

SLX-40-S (Standard) & SLX-40-HF (High Flow)

User Guide

This guide explains how to operate the SLX-40. The SLX-40 is designed to give many years of trouble-free service and peace of mind. Impact Pumps will contact you to confirm your 5 year warranty has been activated and to check that you are fully satisfied with the installation, we will do this within 48 hours of your certified installer submitting your 'Site Installation Report'.

The SLX-40-S can lift water from up to 50m depth and can deliver up to 3,000 L/h
The SLX-40-HF can lift water from up to 50m depth and can deliver up to 6,000 L/h

If you have a basic set-up for the Standard SLX-40 (without an Impact Pumps well head), please also refer to the separate sheet "SLX-40 Basic Set-Up Installation and User Guide"

To access further support, including in other languages such as:

- Français,
- Español,
- Português,

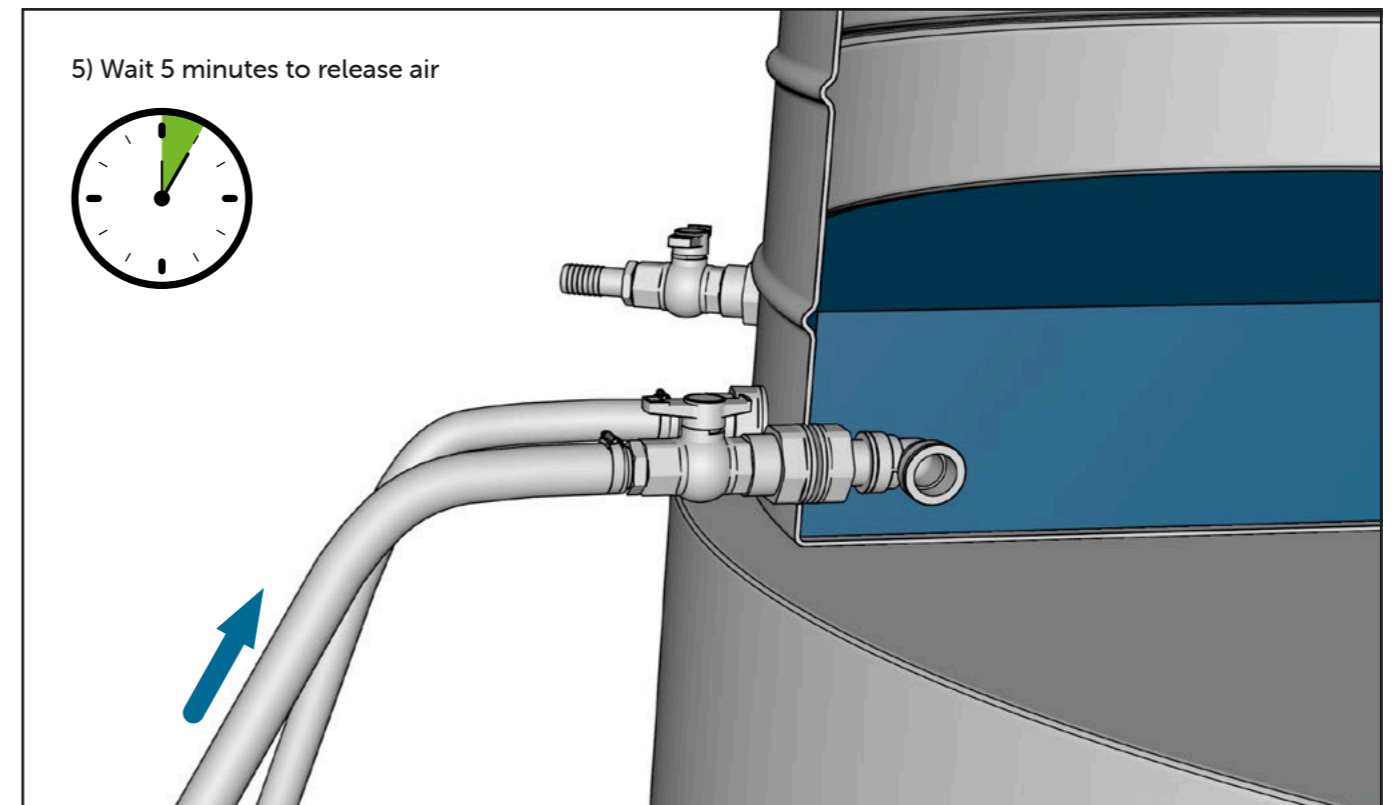
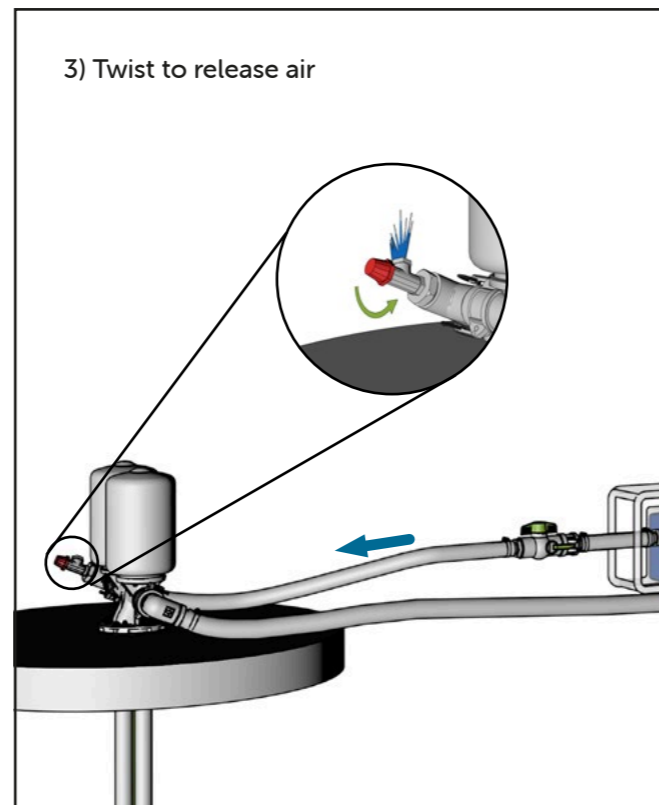
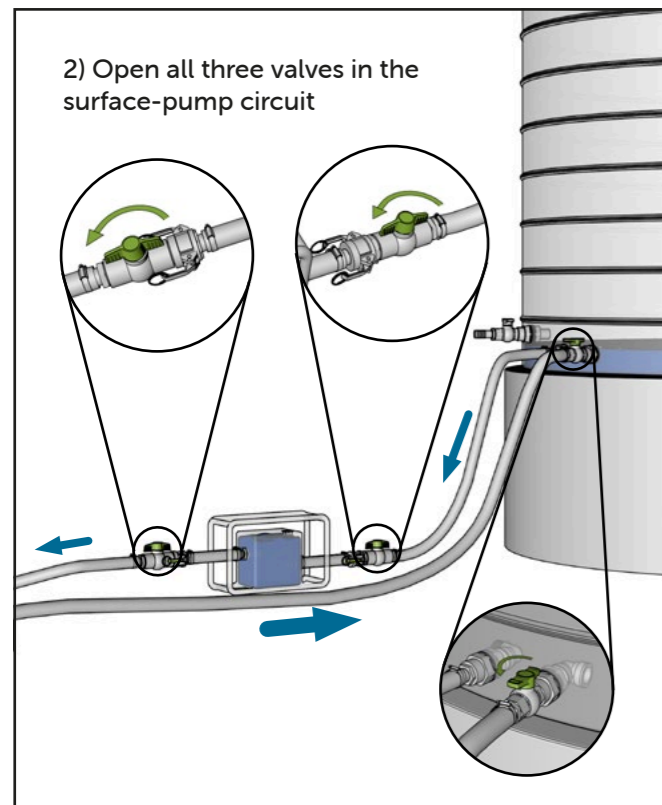
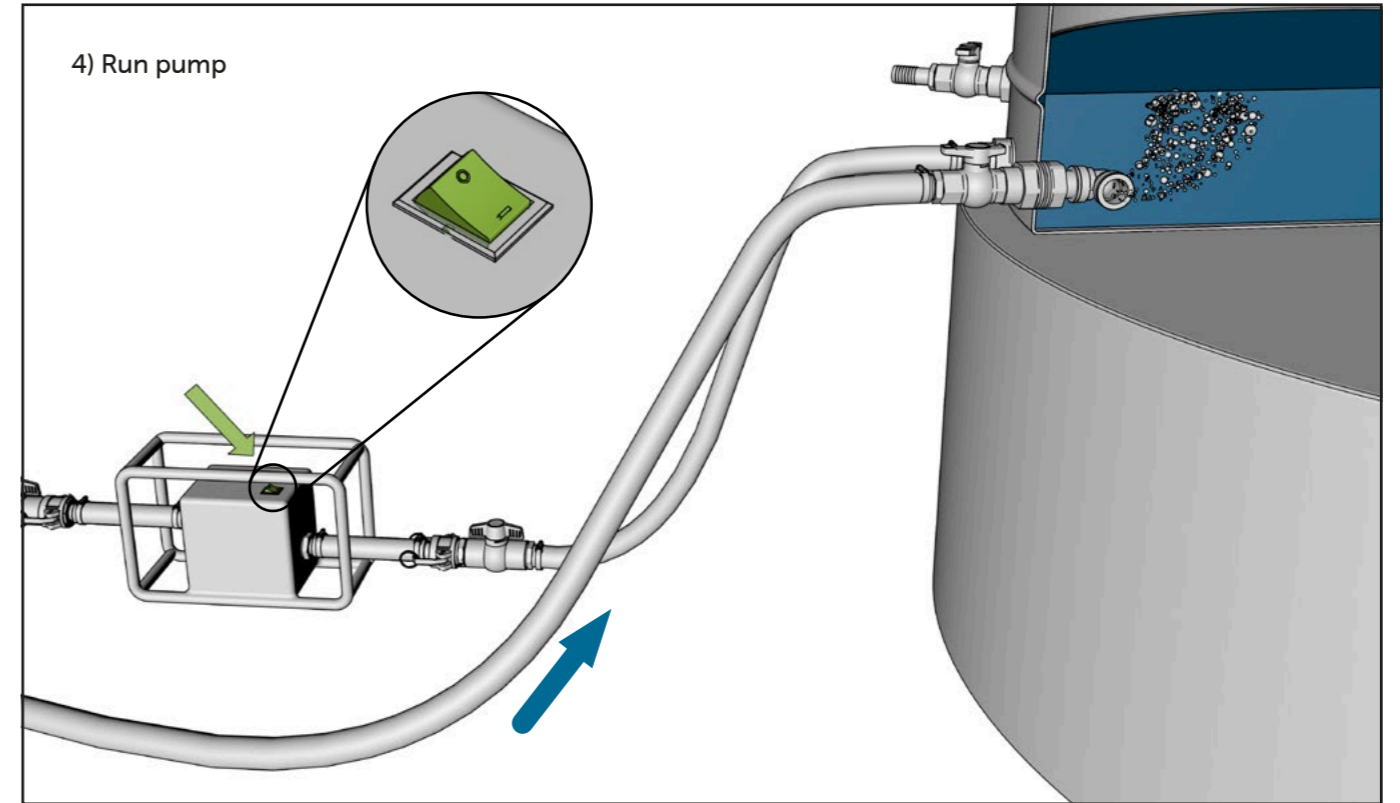
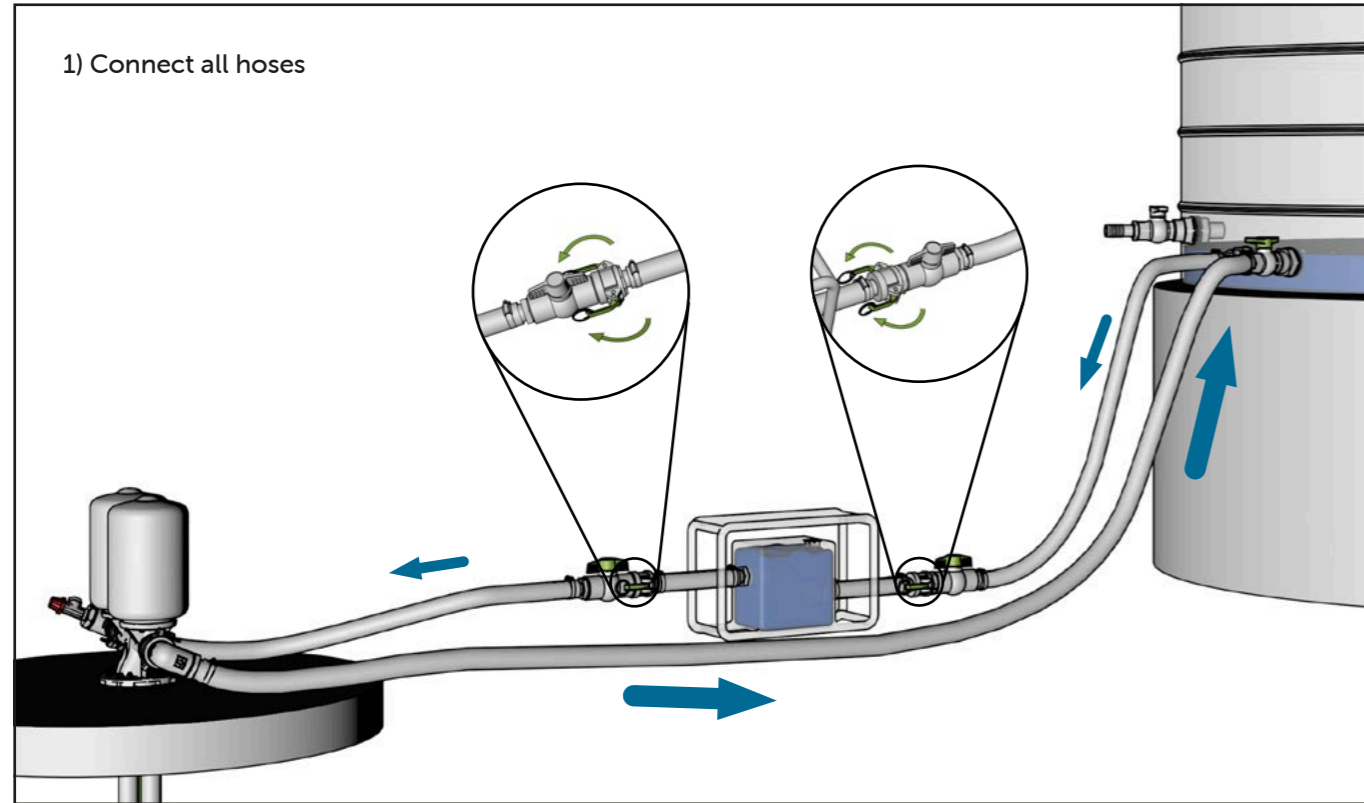
Visit www.impactpumps.com/support or scan this code:



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SLX-40 Quick Start Operating Guide

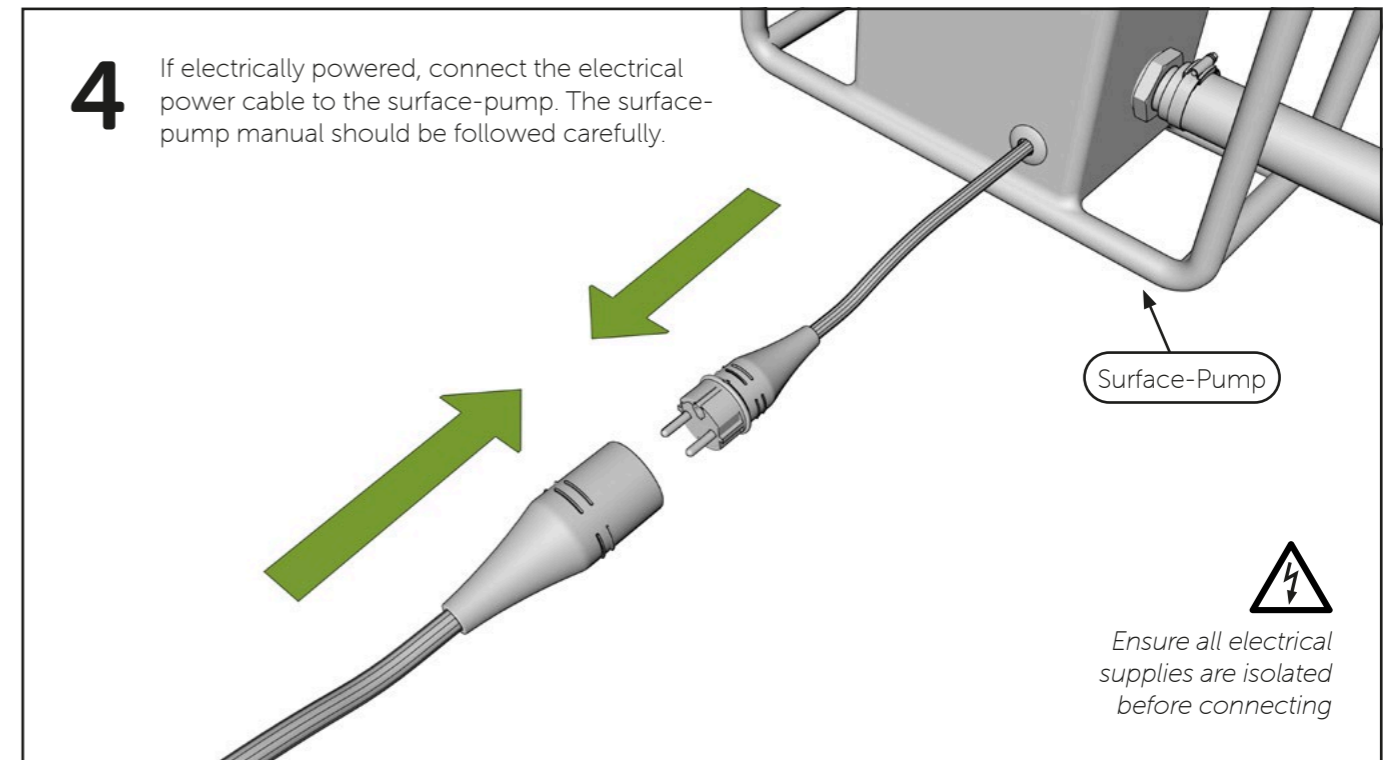
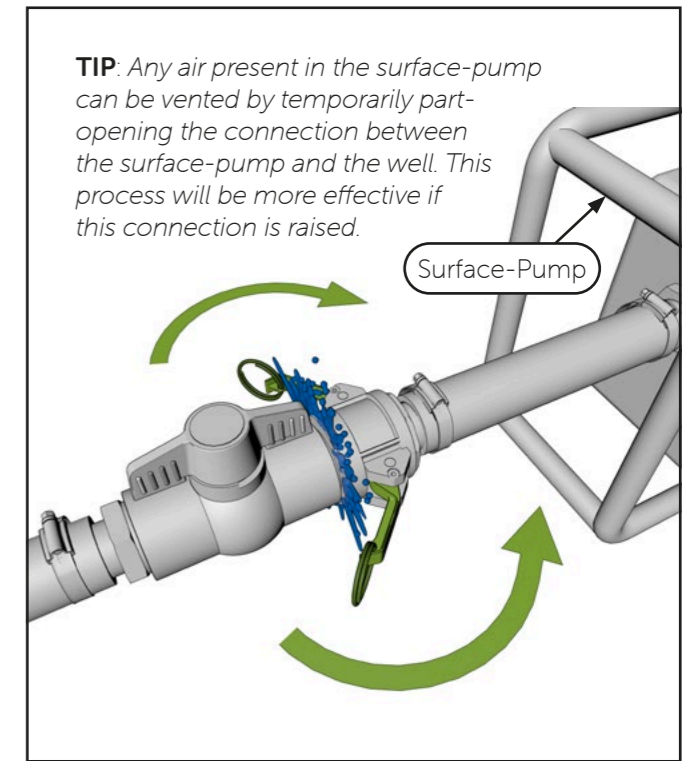
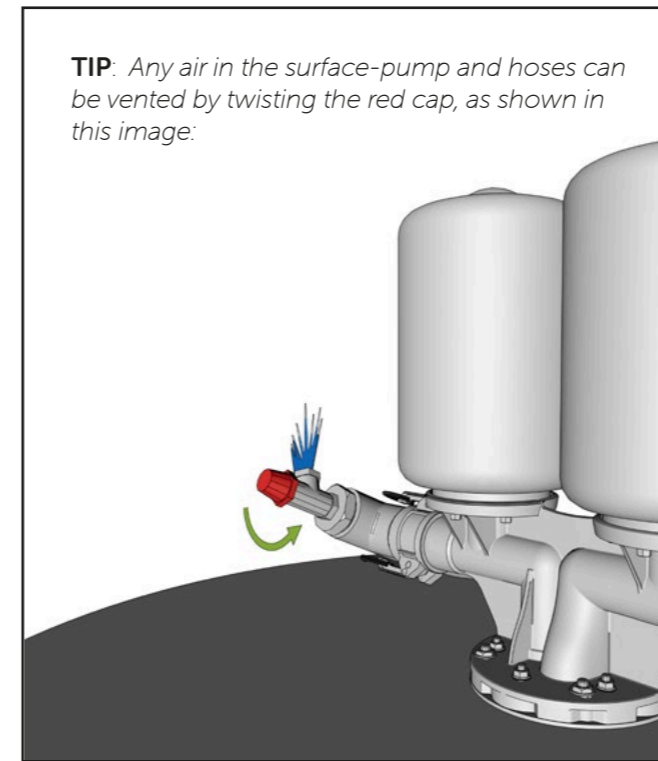
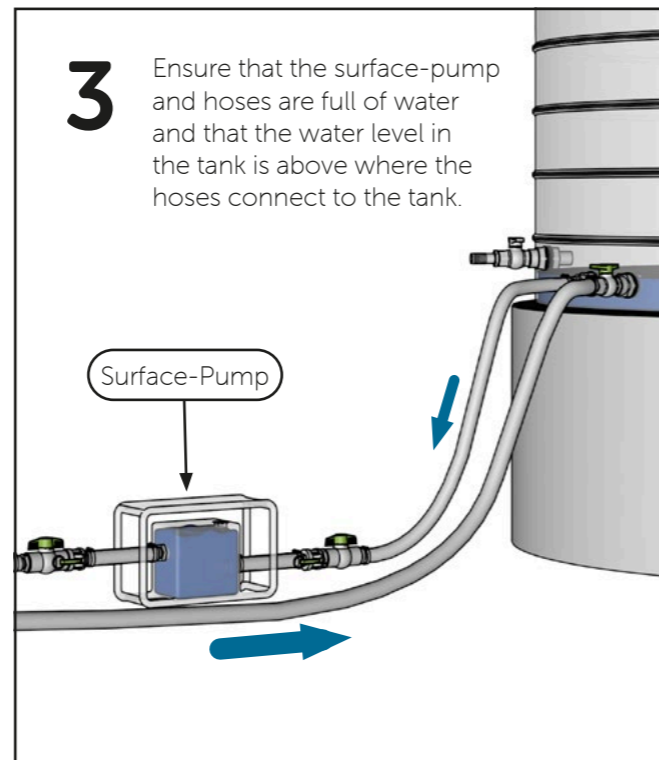
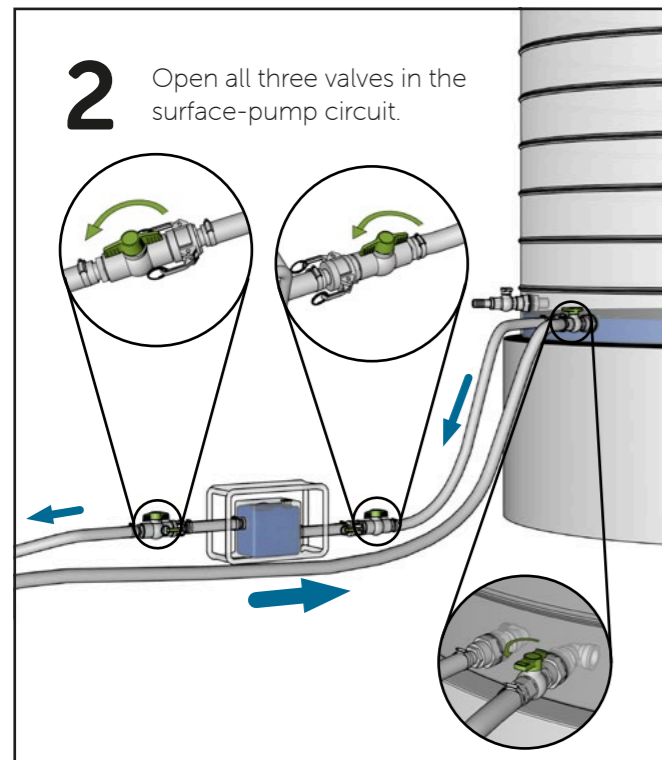
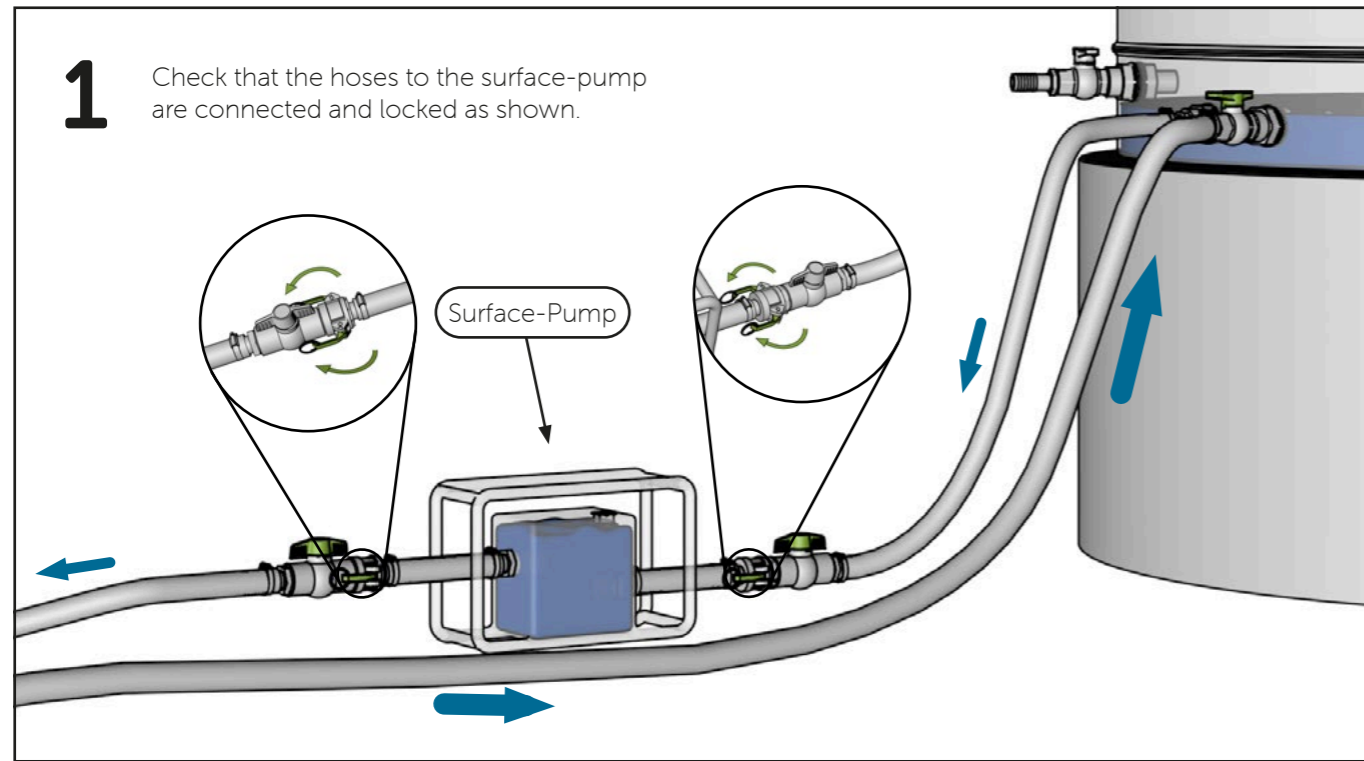
For after installation. More detailed instructions are on page 4



Water pumped down into the SLX-40 is returned with extra water lifted from the well.

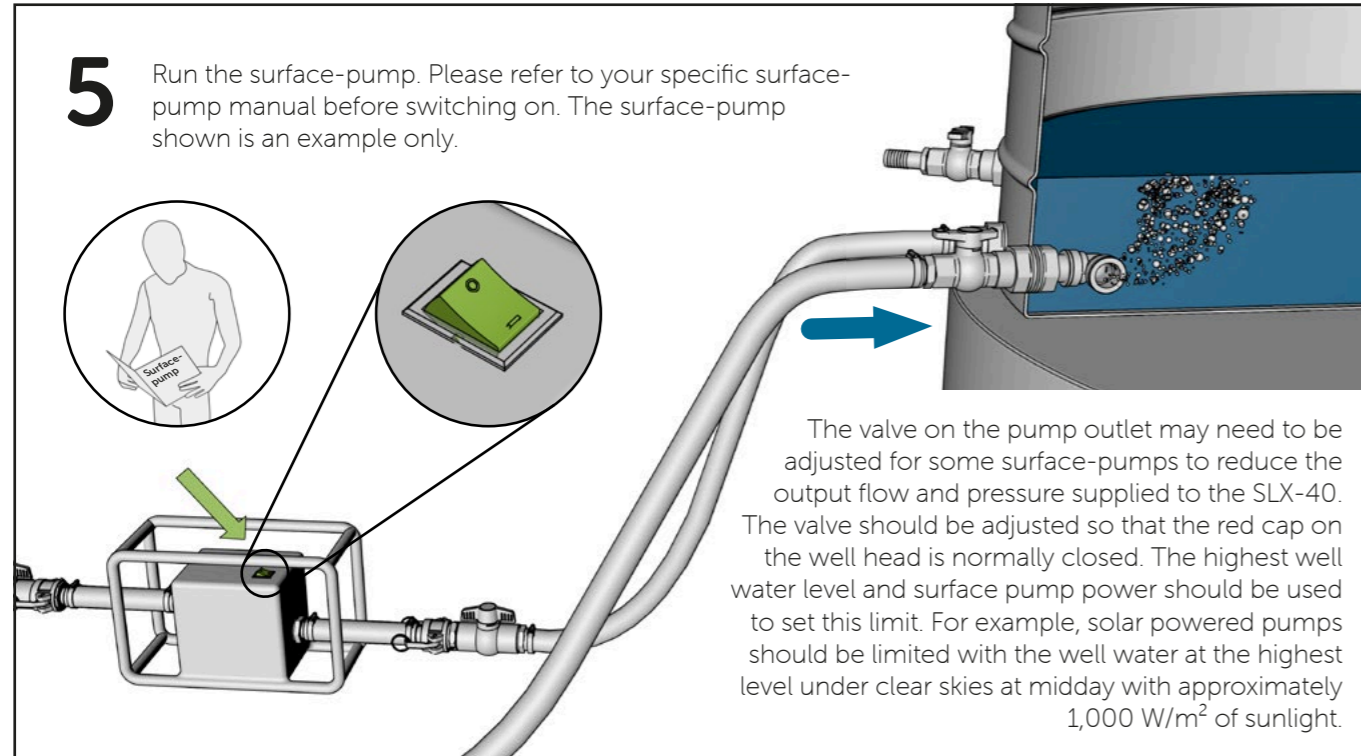
SLX-40 Operating instructions

The SLX-40 has been designed to allow the user to remove the surface-pump easily for safe storage or use in other applications such as surface distribution. These instructions are intended for first time users or use after the surface-pump has been removed and replaced. They cover priming, switch on and operation.



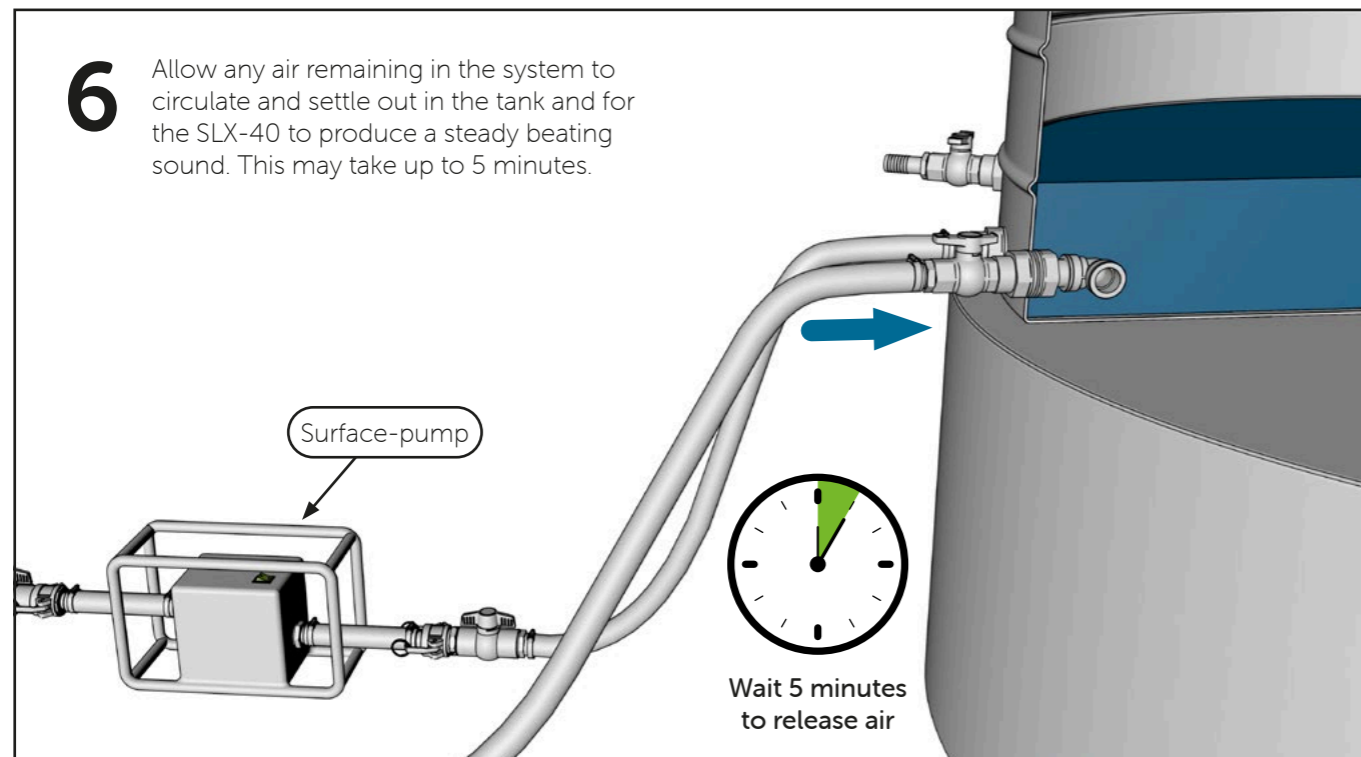
SLX-40 Operating instructions

5 Run the surface-pump. Please refer to your specific surface-pump manual before switching on. The surface-pump shown is an example only.



The valve on the pump outlet may need to be adjusted for some surface-pumps to reduce the output flow and pressure supplied to the SLX-40. The valve should be adjusted so that the red cap on the well head is normally closed. The highest well water level and surface pump power should be used to set this limit. For example, solar powered pumps should be limited with the well water at the highest level under clear skies at midday with approximately 1,000 W/m² of sunlight.

6 Allow any air remaining in the system to circulate and settle out in the tank and for the SLX-40 to produce a steady beating sound. This may take up to 5 minutes.

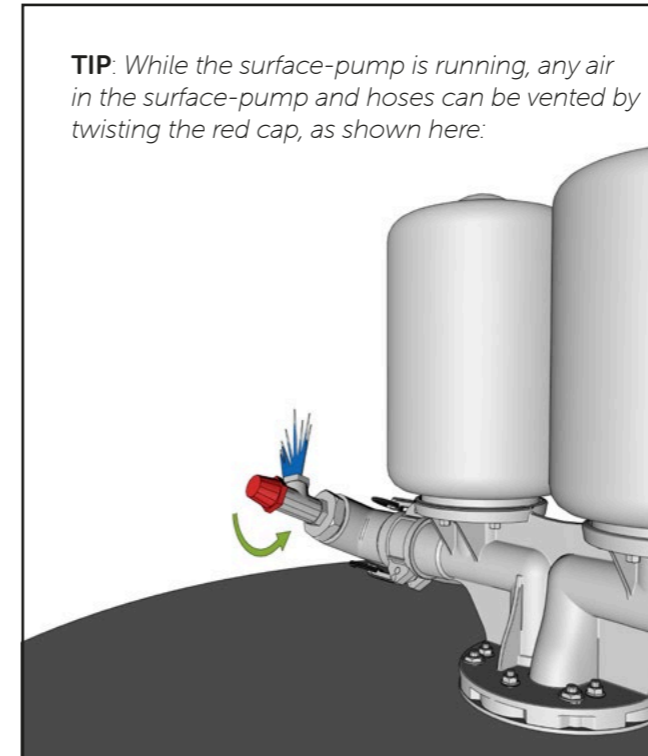


Wait 5 minutes to release air

TIP: The SLX-40 may run irregularly and not add water to the tank if there is air in the system. Ensure that all the hoses are full of water and that the tank ports are always covered by water and no air is sucked in when the pump is switched on.


WARNING! EXCEEDING THE PRESSURE HEAD AND FLOW SPECIFICATIONS MAY DAMAGE THE SLX-40 AND VOID THE WARRANTY.

TIP: While the surface-pump is running, any air in the surface-pump and hoses can be vented by twisting the red cap, as shown here:

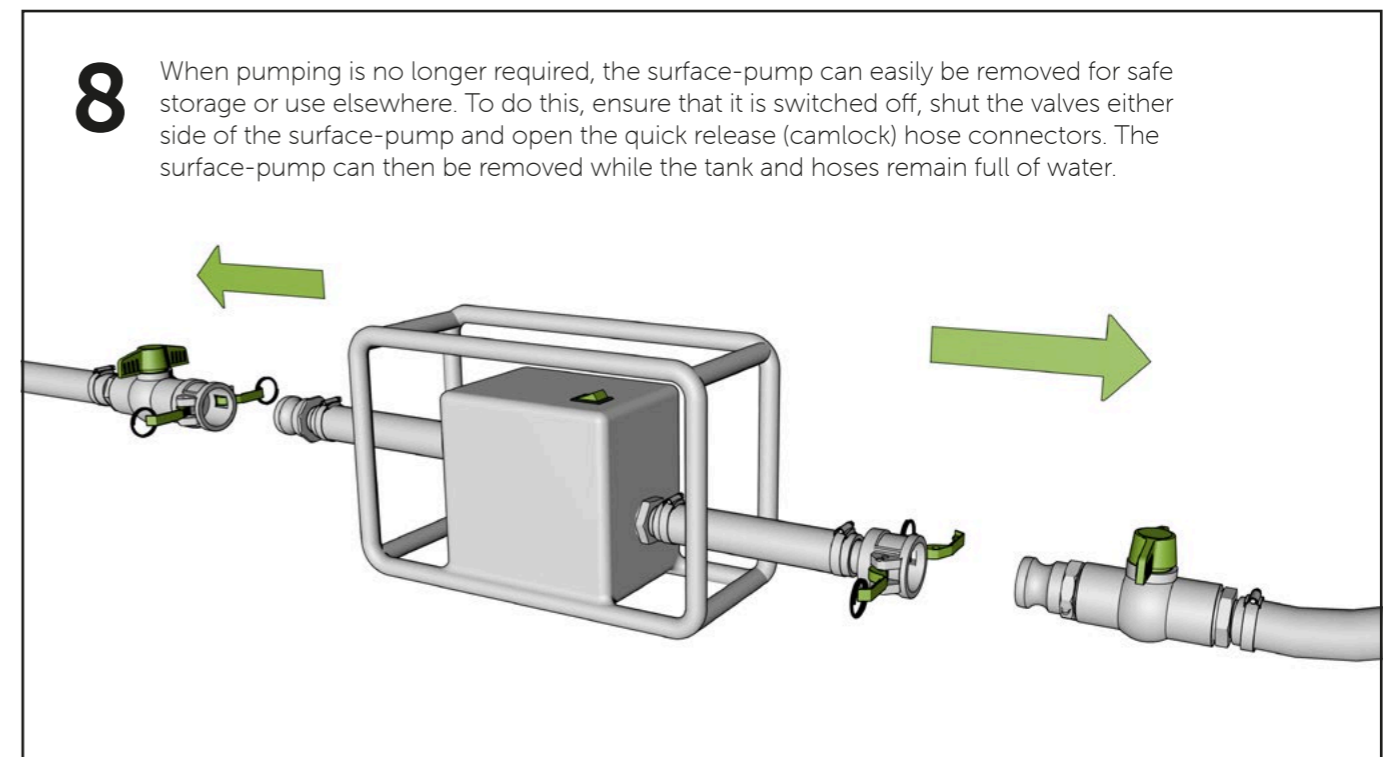


7 The SLX-40 should now start lifting more water to the surface tank than is pumped down the well.

Thank you for choosing the Impact Pump SLX-40. The SLX-40 is designed to give many years of trouble-free service and peace of mind. In the rare event that you may need any further support, there is a quick troubleshooting guide on page 10 and you can contact Impact Pumps by visiting www.impactpumps.com/support or by scanning this code:



8 When pumping is no longer required, the surface-pump can easily be removed for safe storage or use elsewhere. To do this, ensure that it is switched off, shut the valves either side of the surface-pump and open the quick release (camlock) hose connectors. The surface-pump can then be removed while the tank and hoses remain full of water.

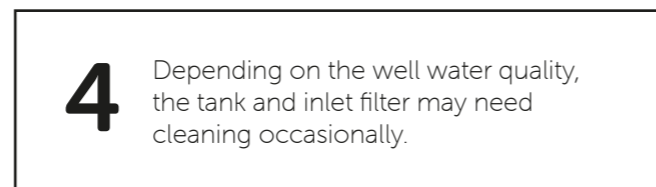
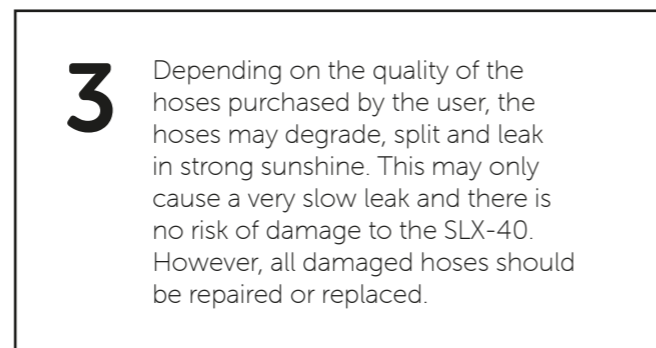
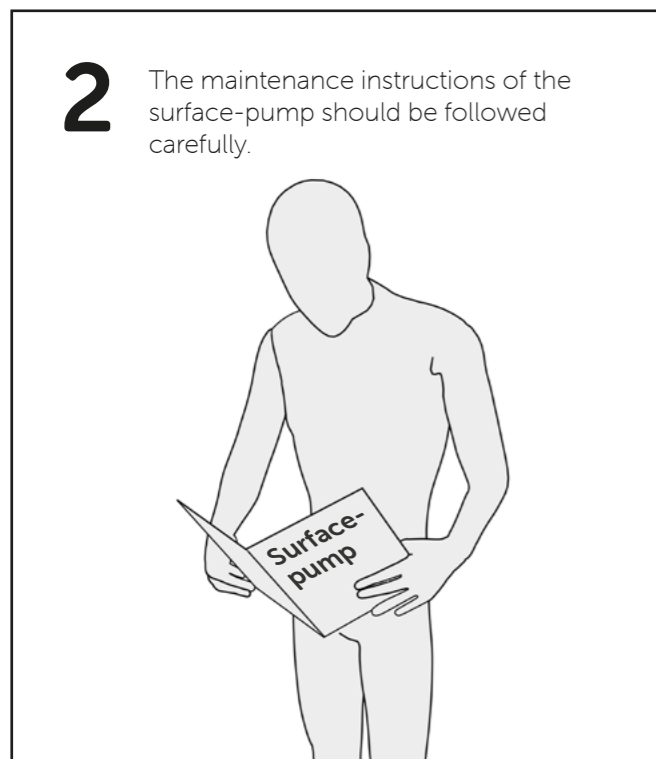
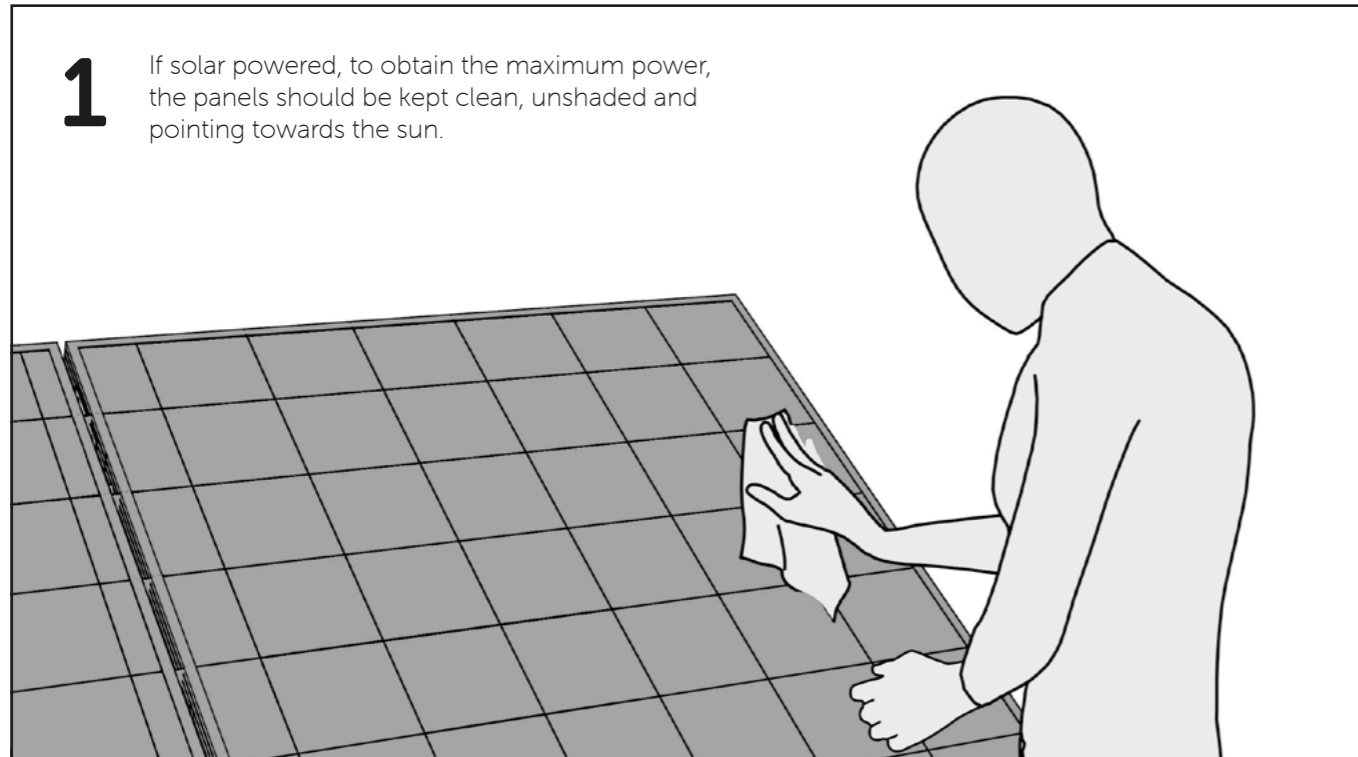


TIP: If the lengths of hose on the surface-pump are sufficiently long, they can optionally be joined together to keep the surface-pump primed. This will make it heavier to transport, but introduce less air for removal the next time it is used.

SLX-40 Care and Maintenance Guide

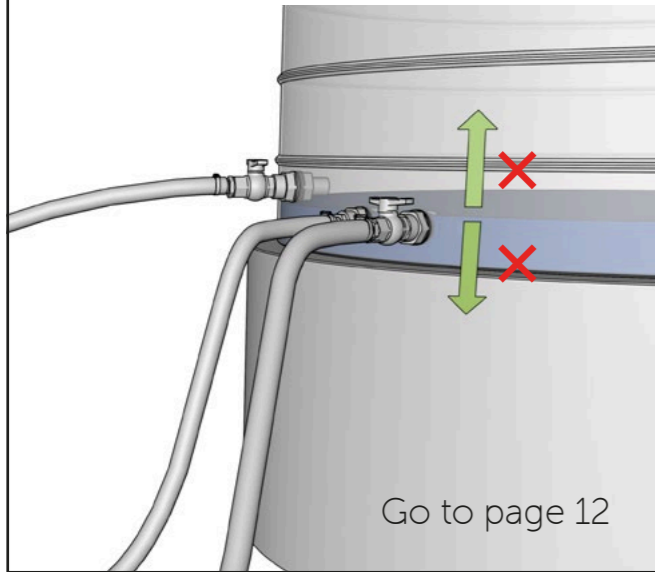
Maintenance of the Hoses, Tank, Surface-Pump and Solar-Panels

The only regular care required for the SLX-40 system is maintenance of the hoses, tank, surface-pump and, if solar powered, the solar panels.

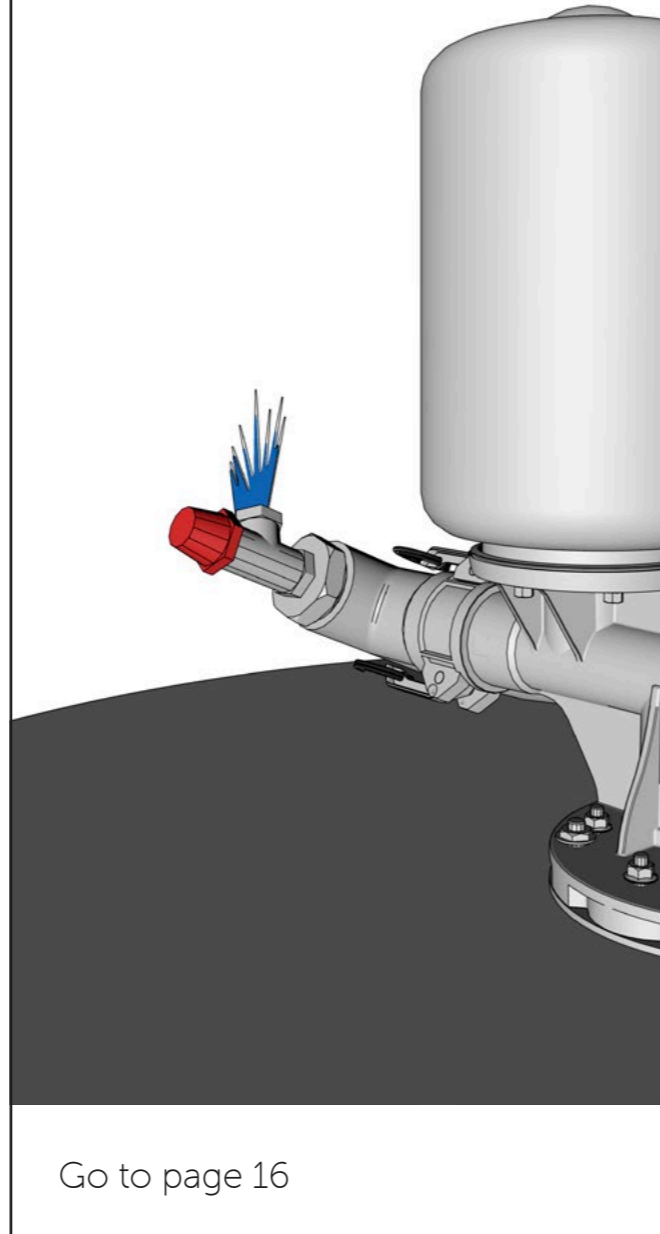


SLX-40 Troubleshooting Guide

If the water level in the tank is not going up or down:



If the pressure relief valve sprays water without being touched:

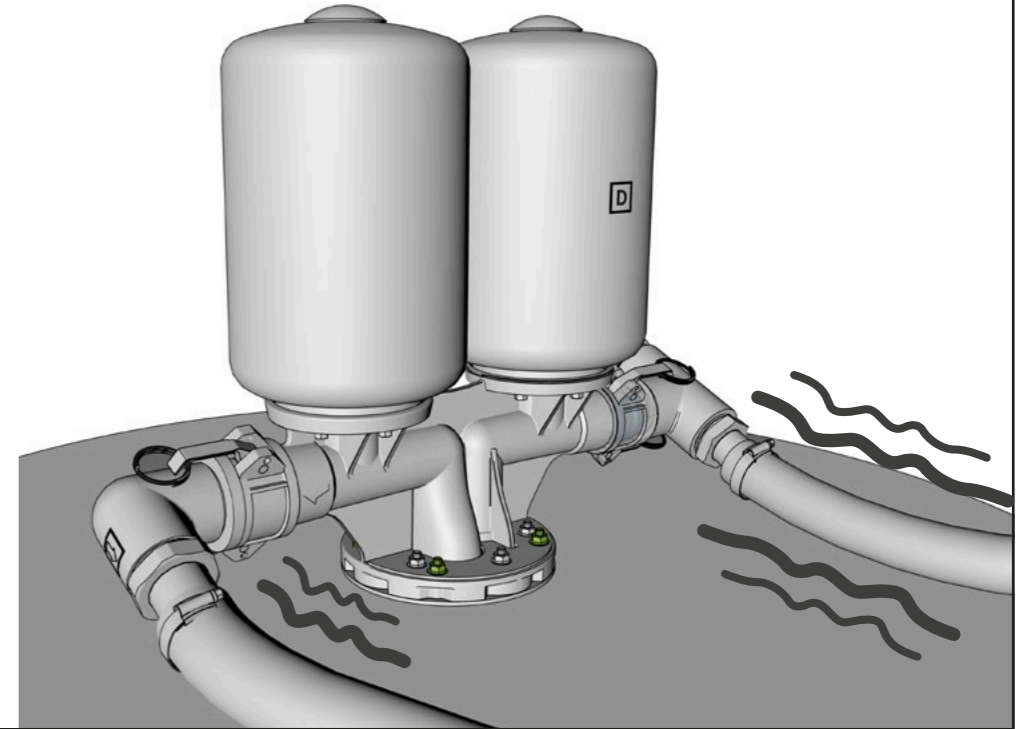


If the tank is empty or losing water:



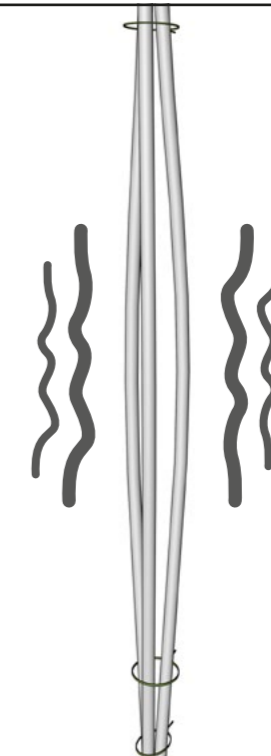
If the hoses are shaking or the pump sounds unsteady:

Go to page 20



If the pipes in the well are making a clapping noise:

Go to page 23



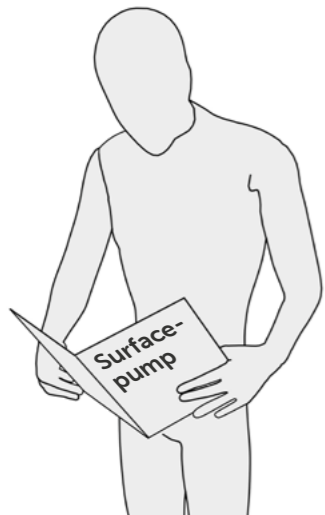
SLX-40 Troubleshooting Guide

If the water level in the tank is not going up or down

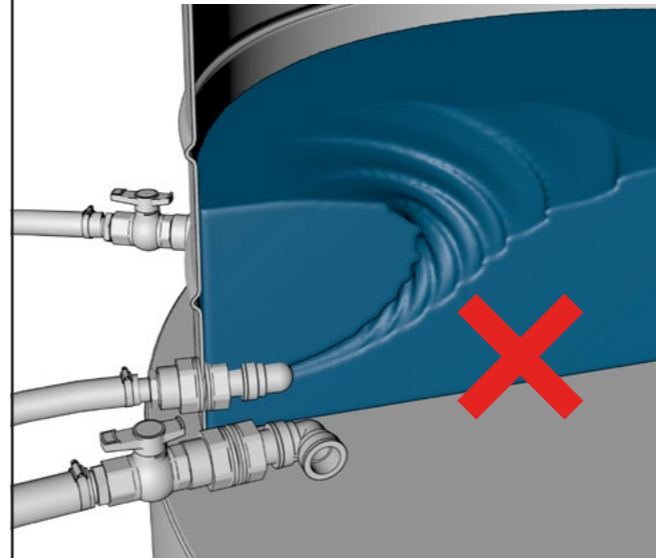
- 1 Repeat steps 1-6 of the Operating Instructions above.

TIP: The water level can be monitored easily using a weighted bottle floating on the tank water level which is connected via a string to a weight on the outside of the tank wall. The weight on the outside of the tank then provides a quick visual guide to the water level on the inside of the tank. Ensure that the tank remains covered with a lid or other cover at all times

- 2 Confirm the surface-pump is working and you have followed the surface-pump manual carefully. If required, disconnect the surface-pump outlet hose to check that it is pumping a good flow rate.

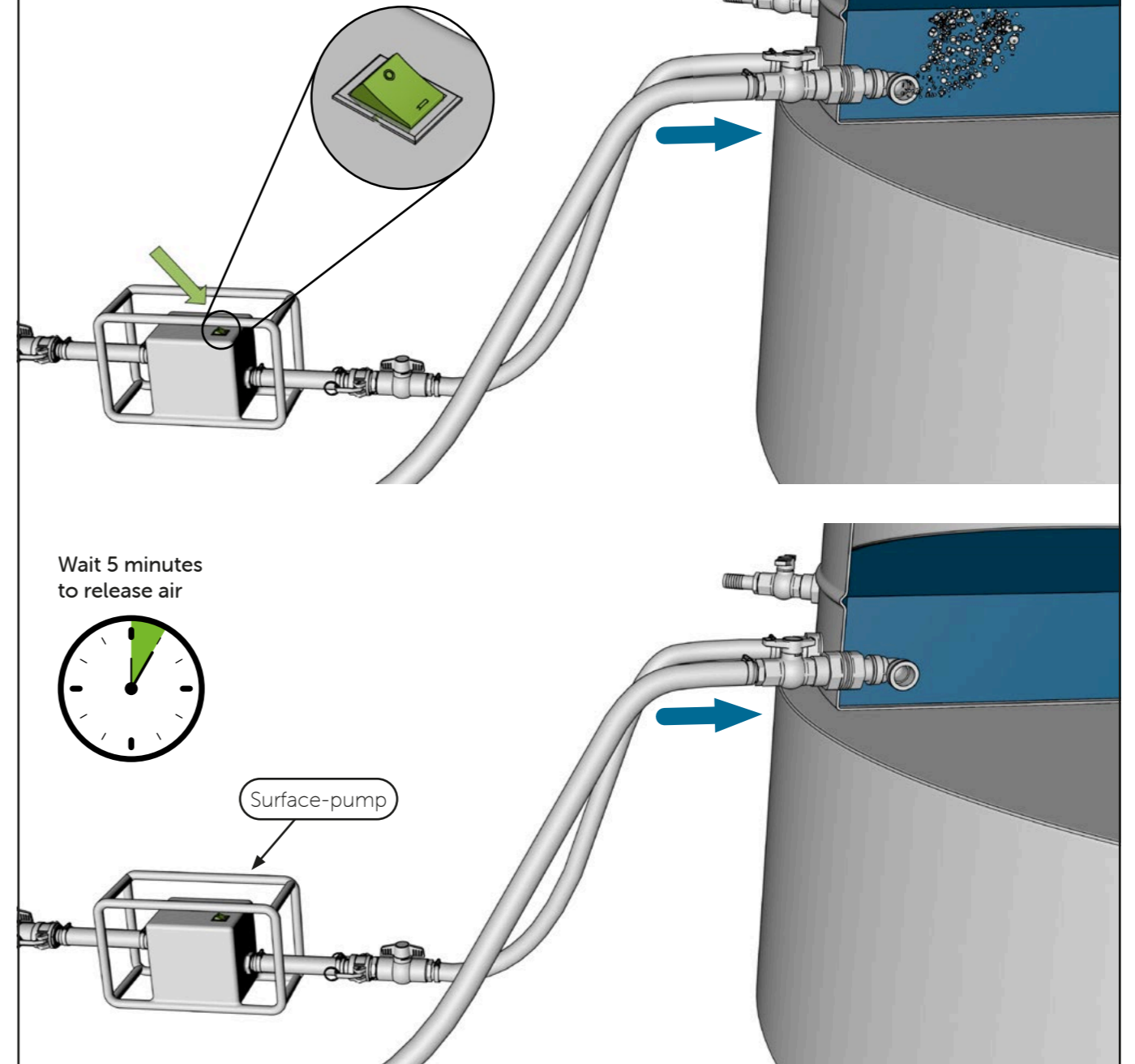


- 3 Look into the tank to verify that the connection-ports aren't covered by sediment and that the surface-pump inlet does not suck in any air whilst pumping.



TIP: If a whirlpool is seen inside the tank then the water level in the tank is too low for the flow rate being pumped. Allow the tank to fill to a higher level. If this occurs regularly, you will need to rotate the elbow on the inside of the tank so that it points more downwards.

- 4 Run the surface-pump and wait for any air remaining in the system to circulate and settle out in the tank and for the SLX-40 to produce a steady beating sound. This may take up to 5 minutes.



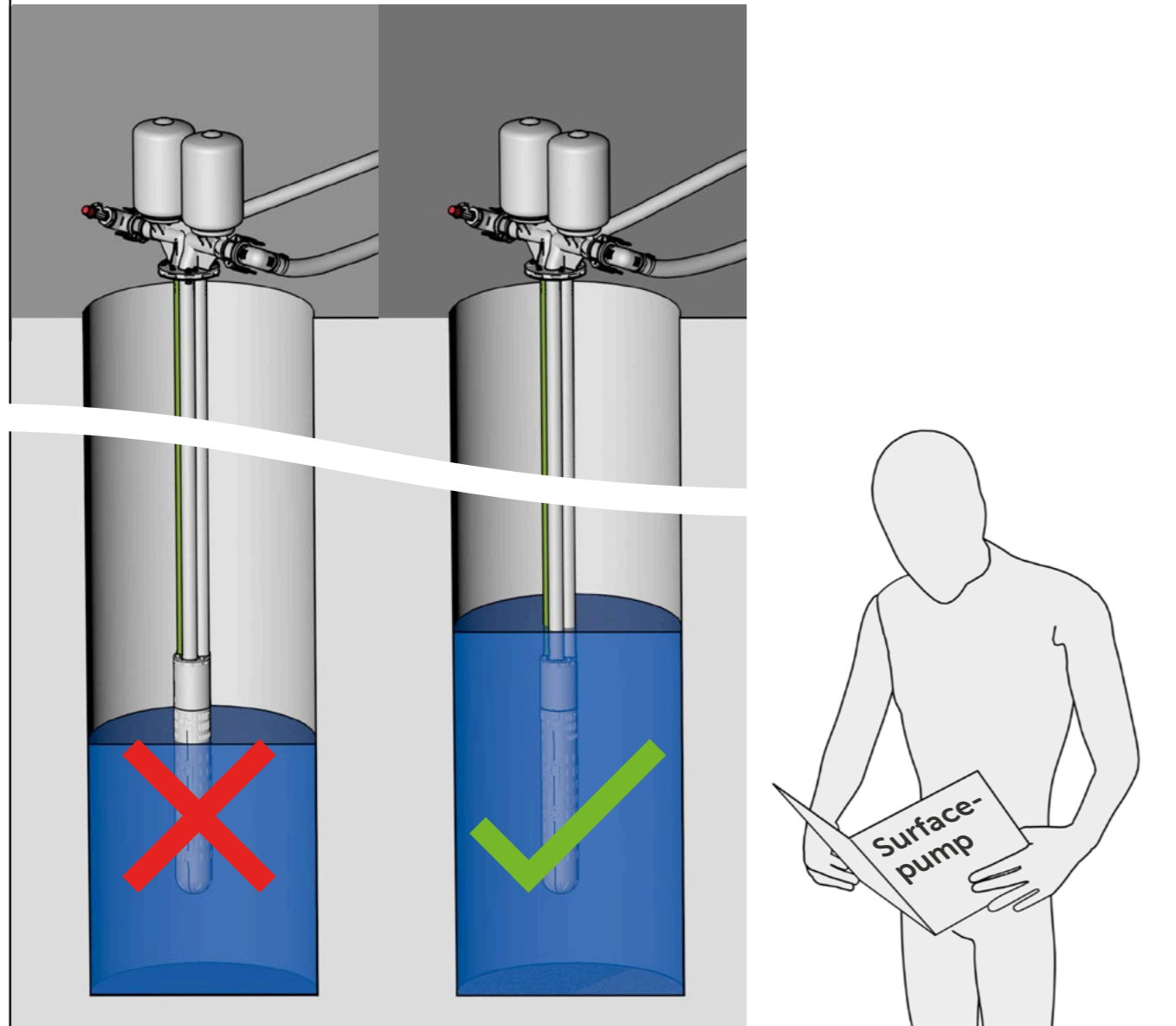
SLX-40 Troubleshooting Guide

If the water level in the tank is not going up or down (continued)

5 Check the water level in the well is covering all of the SLX-40 well inlet filter.

If the level has dropped too low:

- The SLX-40 is designed to tolerate periods of dry-running, and will automatically re-start pumping once water levels recover. However, it should not be left to run dry deliberately as this could place undue stress on its components and might eventually reduce their lifetime.
- Stop the surface-pump and allow the well to re-fill.
- Re-start the surface-pump at a reduced flow rate if possible, else, stop it before the well empties again.



If the above steps have been followed and the problem persists, please continue to page 18 for the guide to removal of the SLX-40 from the well

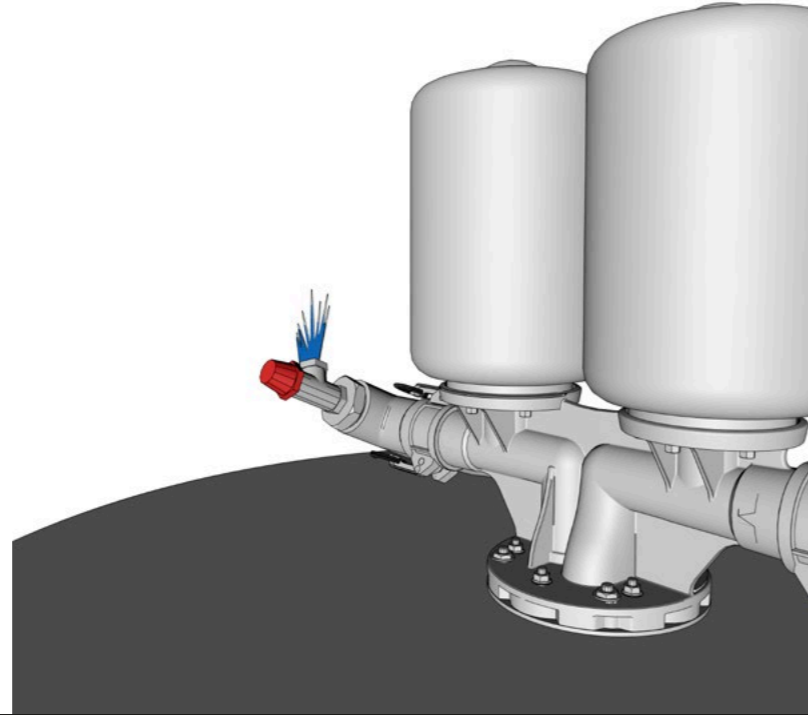
SLX-40 Troubleshooting Guide

If the pressure relief valve sprays water without being touched

If water is blown out of the pressure relief valve, reduce the power to the surface-pump until the valve closes.



If the head and flow specifications of the SLX-40 are exceeded, the Pressure Relief Valve may open, as shown here. **WARNING!** Exceeding the product specifications may damage the SLX-40 and void the warranty.

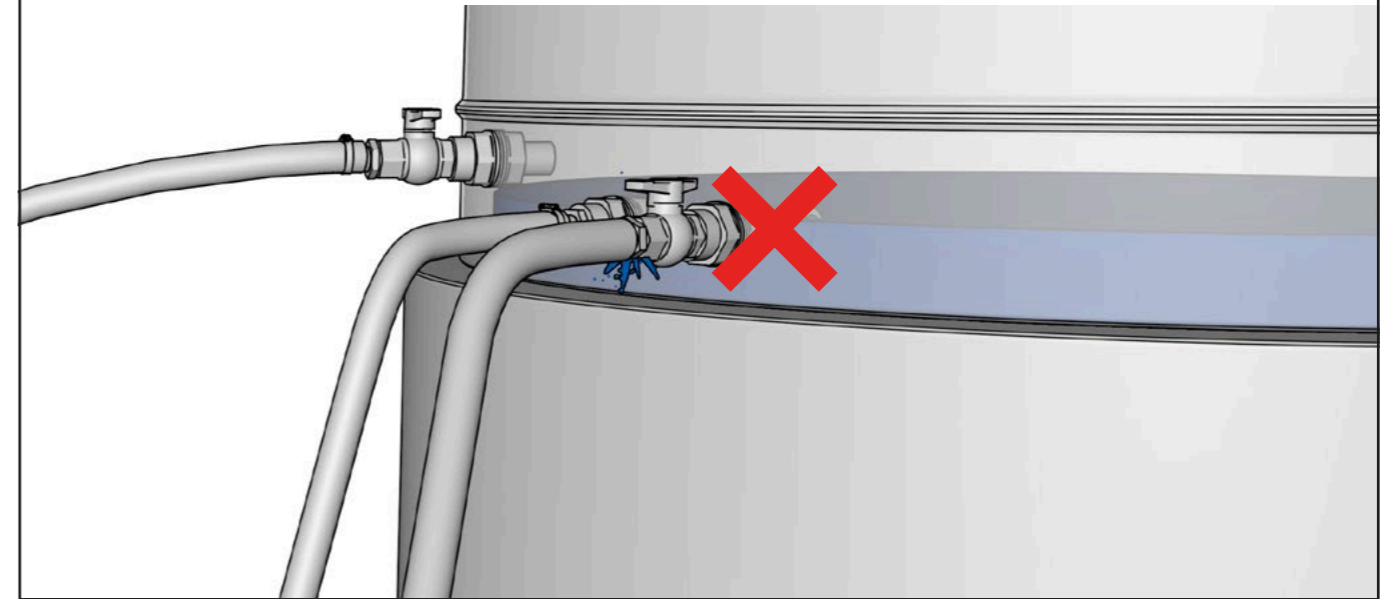


If the tank is empty or losing water

1 Add water to the tank and replace the lid.

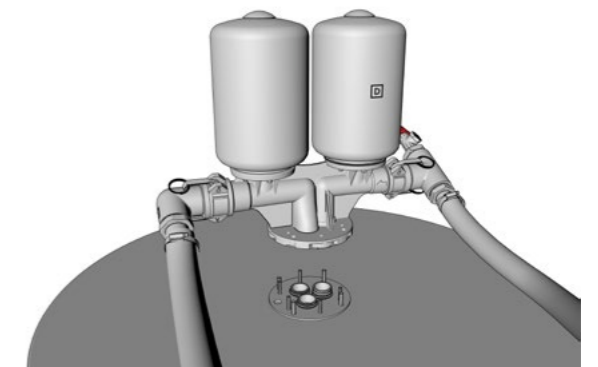


2 Look for any water leaks from the hoses and fittings at the surface and repair if found.



3 Confirm the steps on pages 12, 13 and 14 have been checked.

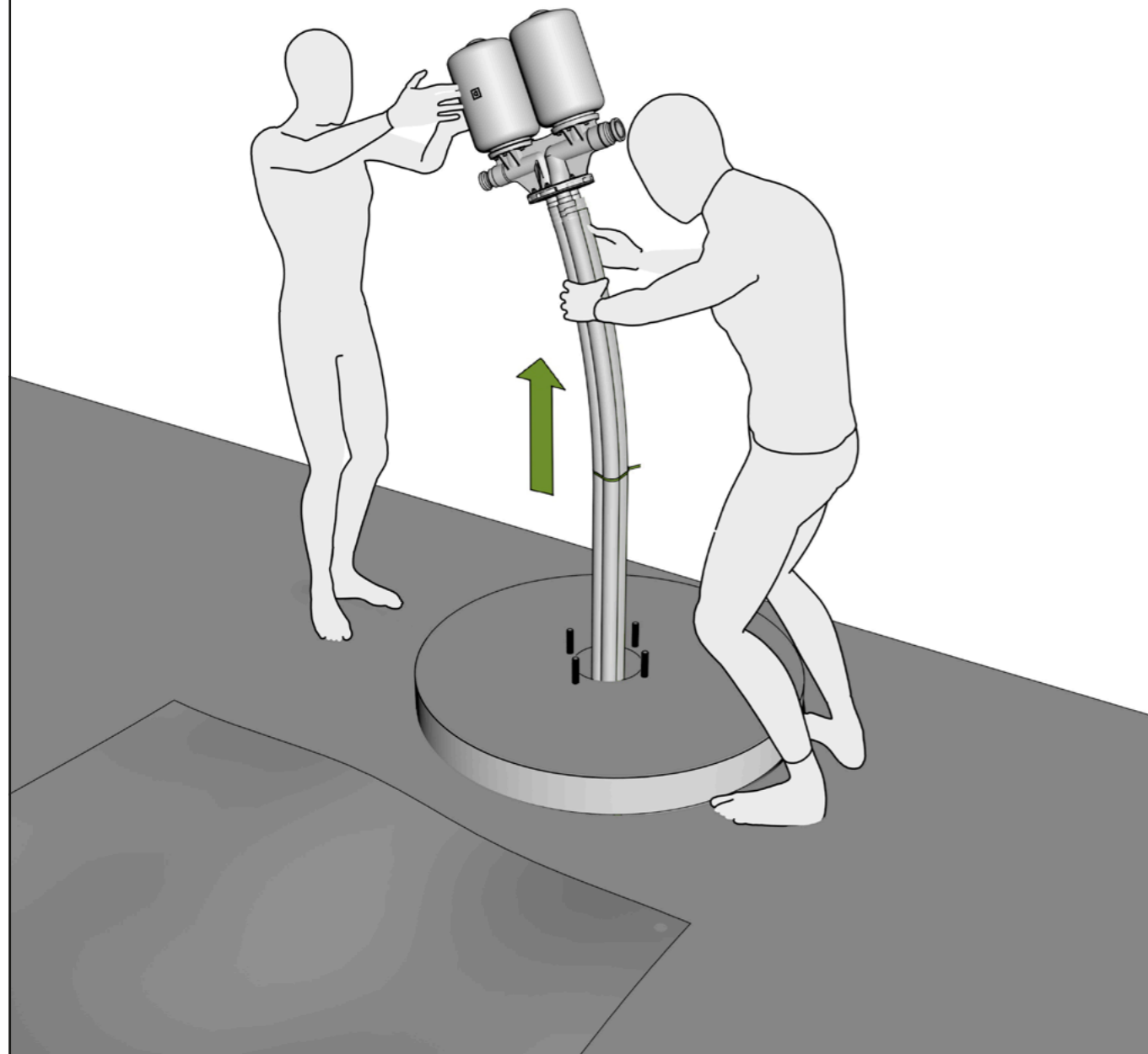
4 Close the valves at the tank. Remove the 6 M6 well head assembly nuts and lift the well head to expose the tops of the three pipes. These should be full of water. If they are not, there is a leak somewhere in the well that must be fixed. To do this, remove the SLX-40 from the well following the steps on page 18.



SLX-40 Troubleshooting Guide

Removal of the SLX-40 from the well

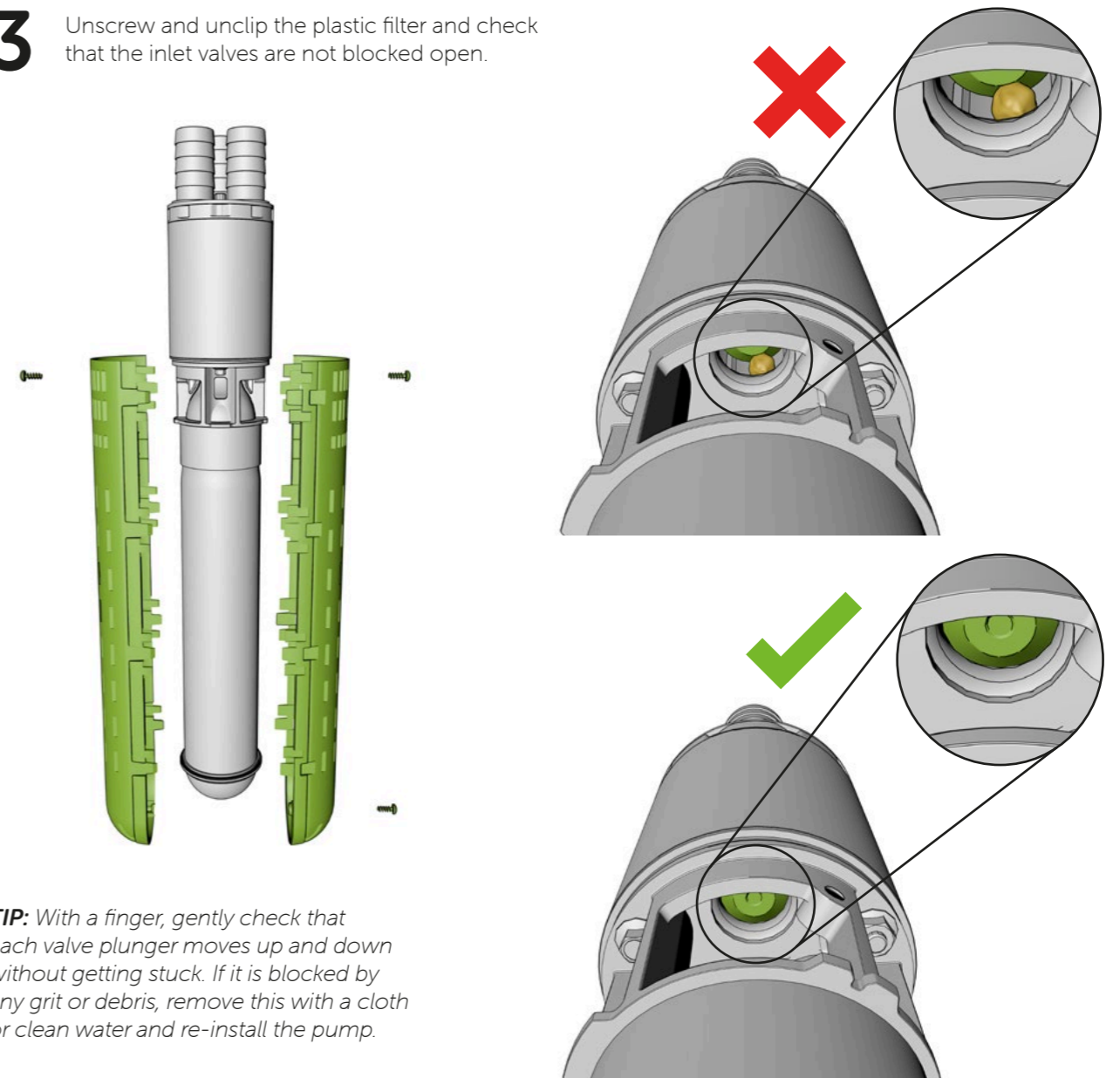
- 1** Contact the installer for assistance. Prepare a clean area (e.g. a plastic sheet) to lay the SLX-40 on. Remove the hoses and lift the SLX-40 out of the well. Several people or specialist lifting gear may be needed to lift the SLX-40 which can weigh up to 200kg if it is 50m (164 feet) long and full of water.



TIP: If it is too heavy to lift, the SLX-40 can be made much lighter by blowing air down the 2 HDPE riser-pipes and allowing water to come back up the HDPE down-pipe. To do this, close ALL the valves and disconnect the surface-pump and 1½" hose from the larger hosetail on the well-head (D). Now open only the SLX-40 inlet valve C that is normally connected to the surface-pump outlet, and arrange to blow air into the large 1½" hosetail with an air compressor, or tyre pump. It may take more than 10 minutes of air-pumping for pressure to build up sufficiently to push the water out.

- 2** Check that the HDPE pipe joints are not leaking.

- 3** Unscrew and unclip the plastic filter and check that the inlet valves are not blocked open.



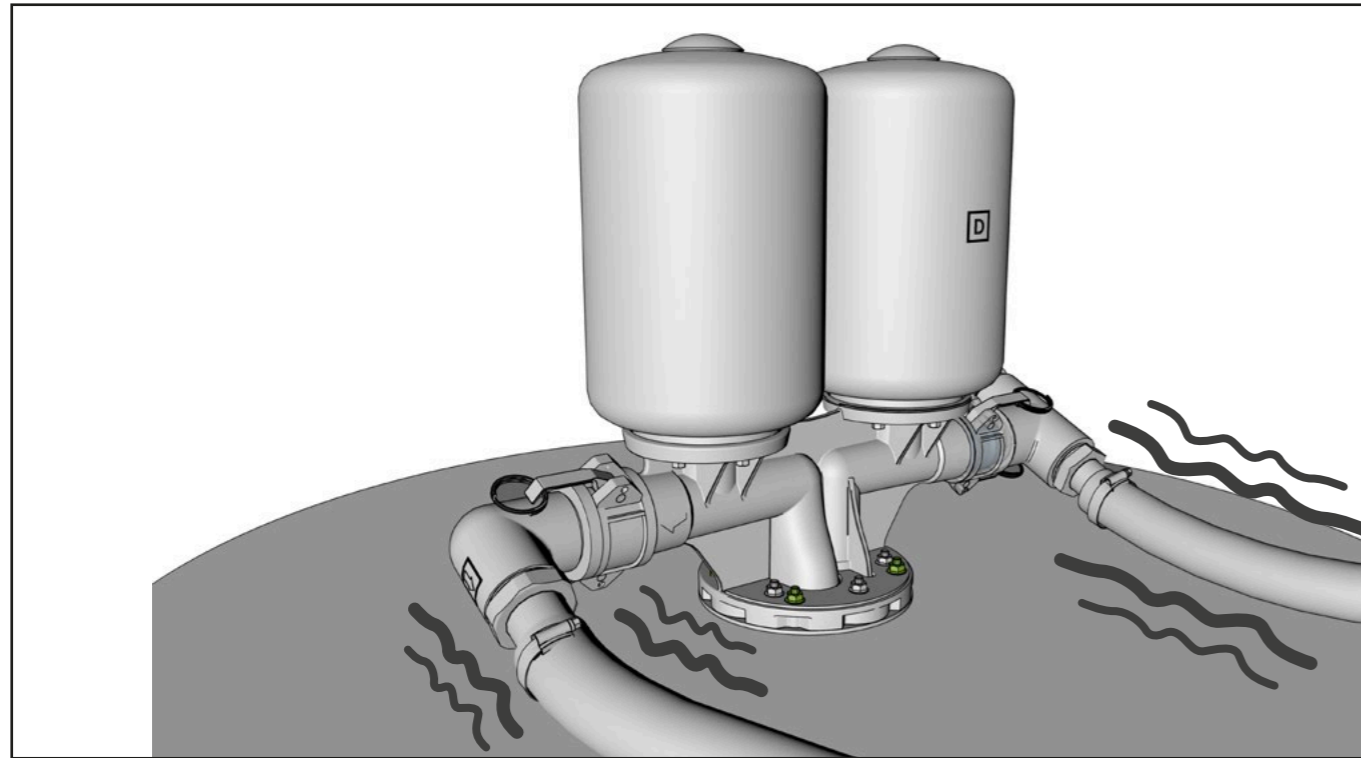
TIP: With a finger, gently check that each valve plunger moves up and down without getting stuck. If it is blocked by any grit or debris, remove this with a cloth or clean water and re-install the pump.

If the above steps have been followed and the problem persists please request further support by visiting www.impactpumps.com/support or by scanning this code:

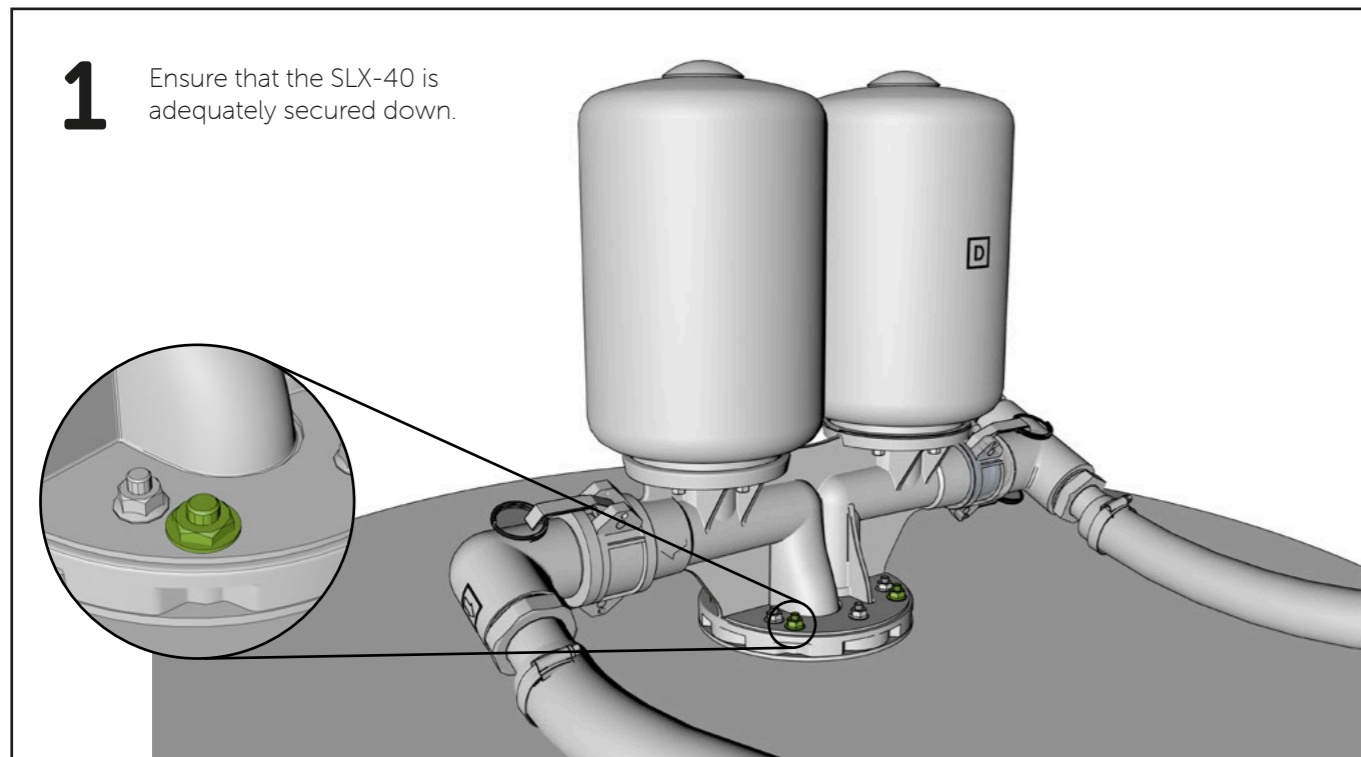


SLX-40 Troubleshooting Guide

If the hoses are shaking or the pump sounds unsteady

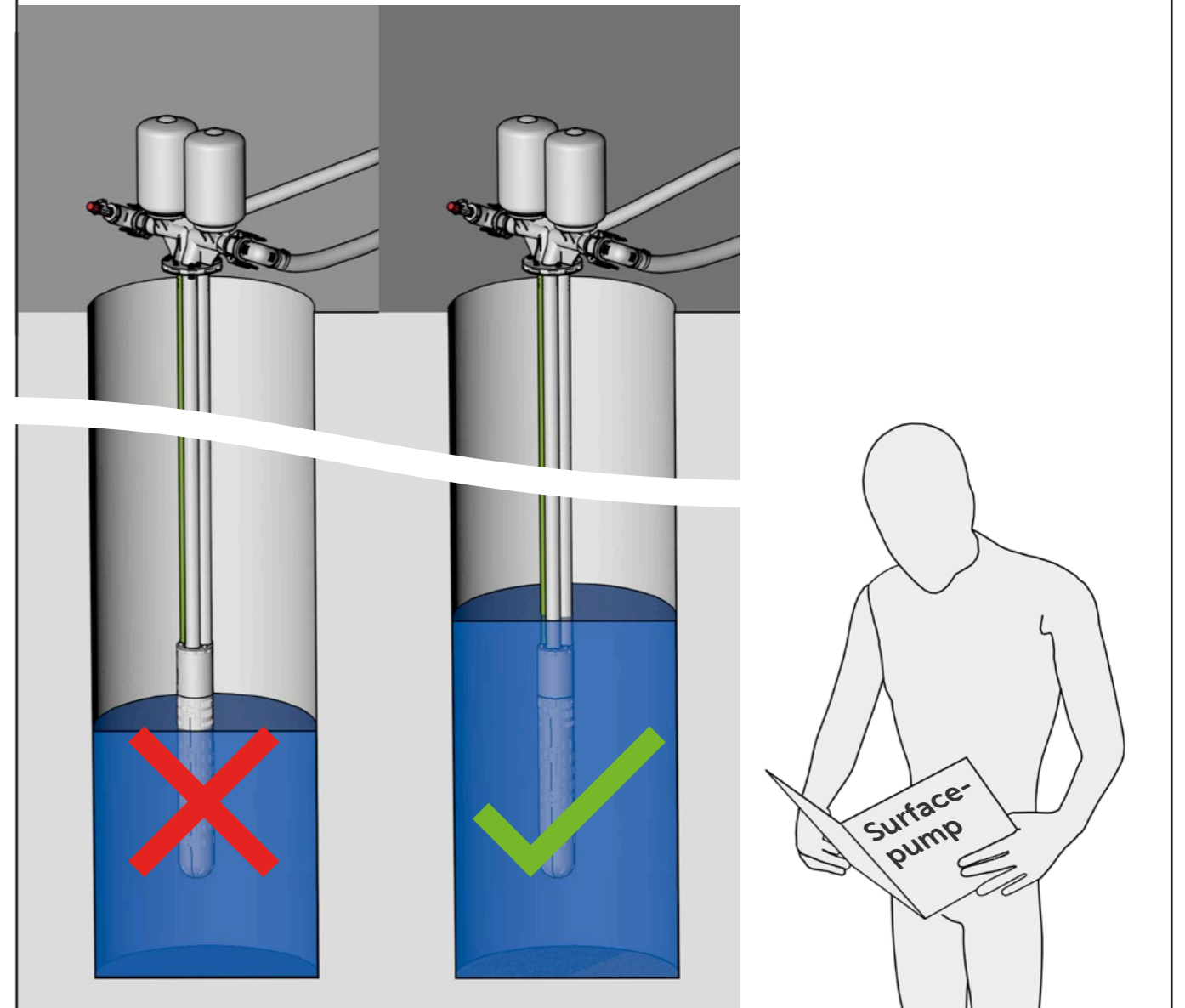


1 Ensure that the SLX-40 is adequately secured down.



2 Check the water level in the well is covering all of the SLX-40 well inlet filter.

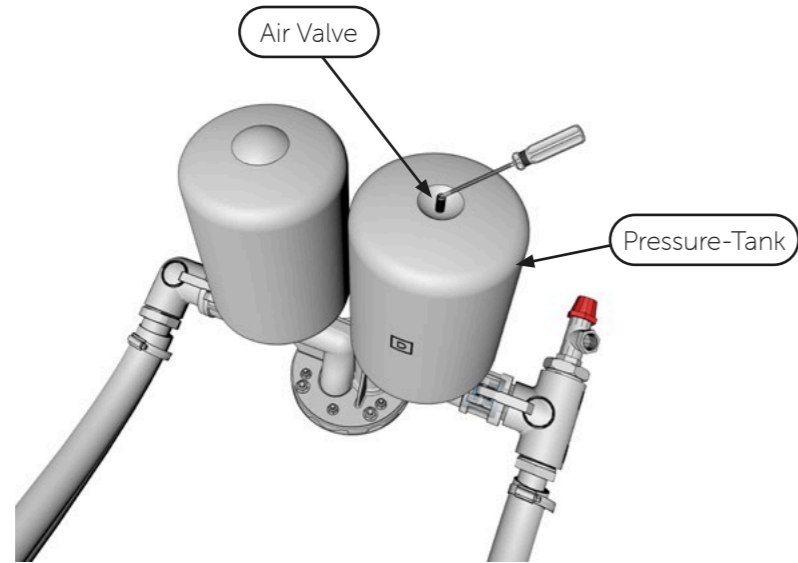
- If the level has dropped too low:
- The SLX-40 is designed to tolerate periods of dry-running, and will automatically re-start pumping once water levels recover. However, it should not be left to run dry deliberately as this could place undue stress on its components and might eventually reduce their lifetime.
 - Stop the surface-pump and allow the well to re-fill.
 - Re-start the surface-pump at a reduced flow rate if possible, else, stop it before the well empties again.



SLX-40 Troubleshooting Guide

If the hoses are shaking or the pump sounds unsteady

3 Air may have been lost from one of the blue pressure tanks. With the surface pump running, check the pressure tank connected to the smaller hose from the surface-pump by pushing down the pin in the centre of the air-valve as shown.



3.1 If air comes out, or if nothing comes out: Connect a standard tyre pump to this valve and pump in a small amount of air slowly until the shaking stops. **DO NOT PUMP IN TOO MUCH AIR AS THIS MAY CAUSE THE SHAKING TO START AGAIN.**

3.2 If water comes out of this valve, please request further support by visiting www.impactpumps.com/support or by scanning this code:



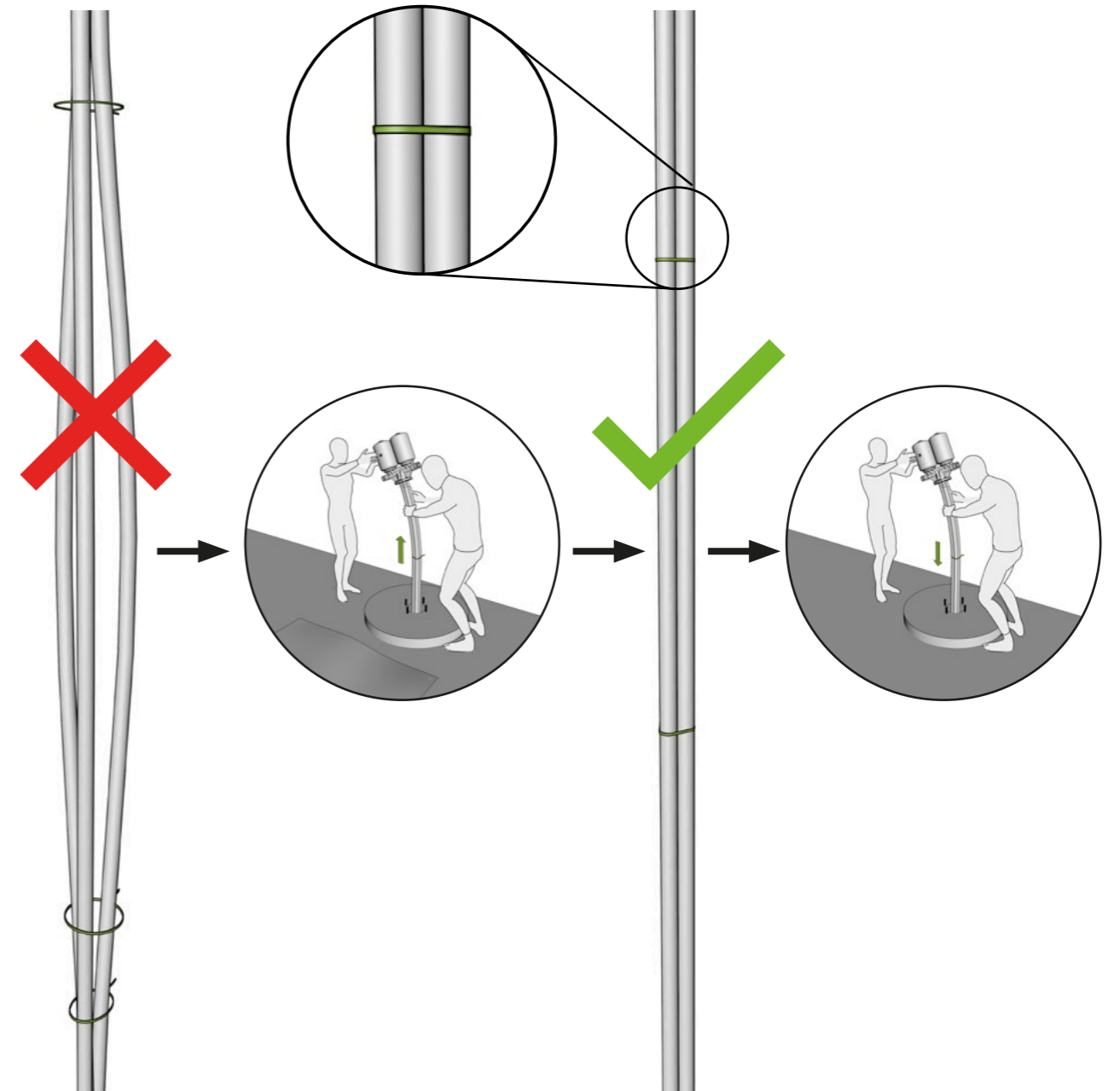
3.3 If steps 3.1 or 3.2 have been completed but the shaking has not stopped, add a few pumps of air to the other pressure tank.



SLX-40 Troubleshooting Guide

If there is a clapping noise coming from the well

1 If the cable ties are not tightly closed, the pipes may become loose and knock against each other causing a clapping noise. Over time this may get worse. If a clapping noise is heard, please ask the installer to remove the SLX-40 from the well and replace the cable ties. Several people or specialist lifting gear may be needed to lift the SLX-40 which can weigh up to 200kg if it is 50m (164 feet) long and full of water.



TIP: If it is too heavy to lift, the SLX-40 can be made much lighter by blowing air down the 2 HDPE riser-pipes and allowing water to come back up the HDPE down-pipe. To do this, close ALL the valves and disconnect the surface-pump and 1½" hose from the larger hoesetail on the well-head (D). Now open only the SLX-40 inlet valve C that is normally connected to the surface-pump outlet, and arrange to blow air into the large 1½" hoesetail with an air compressor, or tyre pump. It may take more than 10 minutes of air-pumping for pressure to build up sufficiently to push the water out.

