make yourself familiar with the control components and their correct use.
- Take an increased care when using this mobile power unit. An improper and careless operation of the power unit can cause serious or fatal injury.
- The operator is responsible for accidents or hazards caused to other persons or their property.
- When working with the power unit never smokes, eat or drink.
- The operator must not be at work under the influence of alcohol or other drugs.
- When operate the power unit always wear firm shoes, work gloves, appropriate hearing protection and long pants.
- Do not use the power unit in very bad weather such as heavy rain, strong wind, heavy frost, thick fog.
- Working in adverse weather is tiring and often can cause dangerous situations.
- Use the power unit always on a flat surface. Vicinity of the unit must be free of obstacles which could reduce the handling ability of an operator. Never use the power unit on an icy surface.
- Always make sure that the operator is not forced to enter into a hazardous area (e.g. rails).
- Do not use the power unit in closed and poorly ventilated areas.
- Store fuel and hydraulic oil in containers assigned for this purpose. Fill all liquids always outside and before starting the engine. Never add fluids when the engine is running or when it is hot. When refuel, take increased care not to spill the fuel on the power unit surface and its vicinity. If it happens, never start the engine and wait until all traces of the spill disappear and petrol vapors dissipate. When refilling hydraulic oil, follow the same procedure: wipe off any spills of hydraulic oil and properly dispose them environmentally. If you contaminate yourself or your clothing with fuel change it and wash soiled parts of the body.
- Do not touch and keep away from rotating parts during operation. There is an increased risk of danger.
- Fill only quality fuel and hydraulic oil. Avoid using non-original spare parts. Check the hydraulic fluid level. After the first year of operation it is recommended to exchange the hydraulic oil.
- Never overturn the power unit or tilt it more than 35 degrees when in operation. In case of overturning the power unit into horizontal position, put it in original position immediately and wait until the oil level stabilizes. Afterwards checking of the unit including checking of air filter on oil flooding must follow
- Make sure that all caps are tightened properly.
- Operate the power unit only in daylight or sufficient artificial light
- Take great care when moving or swinging the power unit. In an event of impact with a foreign object, always check whether the unit is not damaged.
- Keep the unit clean and in working state, especially the filter element assembly. When the filter element (CRE SOFIMA 015 CV1) is clogged, exchange it.  
It is recommended to exchange the filter element after 100 hours of operation at first and then every two years.
- Do not change the maximum setting of engine speed.
- Never use a damaged power unit.
- Ensure that all screws, nuts and other fasteners have always been properly tightened. Each component of the power unit has its importance; therefore do not modify or delete them.
- When the engine is running don't travel with the power unit
- Battery contains dangerous acid. When manipulate with the battery, take an increased care not to contaminate your skin, eyes and clothing. Wear eye protection. Keep the battery in charged state. Charge the battery only in well-ventilated areas. An explosive gas (hydrogen) escapes during charging from the open cells. Pay therefore attention not to use open fire or sparks in the vicinity of the battery. Don't smoke during servicing the battery.
- When connecting or disconnecting the battery contacts put the plug out from the socket.
- Use an appropriate charger for charging the battery.
- Store the power unit in protected areas. Before storing the unit indoors let it cool down. Do not store the power unit near fire, sparks and heat sources

**Instruction for use**

Before operation check the overall state of the power unit and check levels of oil and fuel.

-When you are on the place of operation, grasp the handle firmly with both hands, place one foot on the - protective frame in axis of travel and tilt the unit on your side so, that the tilting angle doesn't exceed 35 degrees.

Bring the power unit to a railway wagon and situate it in such way, that the head of the cardan shaft free -end is situated toward the axis of wagon square prism. Place the power unit on the ground and make sure that it stays stable on wheels and rubber stops.

Grasp the head of the shaft, force the cardan shaft back and put the head on the wagon square -prism.

Make sure that the directional control valve lever is in neutral position and start the engine (see User's -Manual of Honda GX 160).

By shifting the directional control valve lever forwards or backwards you can lift up or lower a loading -platform. Transfer the platform to the desired position, shift the lever in neutral position and turn off the engine.

-Remove the head of drive shaft from the square prism and take the power unit away from the wagon.

**Maintenance schedule**

| REGULAR SERVICE PERIOD |                 | Each Use                             | First Month or 20 Hrs | Every 3 Months or 50 Hrs | Every 6 Months or 100 Hrs | Every Year or 300 Hrs | Every 2 years |   |
|------------------------|-----------------|--------------------------------------|-----------------------|--------------------------|---------------------------|-----------------------|---------------|---|
| Engine oil             | Check level     | •                                    |                       |                          |                           |                       |               |   |
|                        | Change          |                                      | •                     |                          | •                         |                       |               |   |
| Hydraulic oil          | Check level     | •                                    |                       |                          |                           |                       |               |   |
|                        | Change          |                                      |                       |                          |                           |                       | •             |   |
| Air cleaner            | Check level     | •                                    |                       |                          |                           |                       |               |   |
|                        | Clean           |                                      |                       | •                        |                           |                       |               |   |
|                        | Replace         |                                      |                       |                          |                           | •                     |               |   |
| Ventilating filter     | Replace         |                                      |                       |                          |                           |                       | •             |   |
| Filter element         | Replace         | After first 100 Hrs                  |                       |                          |                           |                       |               | • |
| Sediment cup           | Clean           |                                      |                       |                          | •                         |                       |               |   |
| Spar plug              | Check-adjust    |                                      |                       |                          | •                         |                       |               |   |
|                        | Replace         |                                      |                       |                          |                           | •                     |               |   |
| Valve clearance        | Check-adjust    |                                      |                       |                          |                           | •                     |               |   |
| Combustion chamber     | Clean           | After every 500 Hrs                  |                       |                          |                           |                       |               |   |
| Fuel tank & filter     | Clean           |                                      |                       |                          | •                         |                       |               |   |
| Fuel tube              | Check           | Every 2 years (Replace if necessary) |                       |                          |                           |                       |               |   |
| Hydraulic tube         | Check-tightness | •                                    |                       |                          |                           |                       |               |   |
| Battery                | Check           | Before winter season                 |                       |                          |                           |                       |               |   |
| Hydraulic tank         | Clean           | During change hydraulics oil         |                       |                          |                           |                       |               |   |

Hydraulic diagram

