



MOTOR ROTARY DRIVE

Motor rotary drive

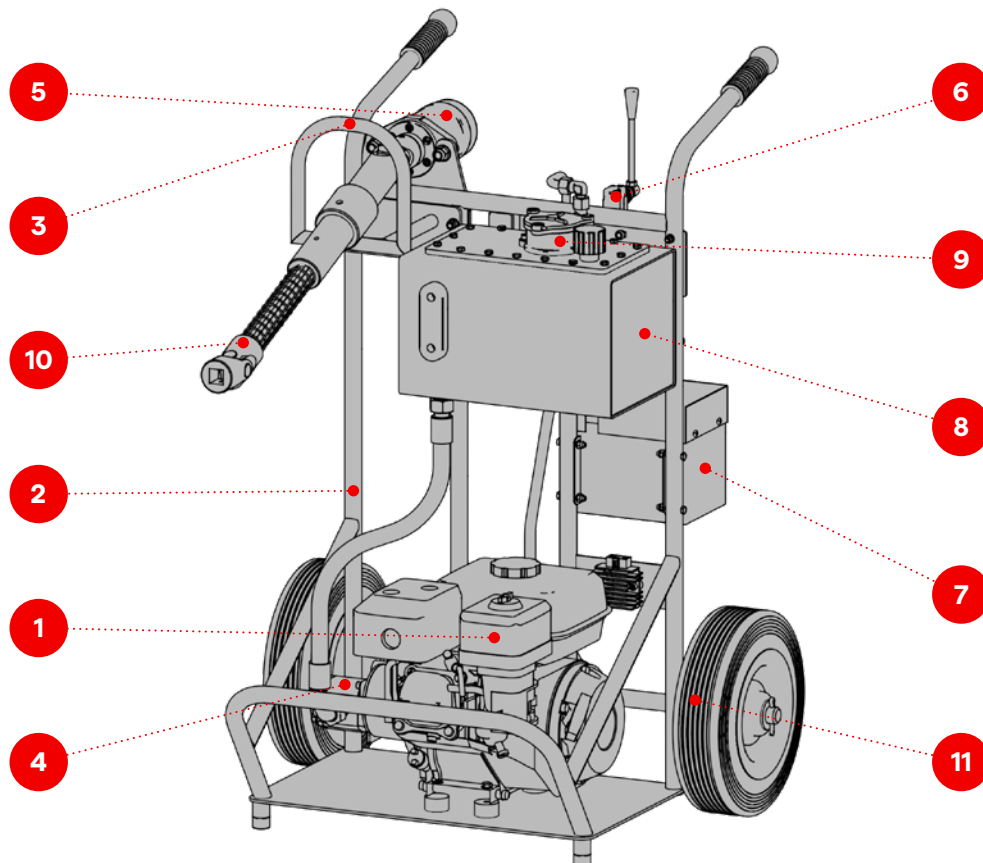
The operations manual contains all information necessary for proper and safe use of rotary drive. Read this manual carefully before using the machine and make sure you understand everything. GLENTOR Ltd. reserves all right to change any of the specifications described in this manual at any time, without prior notice, without bearing any responsibility. An integral part of this manual is a user's manual of internal combustion engine Honda GX 200. 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
Articulated shaft revolutions	140 rpm
Volume of hydraulic oil	10 dm³
Volume of engine oil	0,6 dm³
Volume of fuel	3,1 dm³
Weight	100 kg
Dimensions of the rotary drive can be customized according to customer requirements.	

Description of the rotary drive

The rotary drive is used for handling railway carriage loading platforms. The following picture shows the essential parts of the rotary drive.



- | | | | |
|---|--|----|--------------------------|
| 1 | Internal combustion engine | 7 | Battery |
| 2 | Frame | 8 | Hydraulic oil tank |
| 3 | Protective frame | 9 | Oil filter |
| 4 | Pump | 10 | Cardan shaft |
| 5 | Hydraulic motor | 11 | Wheels with bantam tyres |
| 6 | Directional control valve with pressure Relief valve | | |

Safety rules

1. Before using the rotary drive, read carefully all information contained in this manual, make yourself familiar with the control components and their correct use.
2. Take an increased care when using this rotary drive. An improper and careless operation of the rotary drive can cause serious or fatal injury.
3. The operator is responsible for accidents or hazards caused to other persons or their property. When working with the rotary drive never smokes, eat or drink.
4. The operator must not be at work under the influence of alcohol or other drugs.
5. When operate the rotary drive always wear firm shoes, work gloves, appropriate hearing protection and long pants.
6. Do not use the rotary drive 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.
7. Use the rotary drive always on a flat surface. Vicinity of the rotary drive must be free of obstacles which could
8. reduce the handling ability of an operator. Never use the rotary drive 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 rotary drive in closed and poorly ventilated areas.
9. 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 rotary drive 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.
10. Do not touch and keep away from rotating parts during operation. There is an increased risk of danger.
11. 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.
12. Never overturn the rotary drive or tilt it more than 35 degrees when in operation. In case of overturning the rotary drive into horizontal position, put it in original position immediately and wait until the oil level stabilizes. Afterwards checking of the rotary drive including checking of air filter on oil flooding must follow. Make sure that all caps are tightened properly.
13. Operate the rotary drive only in daylight or sufficient artificial light
14. Take great care when moving or swinging the rotary drive. In an event of impact with a foreign object, always check whether the rotary drive is not damaged.
15. Keep the rotary drive clean and in working state, especially the filter element assembly. When the filter element (CRE SOFIMA 015 CV1) is clogged, exchange it.
16. It is recommended to exchange the filter element after 100 hours of operation at first and then every two years.

17. Do not change the maximum setting of engine speed.
18. Never use a damaged rotary drive.
19. Ensure that all screws, nuts and other fasteners have always been properly tightened. Each component of the rotary drive has its importance; therefore do not modify or delete them.
20. When the engine is running don't travel with the rotary drive
21. 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.
22. When connecting or disconnecting the battery contacts put the plug out from the socket. Use an appropriate charger for charging the battery.
23. Store the rotary drive in protected areas. Before storing the rotary drive indoors let it cool down. Do not store the rotary drive near fire, sparks and heat sources

Instruction for use

1. Before operation check the overall state of the rotary drive and check levels of oil and fuel.
2. 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 rotary drive on your side so, that the tilting angle doesn't exceed 35 degrees.
3. Bring the rotary drive 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 rotary drive on the ground and make sure that it stays stable on wheels and rubber stops.
4. Grasp the head of the shaft, force the cardan shaft back and put the head on the wagon square prism.
5. Make sure that the directional control valve lever is in neutral position and start the engine (see User's Manual of Honda GX 200).
6. 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.
7. Remove the head of drive shaft from the square prism and take the rotary drive 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	
Item	↓							
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	po každých 500 hodinách						
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

