

# Operating Manual

## HPP09 Hydraulic Powerpack

From serial  
number 1498

Revised  
03.08.2017



### **Prior to Operation**

We thank you for choosing a HYCON powerpack.

Please note that the powerpack is delivered without hydraulic oil, and therefore it must be filled up with hydraulic oil prior to operation.

To ensure smooth operation and long-lasting performance of your new powerpack, we recommend you to study this operating manual carefully and pay special attention to the

### **Safety and Service Precautions**

We hope you will be satisfied with your new HYCON powerpack.

Best regards  
HYCON A/S

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## Safety Precautions

1. Always use protective earplugs. The powerpack complies with the EU noise limits, but by daily long-lasting operation there is a risk of hearing defects.
2. Always connect hoses before starting.
3. Never add fuel and oil when the engine is running.
4. In case of non-operation or performance of service, always turn off the engine.
5. Never start the engine without side covers.
6. Operation of the powerpack without tool connected and with lever at "ON" may cause overheating of the system and damage to the powerpack.
7. When lifting the powerpack from a vehicle, we recommend the use of a crane.
8. The pressure relief valve is set at 150 bar from our plant. Never set it higher.
9. Always use filters with by-pass. The use of filters without by-pass may blow the hydraulic hoses and the filter cover.

## Filling Up Hydraulic Oil

- To fill up with hydraulic oil, loosen the filter cover on top of the powerpack.
- Remove the filter element (see photo), and fill up with oil. When oil is showing at the bottom of the filter unit, there is enough oil on the powerpack.
- Insert the filter element again, mount the cover and the powerpack is ready for use.

*Please note: When connecting new extension hoses, it is necessary to fill up with extra 2 litres of oil. Therefore always top up the powerpack when connecting new extension hoses.*



# Technical Data

## Hydraulics

The HYCON HPP09 open centre hydraulic powerpack is designed in accordance with the EHTMA category C, which prescribes a minimum performance of 20 l.p.m. at 138 bar. The HYCON powerpack is fully compatible with and sufficient for the common European tools.

The powerpack is mounted with a pressure relief valve to avoid a too high pressure. Furthermore, the very efficient air cooling protects the powerpack against super-heating.

<b>Oil flow</b>	20 l.p.m at 3300 r.p.m.
<b>Working pressure nominal</b>	120 bar
<b>Pressure relief valve</b>	Set at 150 bar
<b>Pump</b>	Gear pump
<b>Oil temperature</b>	Max. 70° C
<b>Hydraulic oil tank capacity</b>	Min. 5 litres/max. 7 litres
<b>Petrol tank capacity</b>	6 litres
<b>Hydraulic system compl.</b>	Max. 8 litres
<b>Filter system (filter element)</b>	25 Micron with by-pass
<b>Engine</b>	Honda GX270QXB7 9 HP (gross power) 4-stroke petrol with oil alert system Petrol - normal or unleaded Engine oil 1.1 litres
<b>Guaranteed sound power level <math>L_{WA}</math></b>	100 dB
<b>Sound pressure level 1 m <math>L_{PA}</math></b>	88 dB
<b>Dimensions (LxWxH)</b>	680x560x593 mm
<b>Weight, without hydraulic oil</b>	68 kg

## Starting Instructions

Please observe the starting instructions on the front of the powerpack.

- Start:**
- Check engine oil level
  - Check hydraulic oil level at sight glass
  - Connect hoses and tool
  - Switch fuel tap to "ON"
  - Activate choke
  - Turn ignition switch to "1"
  - Pull recoil starter
  - Move the lever to "ON"
- Stop:**
- Move the lever to "OFF"
  - Turn off the ignition switch
  - Turn the fuel tap to "OFF"

## Service, Maintenance and Hydraulic Settings

Service/Maintenance	Daily	Weekly	Yearly
Engine oil	Check		1 x replacement
Hydraulic oil	Check		1 x replacement
Hydraulic oil filter *)			1 x replacement
Check hoses		(tighten up if needed)	
Air filter			1 x replacement
Fuel filter			1 x replacement

\*) Use only filters with by-pass

### Hydraulic Settings

Check the working pressure by means of test equipment. The test equipment must comprise a pressure gauge, a flow meter and a valve for adjustment of pressure.

The pressure relief valve is placed on the right side of the valve block.

1. Connect the test equipment, start the powerpack and move the lever to "ON". Then close the valve - the pressure gauge must show 150 bar.

Adjust the pressure relief valve by loosening the lock nut and turning the adjustment screw in or out. "In" increases the pressure, and "out" decreases the pressure.

Retighten the lock nut after adjustment.

2. When the pressure relief valve has been adjusted correctly, the working pressure must be set at 100 bar by means of the valve on the test equipment. At 100 bar, the oil flow should be 20 l. p.m.

If the oil flow is not correct, loosen the POR cylinder in the bracket and push it to the left (higher flow) or to the right (lower flow).

Secure the POR cylinder in the bracket again after adjustment.

If correct pressure/oil flow cannot be achieved by following the above instructions, the powerpack must be re-adjusted. If the pressure/oil flow is then still incorrect, the pump is defect and must be replaced.

## Oil Types

The HYCON powerpack uses standard hydraulic oil, i.e. all types of mineral oil and biodegradable oil, which comply with the following values:

Recommended viscosity	20-40 cSt
Permitted viscosity	15-1000 cSt
Viscosity index	Min. 100
Temperature area	-20° to +70° C