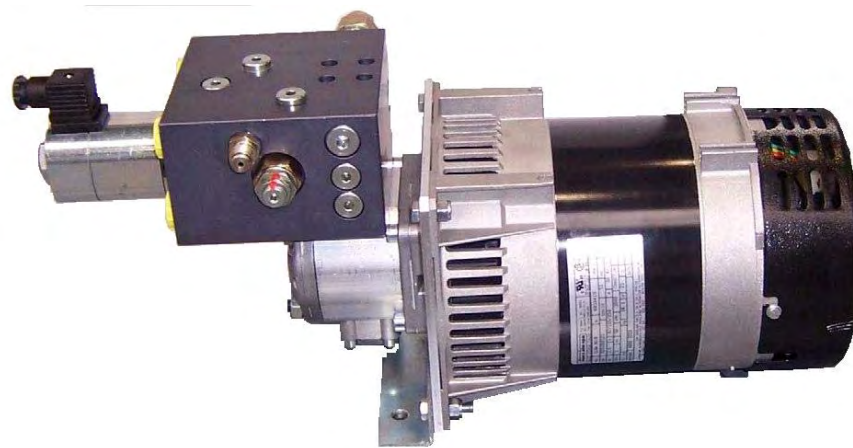


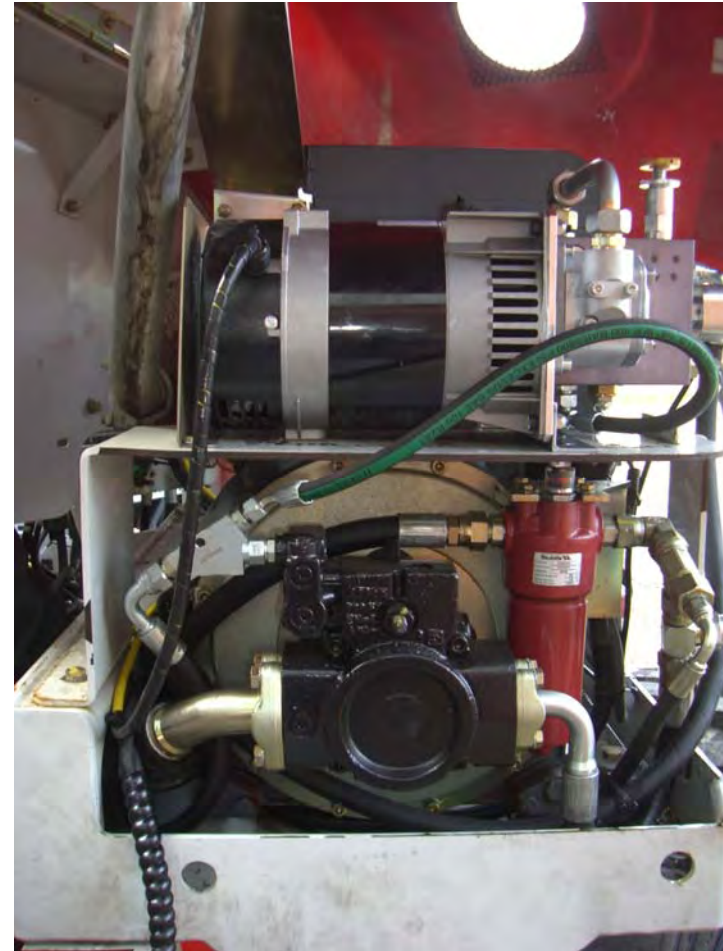
The HPS Platform PowerPack

- **Hydraulic Generators for the Access Platform Industry**



The HPS Platform PowerPack

- How to Install on a Haulotte HA16PX



Overview

- Of all the Haulotte Access Platforms, the HA16PX is probably the most difficult in terms of installation, this is primarily due to the compact design of the platform and therefore lack of space into which the generator can be installed, however with some modification the generator can be installed quite simply using the comprehensive kit of parts that we provide.
- The hydraulic system on the HA16PX

Haulotte HA16PX Kit List

3.5kVa 110 or 230v, 50hz, Hydraulic Generator c/w RCBO housed in weatherproof enclosure, twin socket outlet for basket mounting, hydraulic gear motor and function manifold close coupled to the alternator incorporating 12 or 24v on/off solenoid valve, pressure relief valve, pressure compensated flow control valve, mounting bracket and nuts, bolts etc for installation.

Hydraulic Fittings

- 2 x 1 1/16" JIC F/M/M Tee
- 1 x 1 1/16" JIC M/F Swept Elbow
- 1 x ¼ BSP x 7/16" SAE M/M Adaptor
- 1 x ¼ BSP x ¾ JIC M/M Adaptor
- 4 x ¼ M/M Adaptor
- 4 x ¼ Dowty Washers
- 2 x ½ M/M Adaptors
- 2 x ½ Dowty Washers

Hoses

- 1 x 3.8m Hose – Tank Return
- 1 x 0.3m Hose – Pressure In
- 1 x 0.65m Hose – Load Sense

Caution

- Care should always be taken when installing the generator to ensure that hoses and cables cannot rub or wear against each other or the body of the platform, ideally hoses and cables should be run alongside existing hoses and cables and cable tied to prevent movement when in operation.
- The output of the generator is potentially lethal and under no circumstances should you attempt to operate the generator until it is fully wired in and isolated through the RCBO.

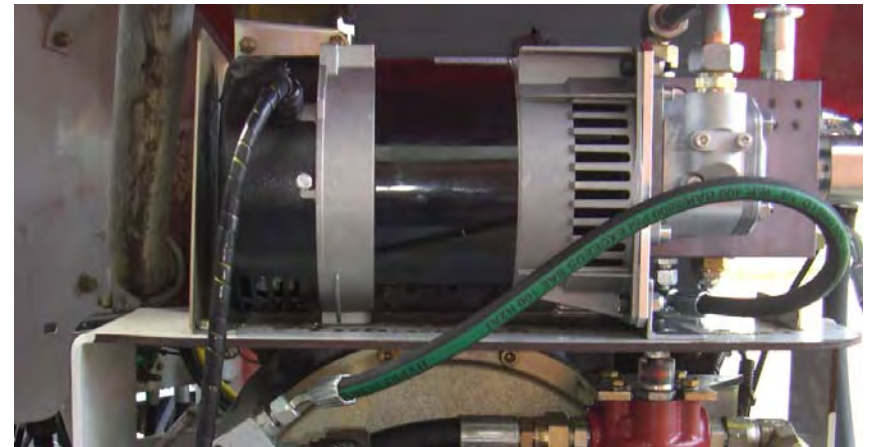
Battery Removal and Re-installation

- The first thing to do is relocate the battery, using the battery tray and battery cables provided in the kit, the battery is relocated so that it fits under the boom, to install, the first thing to do before carrying out any work is to fully extend the boom, this not only provides the access required but also reduces the oil level in the tank, which should mean that the tank does not need to be emptied prior to installation. The replacement battery tray as shown should then be mounted and the battery moved accordingly and secured, the battery cables should then be extended, using the cables provided and connected accordingly.



Battery Removal and Re-installation

- Once the battery has been removed and re-installed in its new location, the existing mounting plate will need to be modified to accommodate the generator, firstly the bracket located at the left hand side of the plate should be removed with an angle grinder, then the heat deflector has to be moved so that it is nearer to but not touching the exhaust pipe, allow approx. 10mm between the exhaust pipe and plate so that it does not touch when the engine is running, new mounting holes will need to be drilled and the plate secured in its new location, the generator fixing points then need to be drilled, a template is provided for this and the generator then secured in place.



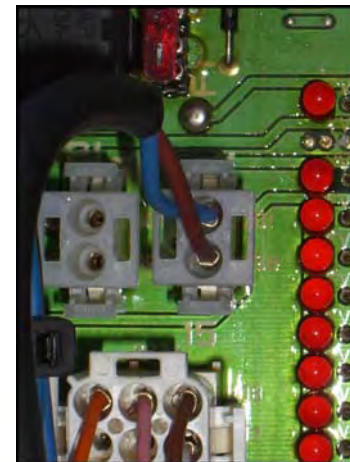
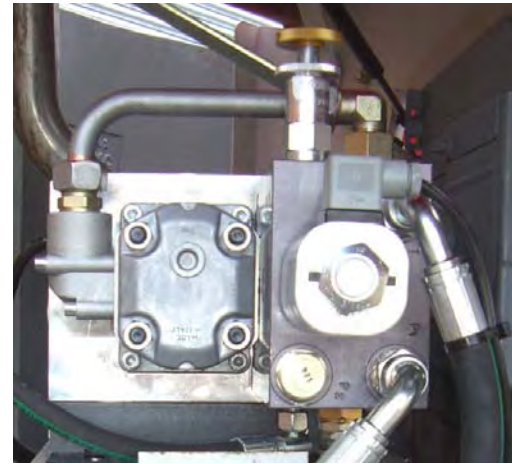
AC Electrical Connections

- Mount the weatherproof RCBO enclosure as shown in the photo, connect the output cable from the generator into the RCBO and the output from the RCBO into the existing power cable running through the boom using the cable connector provided.



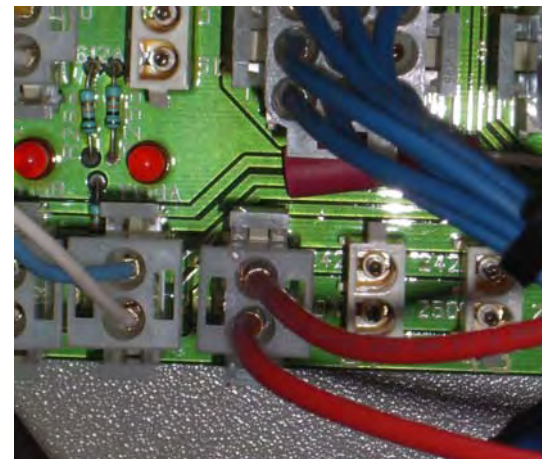
DC Power Connections

- Using the two core cable provided, connect a cable from the solenoid mounted on the generator manifold through to terminal 11 on the control panel, fittings are provided.



DC Electrical Connections

- Locate and identify cables 29 and 30 in the wiring loom from the basket mounted control panel, crimp connectors to both cables and wire through to terminal 36 on the platform control panel



DC Electrical Connections

- Remove the cover of the control panel mounted in the basket and install the on/off switch provided in a suitable location. Locate and identify pin connections 29 and 30 in the multi pin connector mounted in the bottom of the control panel and connect these to the toggle switch

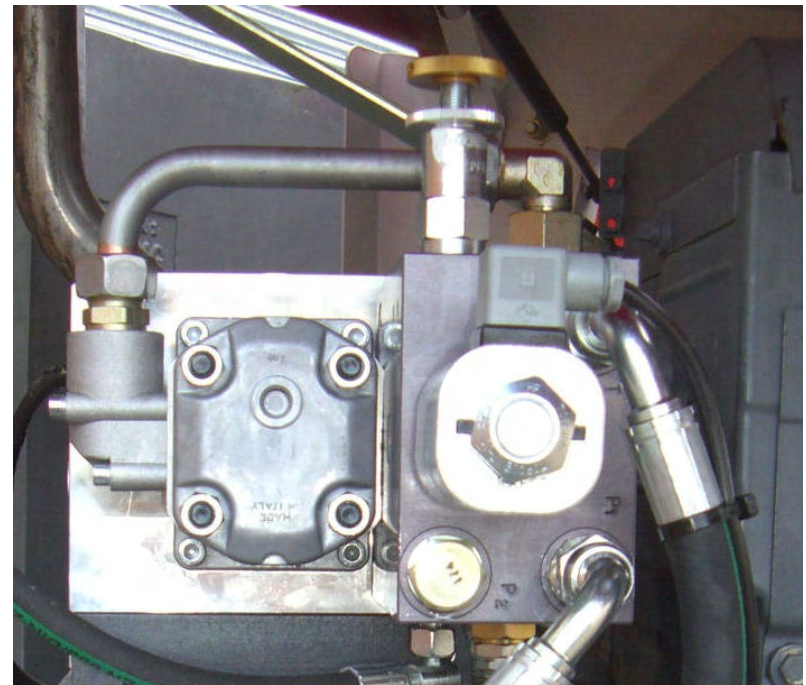


Electrical Installation

- Having completed the aforementioned the unit should now be fully connected electrically and ready for operation once the hydraulic connections have been completed. To summarise what we have done is connect the AC power cables from the generator through the RCBO, which is a combined Earth Leakage / MCB which protects the operator against electrical shock and the machine from overload to the platform power cable and then to the outlet socket on the basket. On the DC side we have incorporated an on/off switch into the basket which when switched on isolates all of the platforms functions to allow the generator to operate, when the generator is running no other function will be available, as soon as the generator is switched off the platform will function as normal.

Hydraulic Connections

- There are in fact three hoses for connection, pressure, return to tank and load sense, each kit contains all of the required fittings and hoses. Pressure is connected into P1 of the manifold, Tank return into T.
- Before connecting or disconnecting any hoses ensure that the isolator valve located behind the control panel is turned off and that the boom is fully extended, if it is not possible to extend the boom, then the hydraulic tank should be emptied.



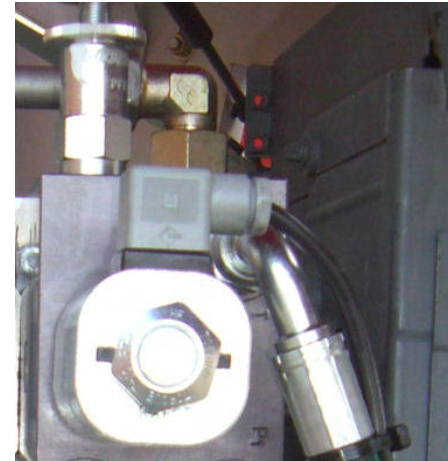
Hydraulic Connections – Pressure

- To connect the pressure line, you must first install the T piece into the existing P line on the pressurised side of the filter, once installed connect the hose supplied from the T piece to P1 on the manifold



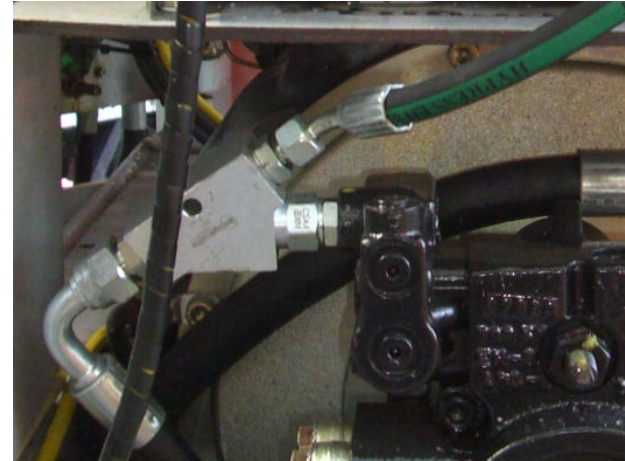
Hydraulic Connections – Tank Return

- The longest hose supplied in the kit is the tank return line, this is connected from the T port on the generator manifold through to the tank return fitting on the tank itself, with the T piece supplied, to access this the control panel should be removed by undoing the three nuts that secure it in place the panel can then be dropped forward.



Hydraulic Connections – Load Sense

- To install the load sense line an additional shuttle valve needs to be installed into the existing circuit, this is done by disconnecting the existing load sense line, removing the existing fitting and replacing it with the fitting provided and then installing the shuttle valve as shown. The existing load sense line is then connected as shown and the load sense line from the generator manifold again connected as shown.



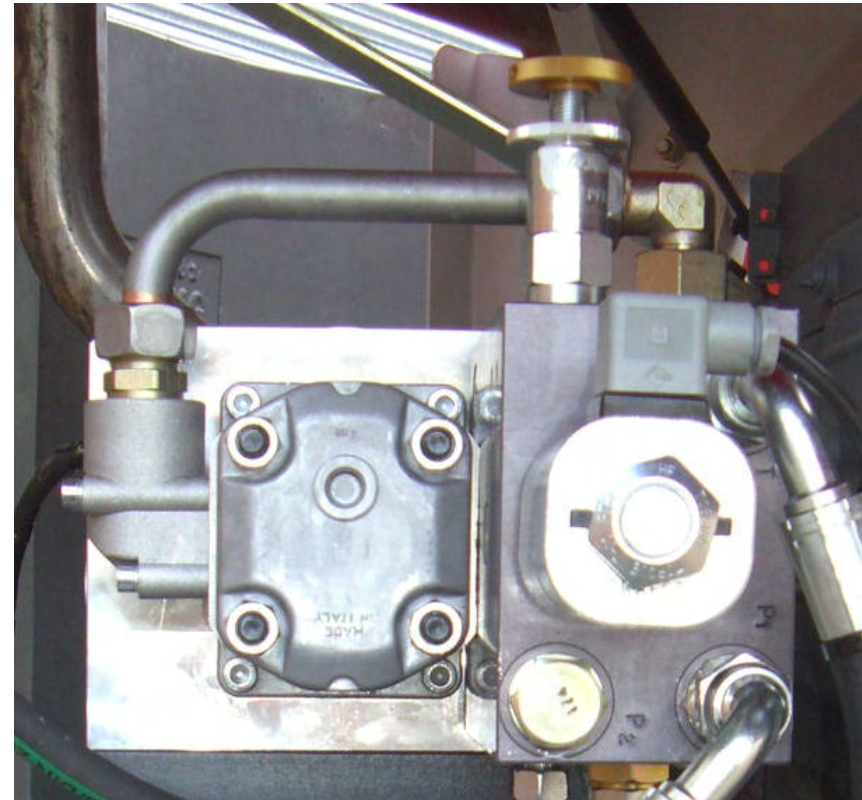
Final Checks

- At this point all required hydraulic and electrical connections should be complete. The unit should now be fully examined to ensure that no hoses or cables can rub or wear against each other and therefore fail, where hoses are likely to rub or could potentially do so they should either be moved or cable tied together to prevent this from happening. All fittings then should be checked for tightness and panels replaced and if appropriate the hydraulic oil should be replaced to the tank.



Set Up and Operation

- The unit is then ready for set up and operation. Turn on the isolator valve on the tank and start the platform as normal, although the flow control on the generator has been set and locked prior to despatch it will be necessary to retest the unit and adjust accordingly once the installation is complete, the generator should be set to operate at 50 Hz and this is governed by the hydraulic flow rate which can be adjusted using the flow control valve mounted on the generator manifold, once set the valve should be locked off and marked so that in the event that anyone should tamper with it, it can be readily identified.



The UKG Platform PowerPack

- The HPS Platform PowerPack is one of the most reliable, versatile onboard power solutions for Access Platforms available in the market place today, there are many other products such as inverters, belt driven generators etc which in many instances provide a cheaper alternative, there are none however that provide the reliability, low maintenance and longevity of this unit, which is why so many manufacturers, rental companies and end users now standardise on our products for there onboard power solution. Our units are now widely in use throughout the world and are installed on platforms from manufacturers such as Genie, JLG, Skyjack, Haulotte, Aichi, Upright.