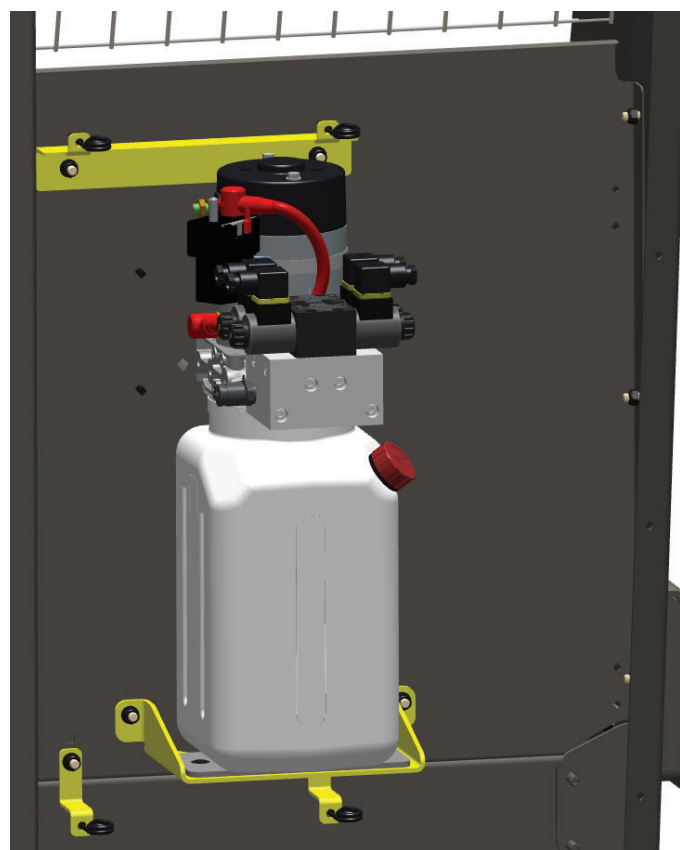


# **Skiptop & Skiptop 2.0 Powerpacks**

**Replacing Skiptop powerpack MU113481101  
or Skiptop 2.0 powerpack MU113481102  
with New generation Skiptop powerpack  
MU114088001**



**Replacement instructions**

## 1. Necessary parts

PCS	PART NUMBER	TITLE
1	MU114088001	SKIPTOP POWERPACK 2.0 NEW GEN, RFP
1	MU114088501	BOTTOM SUPPORT
2	MU113666901	BARBED RIVET
1	MU113658902	RUBBER SILENCER
2	MU114088201	LOWER BRACKET
6	MU110034007	HEX SCREW M8X20 DIN933 8.8 DTM
6	MU110039101	LOCKING NUT M8 DIN 985
12	MU110039008	WASHER M8 DIN 985 ZF1
2	MU110034015	HEX SCREW M10X20 DIN933 8.8 DTM
		<b>Only when replacing Skiptop powerpack 113481101:</b>
1	xxxxxxx	Anti-Tamper Cap & Lockwire Kit
		<b>Only when replacing Skiptop powerpack 113481102:</b>
1	MU110035806	SWIVEL NUT

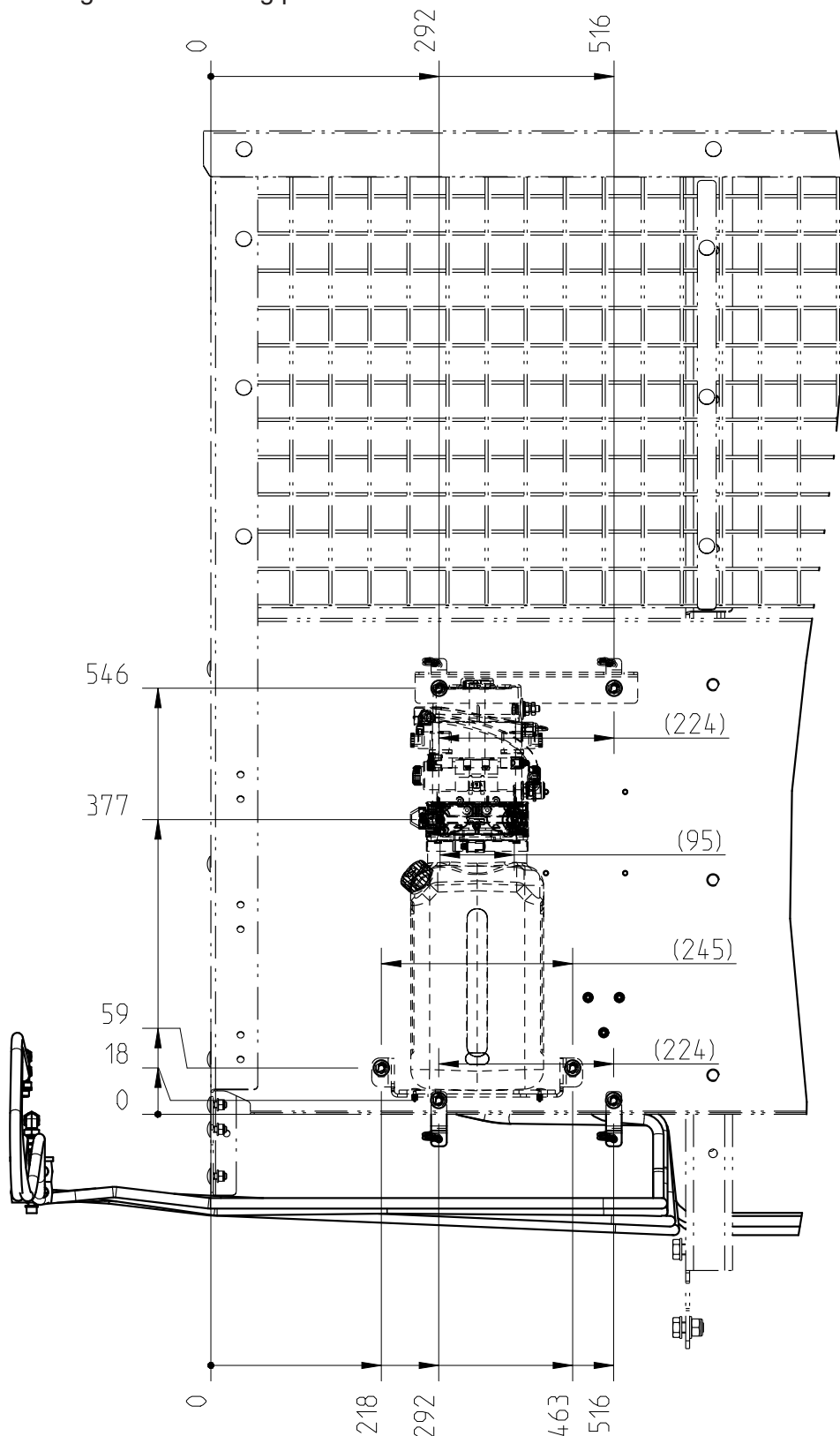
## Necessary tools

- Basic workshop tools
- Pressure gauge (only when replacing Power pack MU113481101)

## 2. Installation

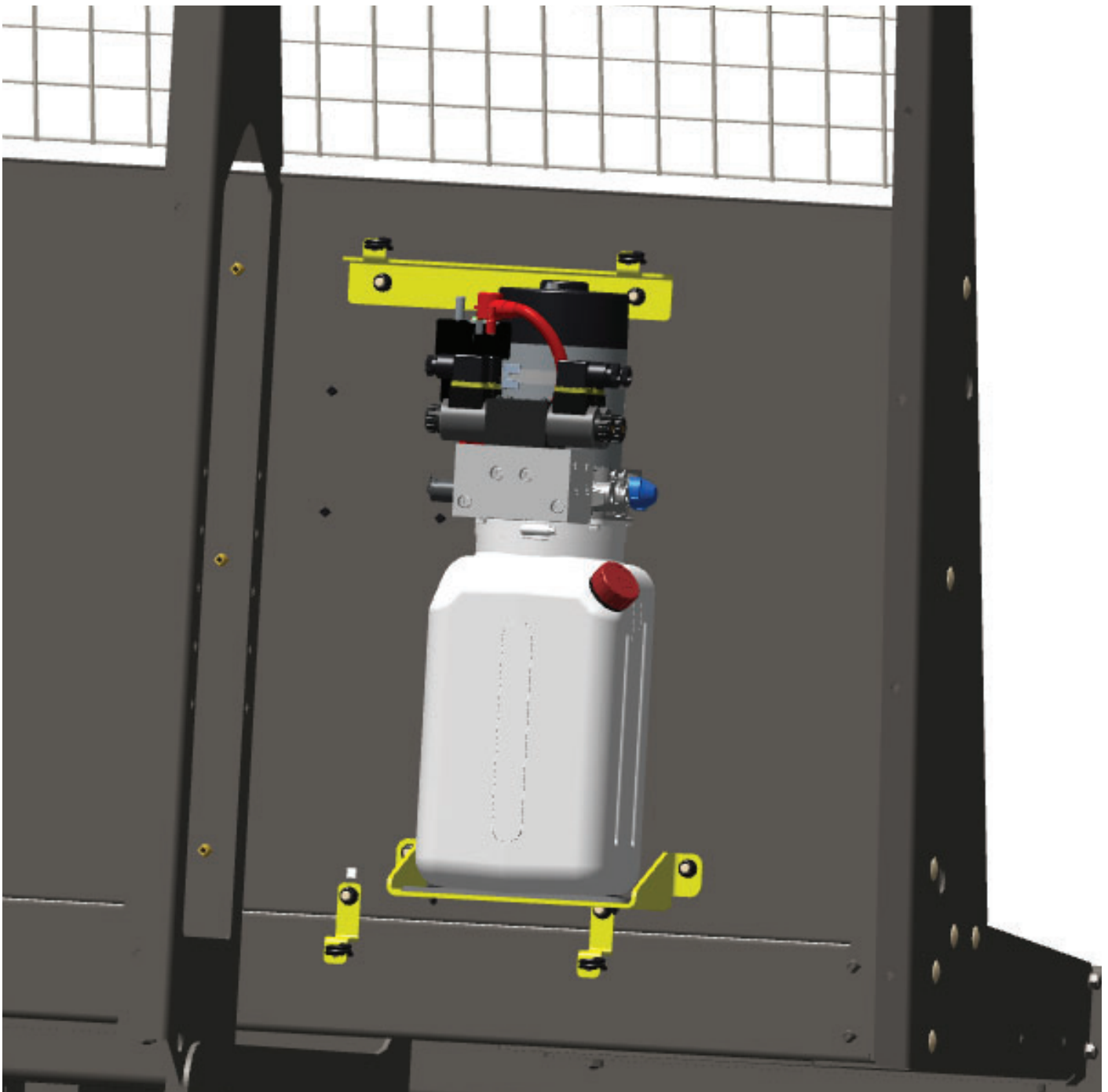
Dismantle the old defective power pack from the unit. Label hoses and electric cabling and protect until those are ready to be fastened to the new powerpack.

Drill holes according to the following pattern.



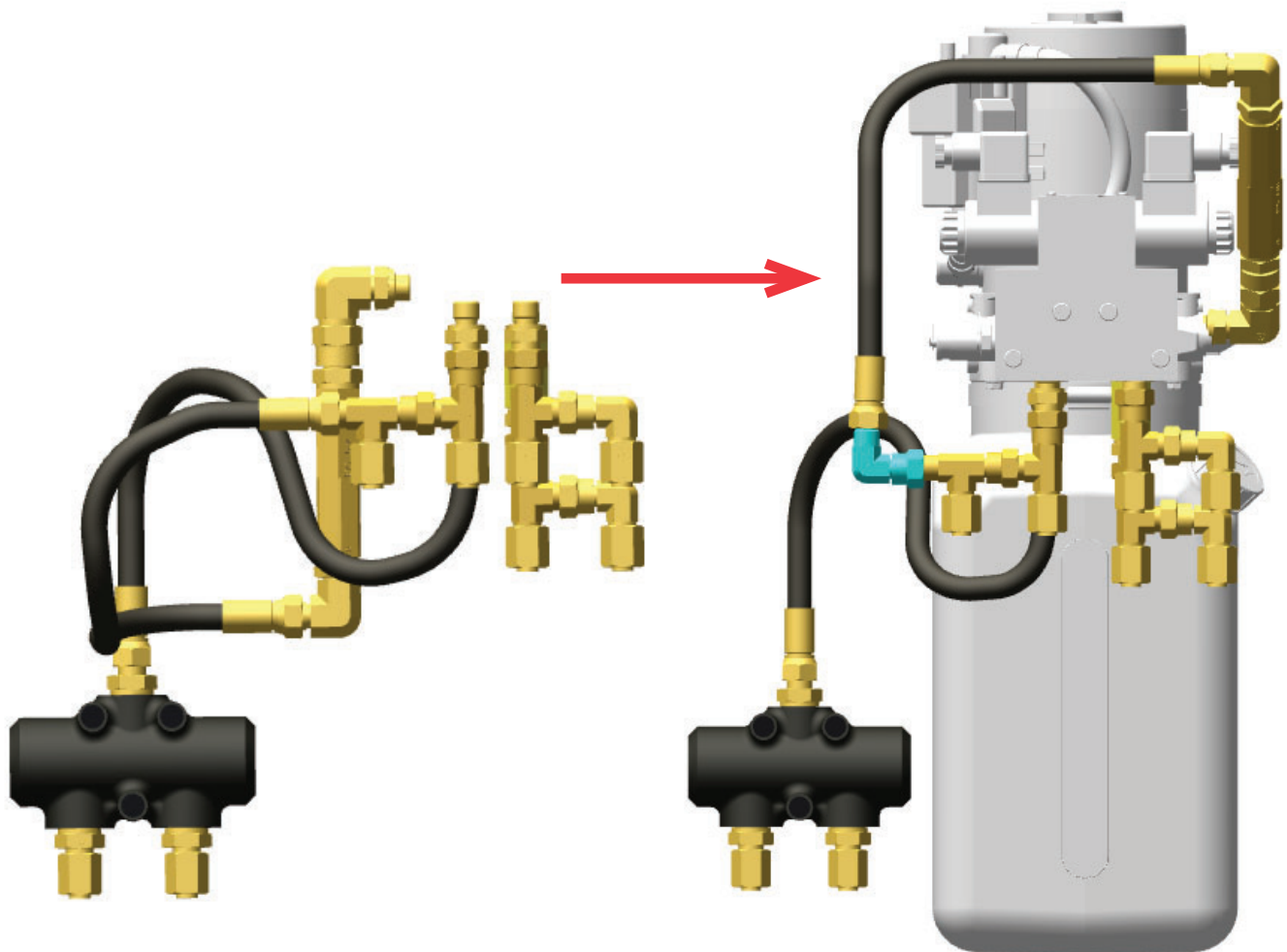
### 3. Bolt Power pack & cover plate fastening brackets

- Fasten rubber silencer plate in the lower bracket with rivets, bolt upper bracket.
- Fasten power pack.
- Fit lower bracket and bottom supports.
- Brackets are highlighted yellow in the following figure.



## 5. Hydraulic connections

- Fasten released hoses in the power pack
- When replacing Skiptop 2.0 power pack MU113481102 one swivel nut MU110035806 for return line hose (highlighted in blue) needs to be added because the T-port is located on the other side of the pump unit. (See instructions in the following page)
- Skiptop 1 power pack MU113481101 is not equipped with this tank line so therefore the hose is not necessary.

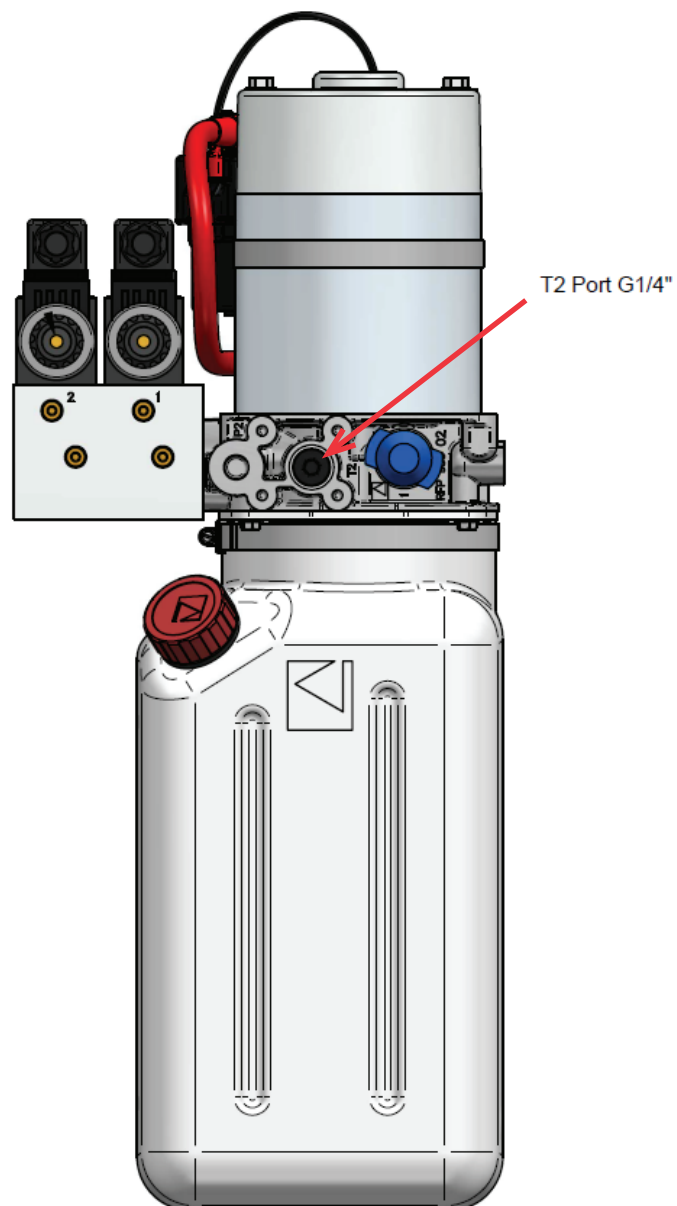


Original setup for Skiptop 2.0 original power pack MU113481102

Modified setup for power pack MU114088001

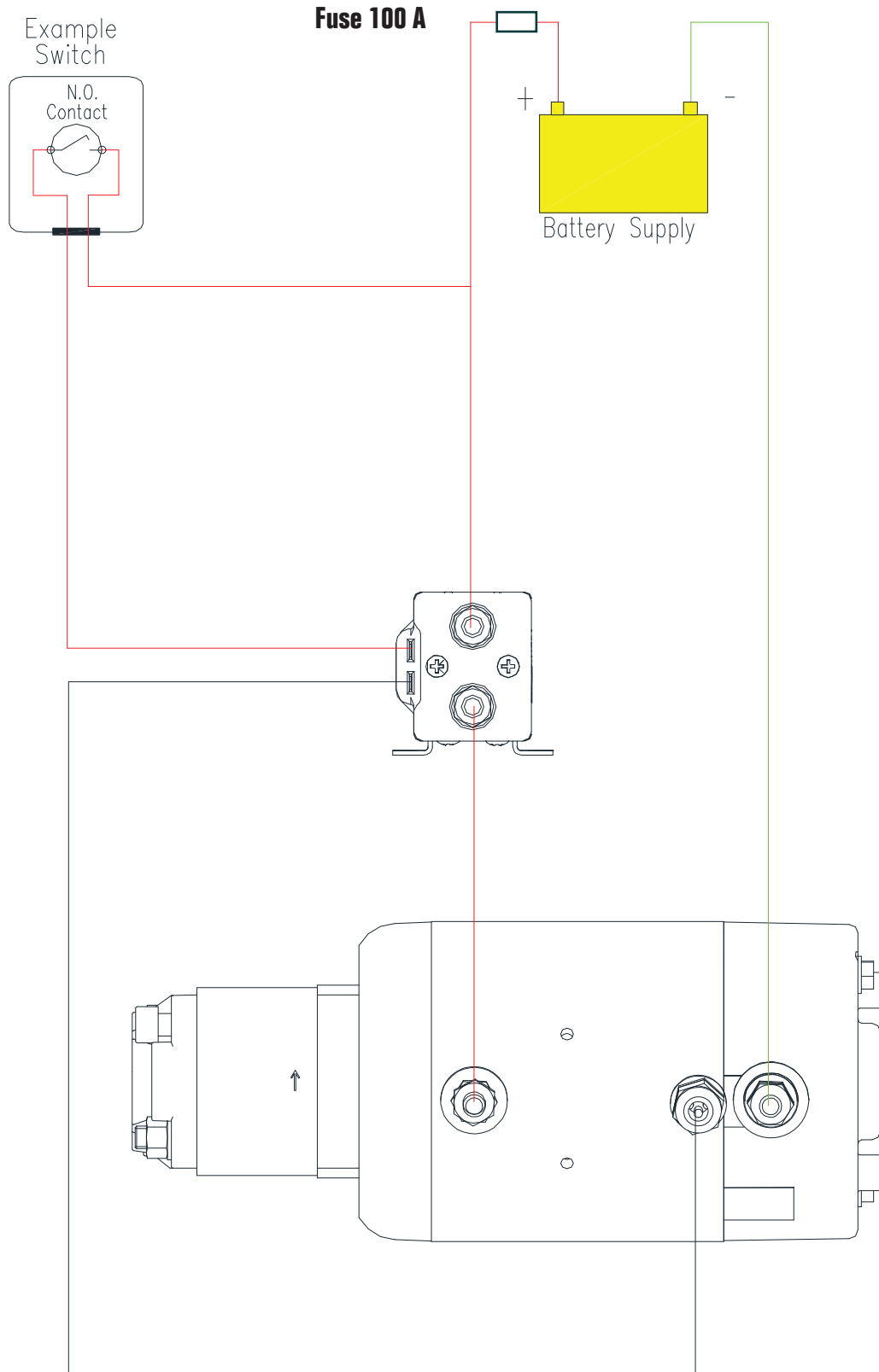
## 5. Tank line

- When replacing Skiptop 2.0 Power pack MU113481102 remove G1/4 plug from T2 port and install return line hose
- Skiptop 1 does not require separate tank line so while replacing MU113481101 it is OK to leave the T2 plug in.



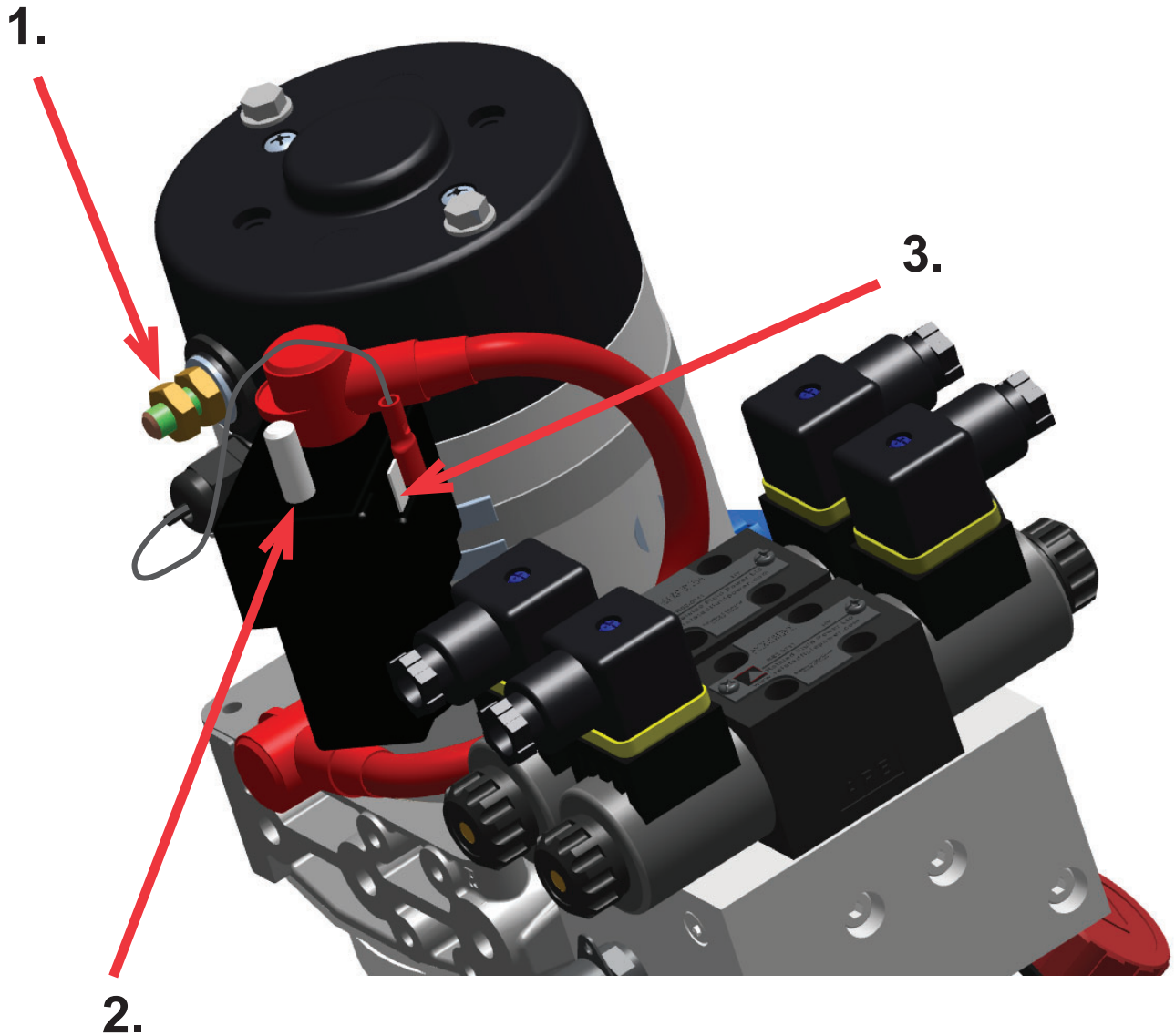
## 6. Electric Schema

- Make sure to have a fuse 100 A max. 100 mm after battery + pole.



## 7. Electrical connections

1. M8 earth terminal
2. +24 VDC from battery
3. Start signal for pump (XM2.08 DO, Control module 3724)

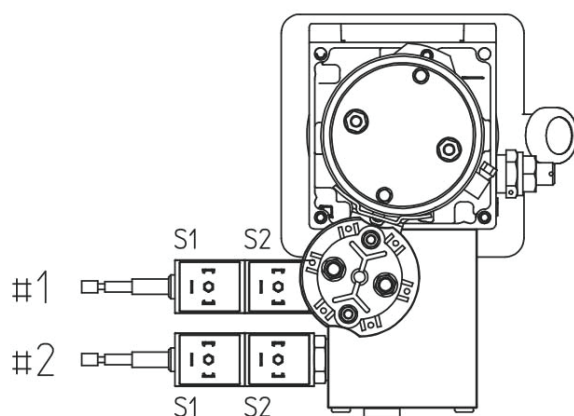




## 7. Valve controls

Connect accordingly

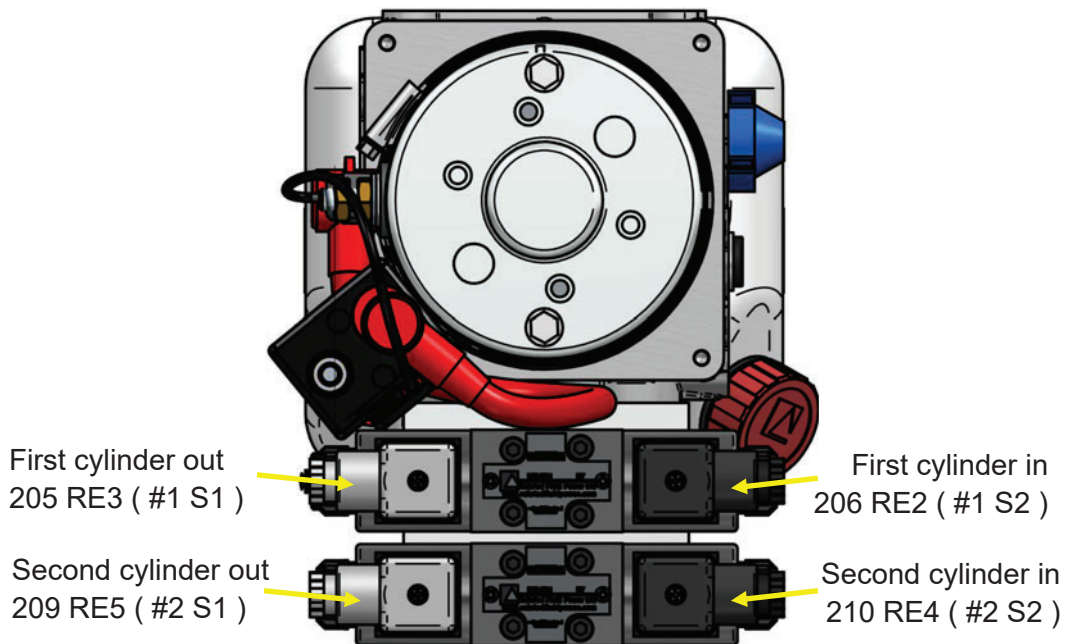
Power packs MU113481101 & MU113481102:



### Directional valves

- #1 S1 - Pin 205/RE3 Arms #1 out
- #1 S2 - Pin 206/RE2 Arms #1 in
- #2 S1 - Pin 209/RE5 Arms #2 out
- #2 S2 - Pin 210/RE4 Arms #2 in

Power pack MU114088001:



## 8. Initial startup

- Fill up the hydraulic tank of the powerpack with 5 Liter HLP oil. Choose used hydraulic fluid according to the table below

- Before starting system, make a final check that all external pipe work connections have been tightened and that control valves allow the power pack to start without generating pressure.

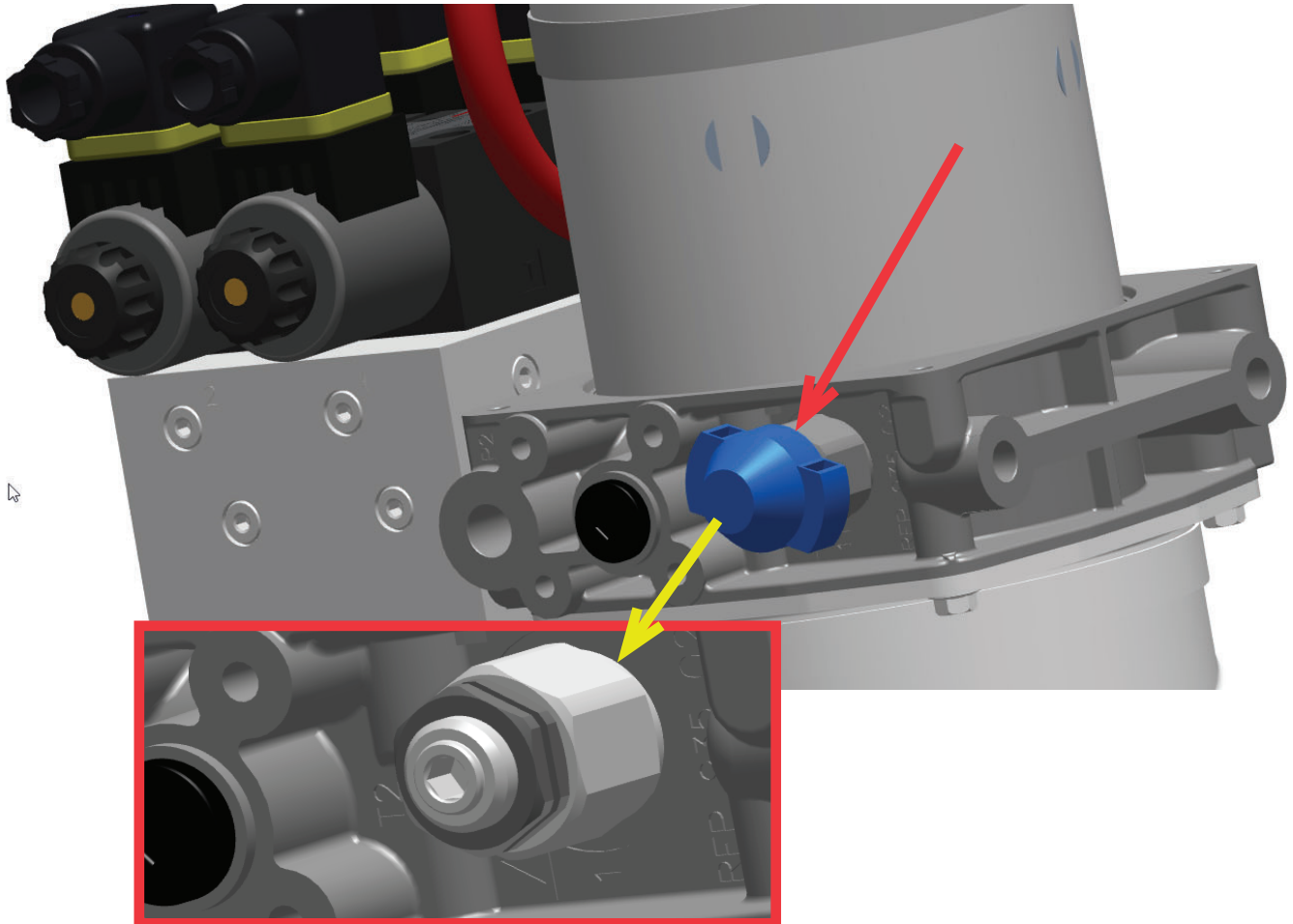
- Operate carefully and test every movement

- For Skiptop 1 / MU113481101 see pressure adjustment instructions in the following page

Examples	Ambient temp. degree C	ISO viscosity grade VG no.	Viscosity index
Standard grade oils	-5 to 25	32	98
	5 to 35	46	98
Premium grade oils with high viscosity index	-10 to 30	37	155
	-25 to 35	22/32	up to 400

## 7. Pressure adjustment (Only when replacing MU113481101)

- Due to different structure of the hydraulic system of Skiptop 1 the pressure must be lowered to 150 bar from the standard adjustment 180 bar.
- Open blue tamper resistant cap.



- Operate the cylinder against one end, measure pressure from the power pack pressure measurement nipple.
- Adjust and fasten the adjustment and re-seal with a new tamper resistant cap.
- Install plastic cover

**For additional instructions contact: [multilift.support@hiab.com](mailto:multilift.support@hiab.com)**