Sykes Hydrapak

Operation and Safety Guide



General Safety

- Always assess the risks before use.
- This equipment should only be used by a competent person.
- Follow operation & maintenance instructions.
- Never operate this equipment if you are ill or under the influence of alcohol or drugs.
- Ensure that equipment is inspected & serviced at appropriate intervals.

General hydraulic tool safety

Beware - Hydraulic tools may use fluid pressurized up to 240 bar.

Fluid under pressure can penetrate skin.

 High pressure injection injuries are rare but constitute a medical

- emergency. The degree of injury may not be immediately apparent (HSE 2013). There are no gloves available to protect against fluid injection injuries to the hand & ordinary working clothes do not significantly resist penetration.
- Always check hoses with care for signs of wear before use.
- Wear eye protection & personal protective equipment.
- Check condition of equipment before use.
- Ensure all hoses and fittings are correctly & securely connected.
- Secure hose before starting.
 Do not hold by hand.
- Use the lifting points & employ safe lifting techniques.

Operation

Pre start checks:

- 1. Check engine oil level
- 2. Check hydraulic oil level
- 3. Check adequate fuel level
- 4. Check instructions labels
- 5. Check Hydrapak for damage, particularly hoses & control circuits.
- 6. Position the Hydrapak safely and prevent the chassis from rolling.
- 7. Connect the hydraulic hoses between the Hydrapak & pump before starting the engine.

Starting the Hydrapak

- 1. Move the output control to OFF
- 2. Connect the water outlet hose with the flexible hose, avoiding any kinks or twists. Connect the return line first and then the supply line

3. Position the outlet to discharge safely, away from personnel etc.



- 4. Turn the key, using the preheat system to start the engine.
- 5. Move the control output to ON when the engine is running normally
- 6. Adjust the throttle control to give the required output.
- 7. Take great care when checking for any hydraulic oil leaks.
- 8. Do not disconnect the hoses with the engine running.
- 9. Beware water will begin to pump as soon as the pump touches the water if the control valve is not switched off.
- Take care that the water flow is directed safely. Jets can contain small stones/debris travelling at great speed.

Stopping the Hydrapak

- 1. Move the output control to OFF
- Turn the key anti-clockwise to the OFF position.
- Check the Hydrapak for leaks.



Routine maintenance

Daily

- Check hydraulic oil level.
- Visually check all joints for leaks, wearing eye protection if unit is running.
- Check condition of Hydrapak labels, replace if necessary.

Weekly or every 100 hours.

- Complete all daily maintenance.
- Check filter condition gauge. Change filter if in red.
- Check QRCs for leaks. Change if necessary but always change as a pair – damage to one half can cut the seals in the other half.
- Visually check the condition of the hoses.

Check for general damage.

6monthly or 1000 hours

- Complete all daily and weekly maintenance
- Drain oil.
- Replace hydraulic return filter.
- Check filter condition gauge for damage.
- Replace hydraulic oil with suitable quality replacement. Biodegradable hydraulic oil should be synthetic oil type only.
- Check low hydraulic oil cut out.
- Remove the M8 bolts in the top cover and examine the hoses.
- With the top cover removed, if suitably qualified, carry out a flow & pressure test.
- Check bolts for tightness, particularly the bolts used on the lifting loop.
- Use grease gun to apply grease to wheels.
- Undertake any other maintenance tasks as required.





Sykes Hydrapump

Operation and Safety Guide



General Safety

- Always assess the risks before use.
- This equipment should only be used by a competent person.
- Follow operation and maintenance instructions.
- Ensure safe positioning of equipment prior to use.
- Never operate this equipment if you are ill or under the influence of alcohol or drugs.
- Ensure that equipment is inspected & serviced at appropriate intervals.

General hydraulic tool safety

Beware - Hydraulic tools may use fluid pressurized up to 240 bar.

Fluid under pressure can penetrate skin.

- High pressure injection injuries are rare but constitute a medical emergency. The degree of injury may not be immediately apparent (HSE 2013). There are no gloves available to protect against fluid injection injuries to the hand & ordinary working clothes do not significantly resist penetration.
- Always check hoses for signs of wear before use.
- Wear eye protection & personal protective equipment.
- Check condition of equipment before use. Never use without bottom casing & strainer in place.
- Ensure all hoses and fittings are correctly & securely connected.
- Secure hose before starting.
 Do not hold by hand.
- Use the lifting points & employ safe lifting techniques. Do not lift using the hoses.

Operation

Pre start checks:

- 1. Check pump for damage.
- 2. Check hoses for damage & leaks.
- 3. Check quick release connectors (QRC) for damage.
- 4. Check lifting loop for damage.

Running the pump from the Hydrapak

- 1. Wipe clean any debris on QRCs on the pump, hose and Hydrapak.
- 2. Connect the return line first and then

- the supply line.
- 3. Remove any twists or kinks in the hose and ensure hose is secure before use.
- Anticlockwise kick of the pump body when switched on indicates correct impeller rotation.
- 5. Check for any hydraulic oil leaks.
- 6. Beware water will begin to pump as soon as the pump touches the water if the control valve is not switched off.
- 7. Do not lift or lower the pump using the hoses.
- 8. Take care that the water flow is directed safely. Jets can contain small stones/debris travelling at great speed.

Routine maintenance Weekly or 100 hours

- Run the pump out of the water
- Check the unit for hydraulic leaks

3monthly or 500 hours

- Replace the oil in the mechanical seal cavity.
- Remove the pump lower casing and examine the lower wear plate and impeller for signs of wear.

6monthly or 1000 hours

 Strip pump down and replace mechanical seal.