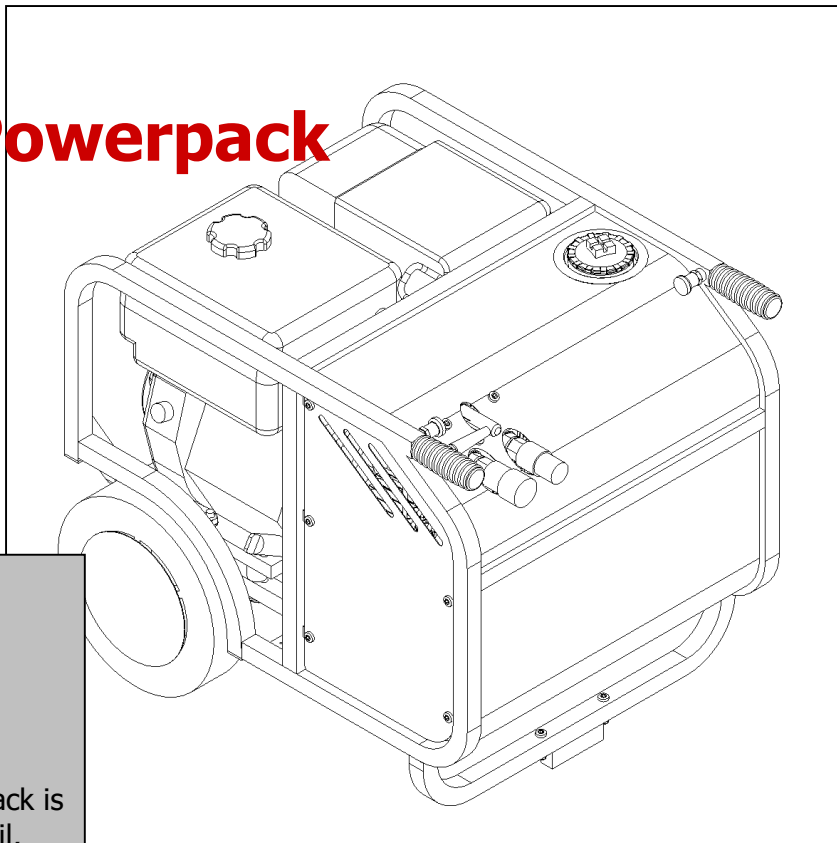


# Operating Manual

## HPP13D Hydraulic Powerpack

From S/N 8264

Revised 30.08.2013



### 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 that you 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 145 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

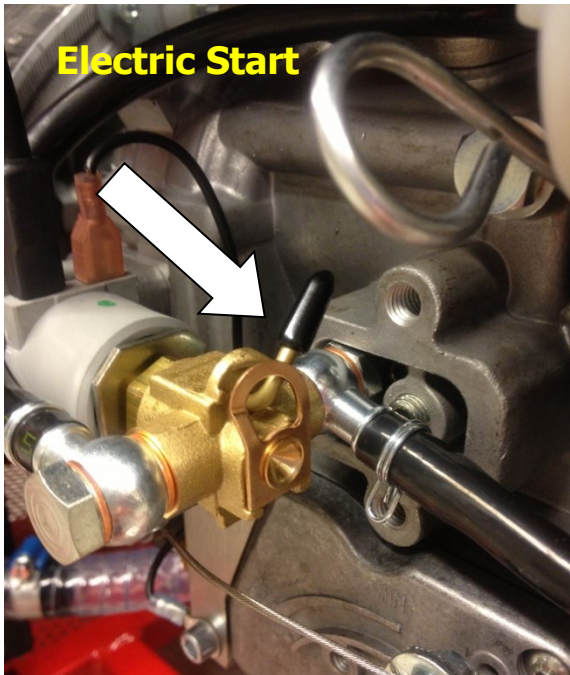
The HYCON HPP13D open centre hydraulic powerpack is designed in accordance with the EHTMA categories C and D, which prescribe a minimum performance of 20 l.p.m. at 138 bar and 30 l.p.m. at 138 bar, respectively. The HPP13D is available in one version:

- Manual flow adjustment. This powerpack can be set to 20 to 30 l.p.m. on the front of the powerpack.

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 overheating.

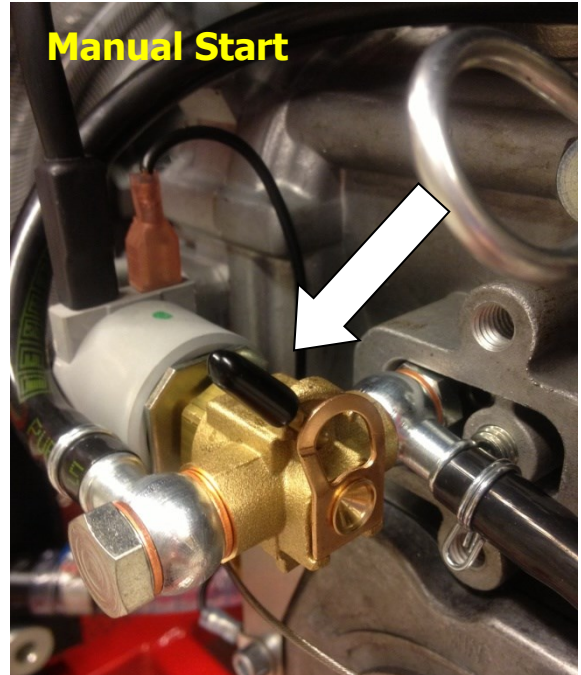
<b>Oil flow</b>	20 l.p.m. at 2500 r.p.m. 30 l.p.m. at 3600 r.p.m.
<b>Working pressure nominal</b>	120 bar
<b>Pressure relief valve</b>	Set at 150 bar
<b>Pump</b>	Gear pump
<b>Oil temperature</b>	Max. 70° C
<b>Hydraulic oil tank capacity</b>	Min. 8 litres/max. 11 litres
<b>Diesel tank capacity</b>	6,5 litres
<b>Hydraulic system compl.</b>	12 litres
<b>Filter system (filter element)</b>	25 Micron with by-pass
<b>Engine</b>	Lombardini LD15-440 11.0 HP Engine oil 1.5 litres
<b>Dimensions (LxWxH)</b>	805x625x695 mm
<b>Weight, without hydraulic oil</b>	114 kg

## Starting Instructions



*Electric start of powerpack.  
Lever is pushed towards the engine block.  
Engine can be turned on and stopped by turning  
ignition key.*

**STOP POWERPACK  
TURN IGNITION KEY OFF**

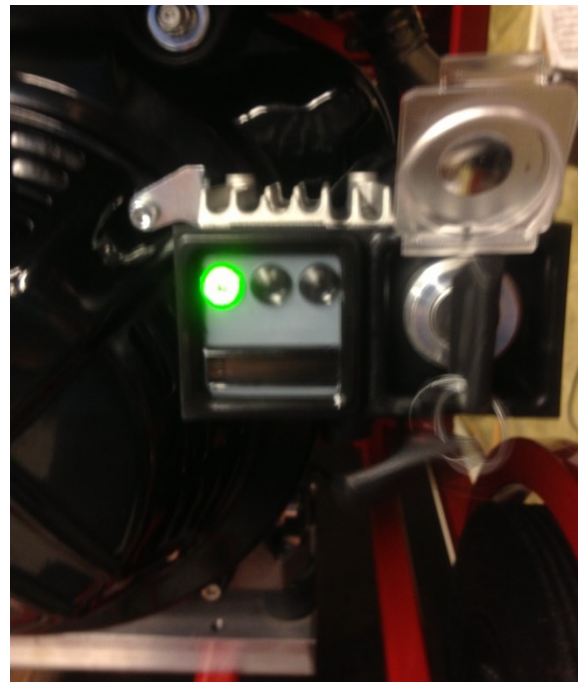


*Manual start of powerpack.  
Lever is pushed away from the engine block.  
Engine cannot be turned on and stopped by  
turning ignition key. Use recoil start.*

**STOP POWERPACK  
PUSH LEVER TOWARDS ENGINE BLOCK**



*1. Turn ignition key one step to the right. Two red bulbs light up.*



*2. Turn ignition key one more time and engine starts. When engine is running, one green bulb should light constantly.*

# 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 (30) l. p.m.

On the powerpack with adjustable flow, the flow is regulated by adjusting the position of the throttle cable.

**If correct pressure/oil flow cannot be achieved by following the above instructions, the powerpack must be re-adjusted. Then if the pressure/oil flow is 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

## **Warranty Terms**

We grant 12 months warranty from the first date of operation – however, not more than 18 months from the date of delivery.

The warranty applies to faults that can be related to construction and production errors.

Faults caused by incorrect operation, incorrect handling, lack of maintenance or the like will not be accepted as warranty.

The warranty covers the parts necessary for repair and the suggested average time needed for repair.

For further warranty details, please contact your local dealer.