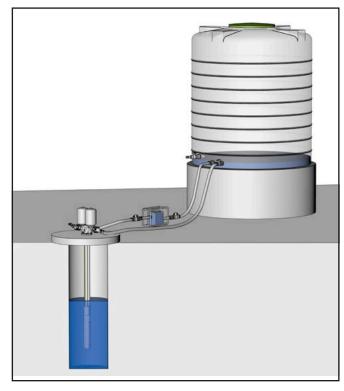


SLX-40 Installation Guides

This document combines: SLX-40 Installation Guide SLX-40 Basic Set-Up (Appendix A) SLX-40 Site Installation Report Forms (Appendix B)

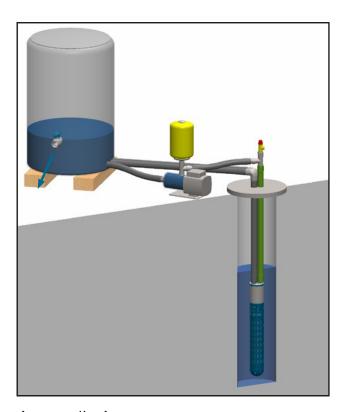
The Basic Set-Up instructions explain how to complete a basic installation of an Impact Pump SLX-40 without an Impact Pumps well-head or optional surface fittings. For applications requiring pressurised output (e.g. to sprinklers or drip irrigation), or remote delivery, an Impact Pumps well-head should be used.

The Basic Set-Up should only be used for output flows less than 3,000 L/h.



SLX-40 Installation Guide

Page 1



Appendix A: SLX-40 Basic Set-Up Page 33



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

Installation Guide

This document explains how to install the SLX-40 to deliver water to a raised tank. Installation of the SLX-40 should take a certified installer less than two hours once the tank stand and well are constructed. The guide details the installation procedure for an Impact Pumps SLX-40 using the "Quick Connections Accessories Kit" available from your dealer. For hard-piped or fixed installations without this kit, please use equivalent appropriately sized fittings to make the connections shown.

In some applications an optional basic set-up can be used which does not require the Impact Pumps well head package or quick connections kit. For applications requiring a raised tank for pressurised output (e.g. to sprinklers or drip irrigation), or remote tank, an Impact Pumps well-head should be used. The basic set-up should only be used for output flows less than 3,000 L/h and the pipes must be firmly secured. See separate additional "SLX-40 Basic Set-Up Installation and User Guide".

For operating and troubleshooting help, please refer to the accompanying "SLX-40-S (Standard) & SLX-40-HF (High Flow) User Guide".

To register for the 5 year warranty or to get further support, including in other languages such as:

- Français,
- Español,
- Português,

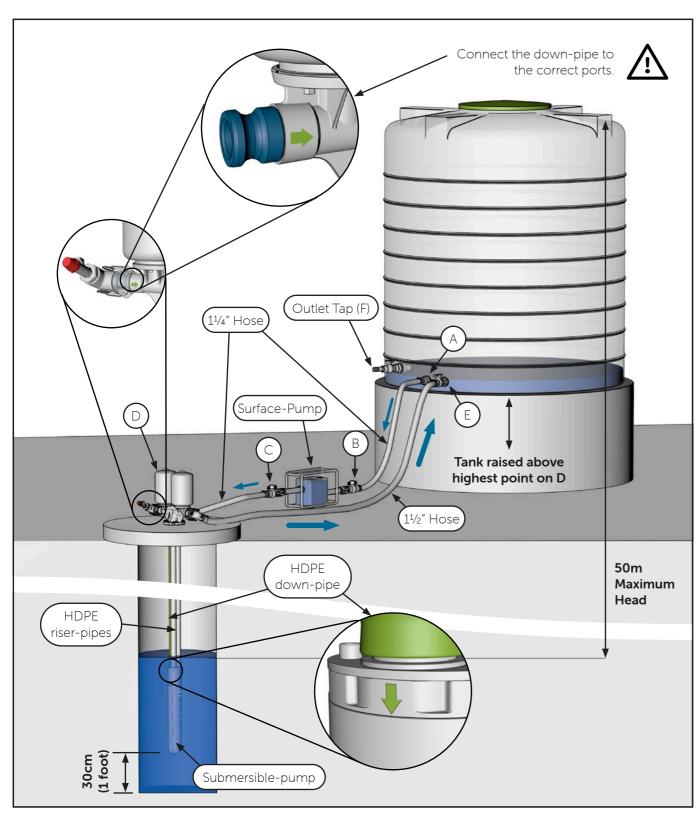
visit www.impactpumps.com/support or scan this code:



Quick Start Installation Guide Summary	Page 2	
Packing Lists	Page 4	
Quick Connections Accessories Kit	Page 5	
Required Items Not Included With The SLX-40	Page 7	
Tools Needed For Installation	Page 8	
Installation Instructions	Page 10	04/2022

Quick Start Installation Guide Summary

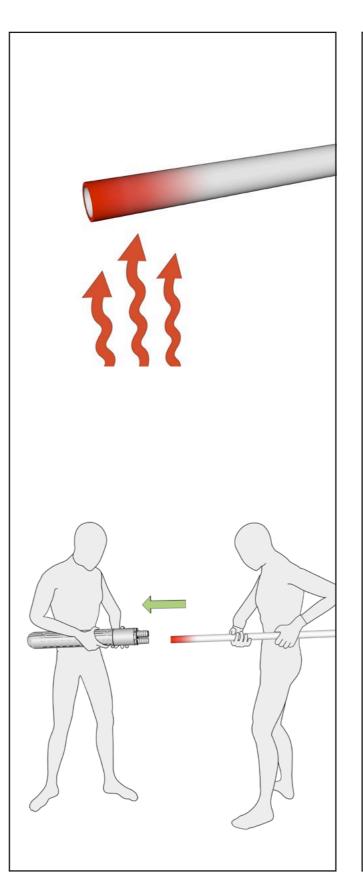
More detailed instructions are on page 10

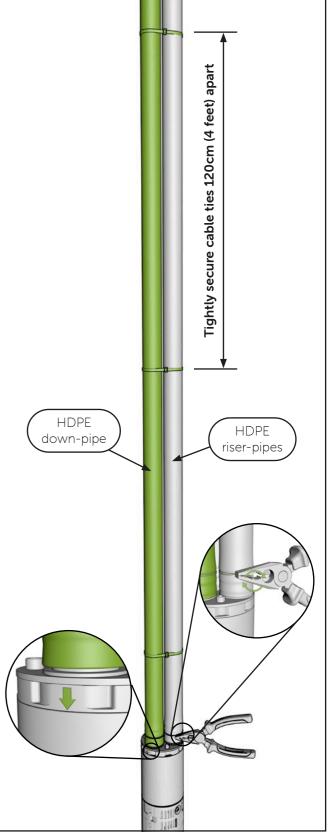


Water pumped down into the SLX-40 submersible-pump is returned up the riser pipes with extra water lifted from the well. The valve on C should be adjusted so that the red cap on D is normally closed. The SLX-40-S must also lift an output flow of no more than 3,000 L/h.



WARNING! EXCEEDING THE PRESSURE HEAD AND FLOW SPECIFICATIONS
MAY DAMAGE THE SLX-40 AND VOID THE WARRANTY.
SLX-40-S & SLX-40-HF Installation Guide

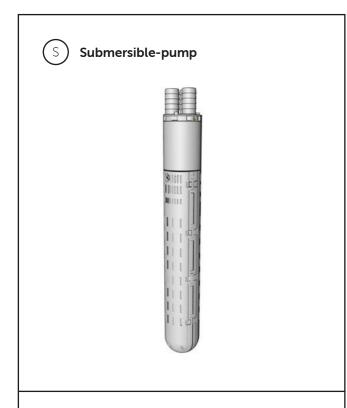


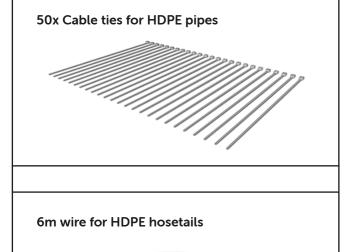


Packing Lists

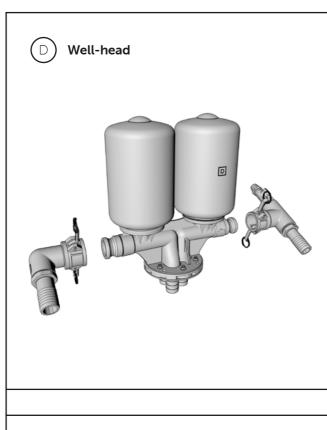
TIP: Plumbing fittings have been supplied pre-assembled and sealed except where parts will need to be disassembled and reassembled during installation.

Submersible Box





Well Head Box

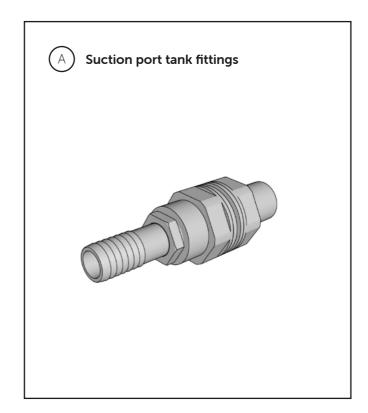


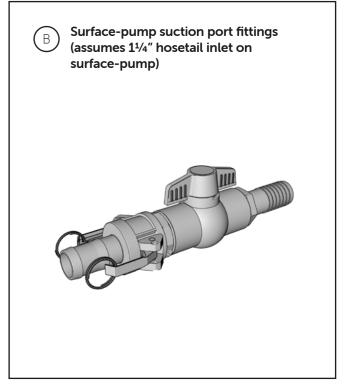


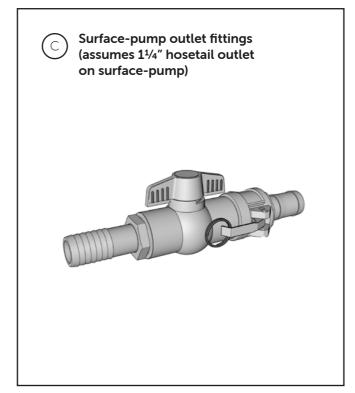
SLX-40-S and SLX-40-HF

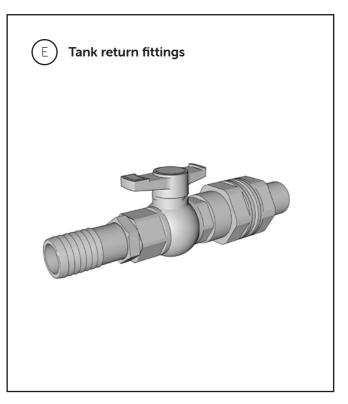
Quick Connections Accessories Kit

This is available separately from your dealer and strongly recommended to facilitate surface-pump removal, enabling you to get the most out of your SLX-40 installation. Installers may alternatively choose to use externally supplied fittings, e.g. in the case of hard-piped installations or if the surface pump does not need to be easy to remove.

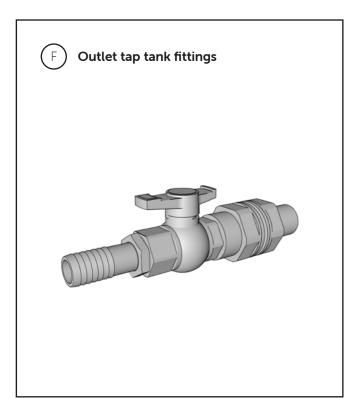


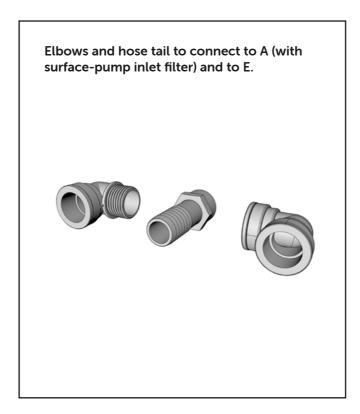


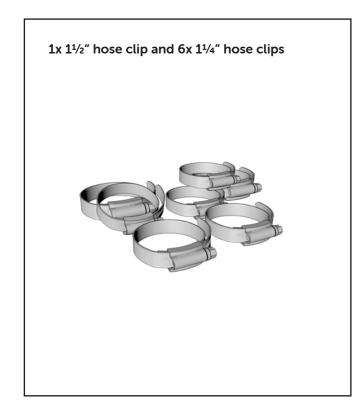


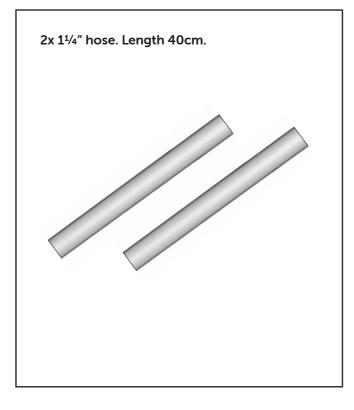


Quick Connections Accessories Kit (continued)









TIP: For hard-piped or fixed installations without this kit, please use equivalent appropriately sized fittings to make the connections shown.

SLX-40-S and SLX-40-HF

Required Items Not Included With The SLX-40

Surface-pump with 11/4" hosetails and 2x hose clips. Please see your distributor for a list of recommended surface-pumps. The SLX-40-S must lift an output flow of no more than 3,000 L/h, this requires the surface pump to supply a drive flow of less than 4,500 L/h. The pressure supplied to the SLX-40-S as well as the SLX-40-HF should be limited to less than 27m. Some surface-pumps may require reducing the output flow and pressure supplied to the SLX-40 by using a valve. There is a pressure relief valve with a red cap on D that will open at pressures higher than 27m.



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

HDPE (PE100) PN16 (SDR11) pipes, 40mm outside diameter, 3 lengths equal to the installation depth. Please note that the maximum installation depth is 50m (164 feet).



Good quality 11/4" and 11/2" suction hoses (equal lengths of at least the intended distance from the well-head to the tank). The hoses should be UV resistant and preferably opaque (not see through). Suction hoses should not collapse if squeezed. Either of these hoses may be supplied with the surface-pump or purchased separately.





TIP: For hard-piped surface connections avoiding hoses, replace the well-head hosetails with 1½" and 1½" threaded pipe fittings as required.

Tank or water butt (200L or more) including provision for overflow/tank switch if required

The tank should be raised on a plinth or stand so that the bottom of the tank is higher than the well-head (D).

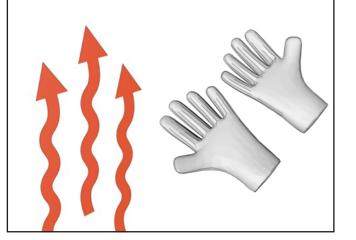
TIP: At least a small tank is required for all installations for ease of priming and to protect the surface-pump, even if water storage is not required.

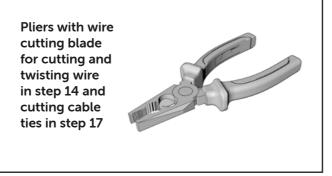


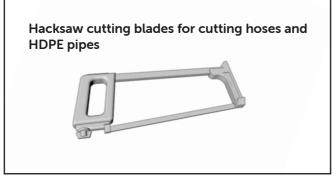
Tank raised above highest point on Well-head (D)

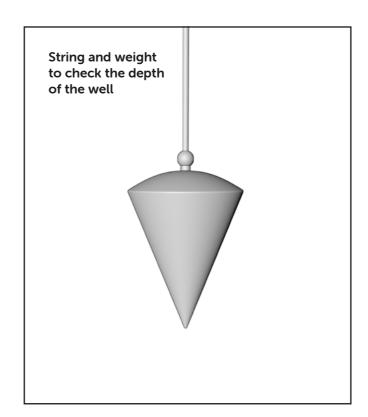
Tools Needed For Installation

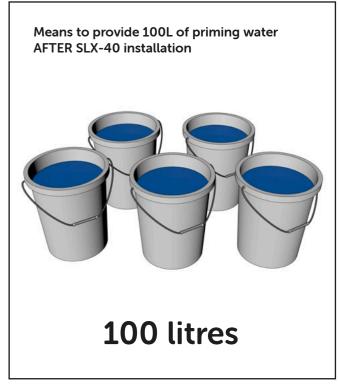
Heat source to soften the HDPE pipes in step 13 (e.g. blow torch, hot air gun or means to build a small fire). You may wish to use gloves to improve grip and avoid burns whilst pushing heated pipes onto the SLX-40 hosetails.

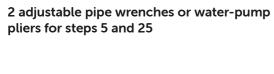






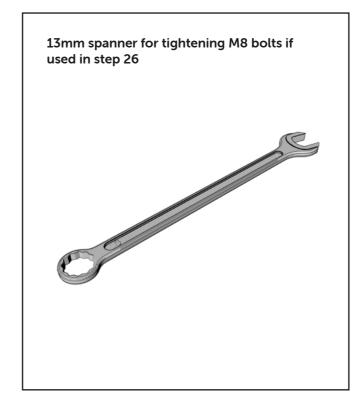








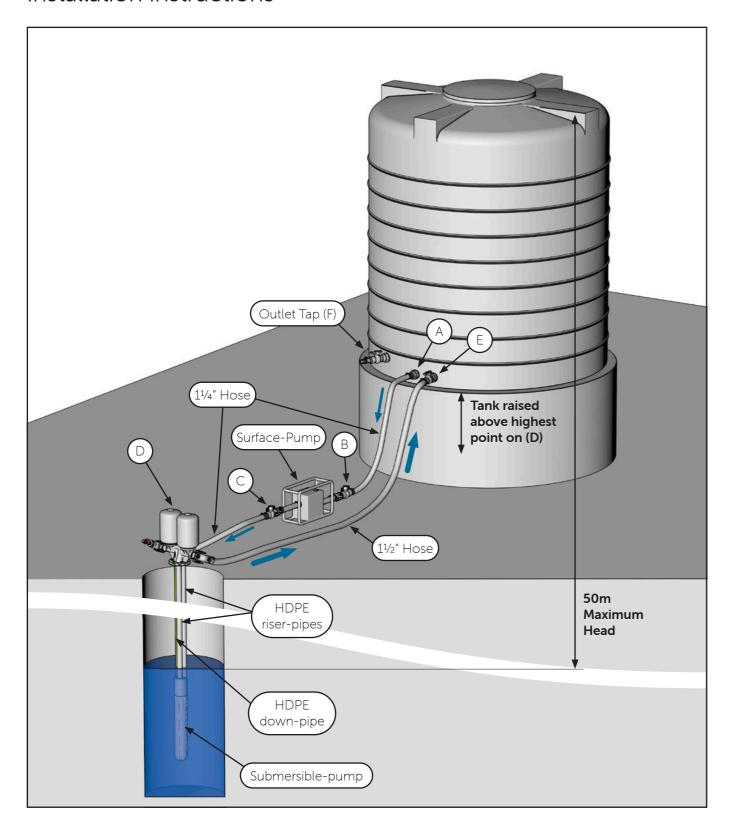


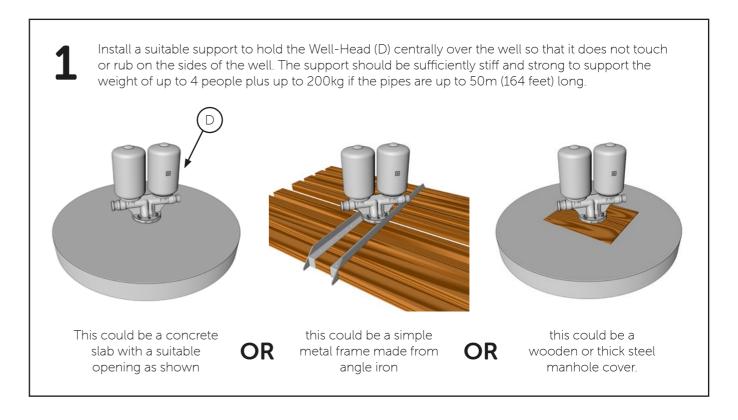


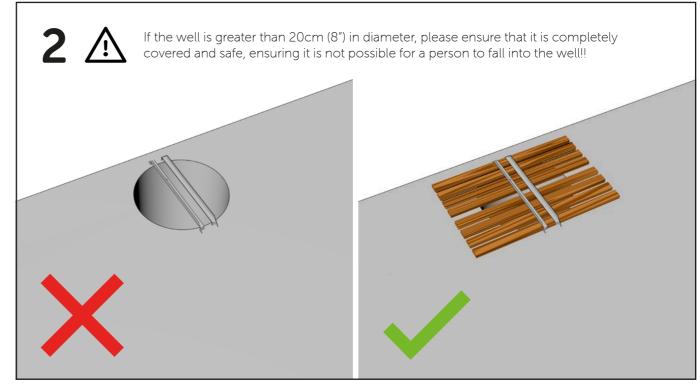
Optional or recommended items:

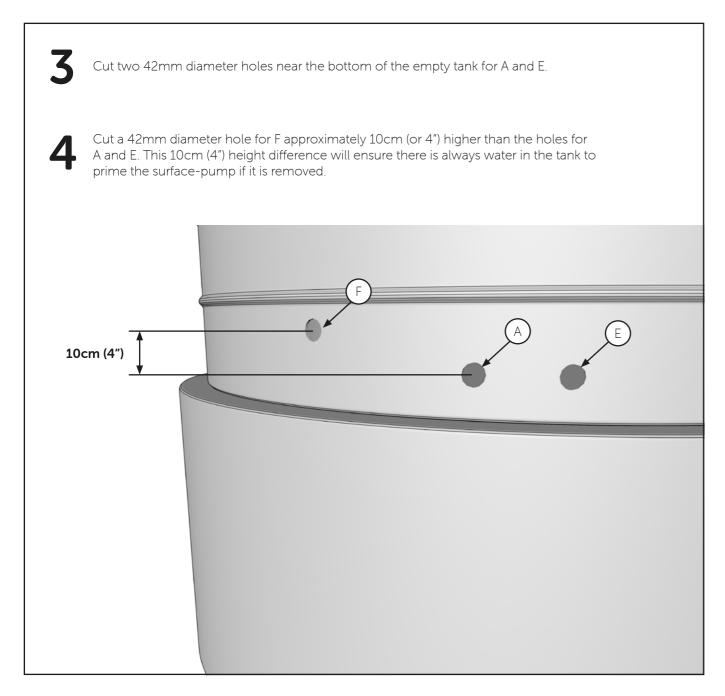
- Fittings and pipes/hoses to plumb an overflow return to the well.
- Woodscrews, anchor bolts or appropriate fasteners to secure the well-head to whatever platform structure is used to support the SLX-40 at the top of the well or borehole.

Installation Instructions

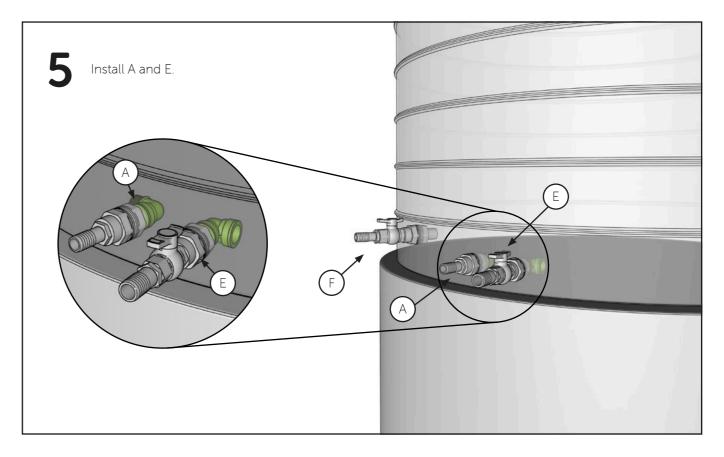








TIP: We recommend that the top hole, F, is installed as far as possible from A and E to avoid any silt being carried with the outlet water.



TIP: The elbows provided should always be installed on the inside of the tank so that the ports on A and E face away from each other. This allows any sand or dirt from the well to settle out of the flow before it returns to the surface-pump.

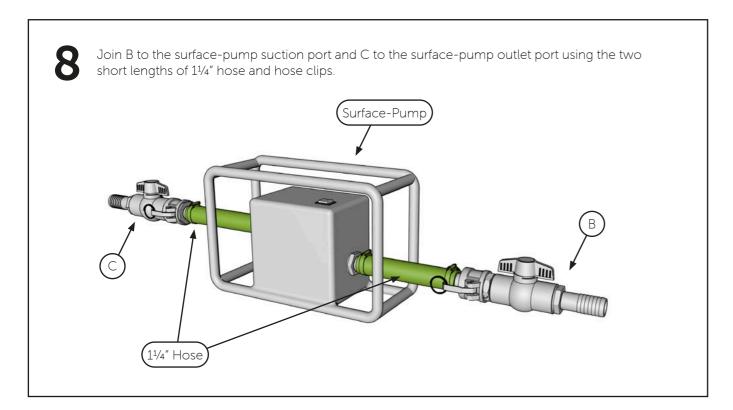
TIP: If an inlet filter is supplied with the surface-pump, this should be installed inside the tank on A. Different options to join A to an inlet filter have been provided: a hosetail and two types of elbow. The remaining elbow can be installed on E.



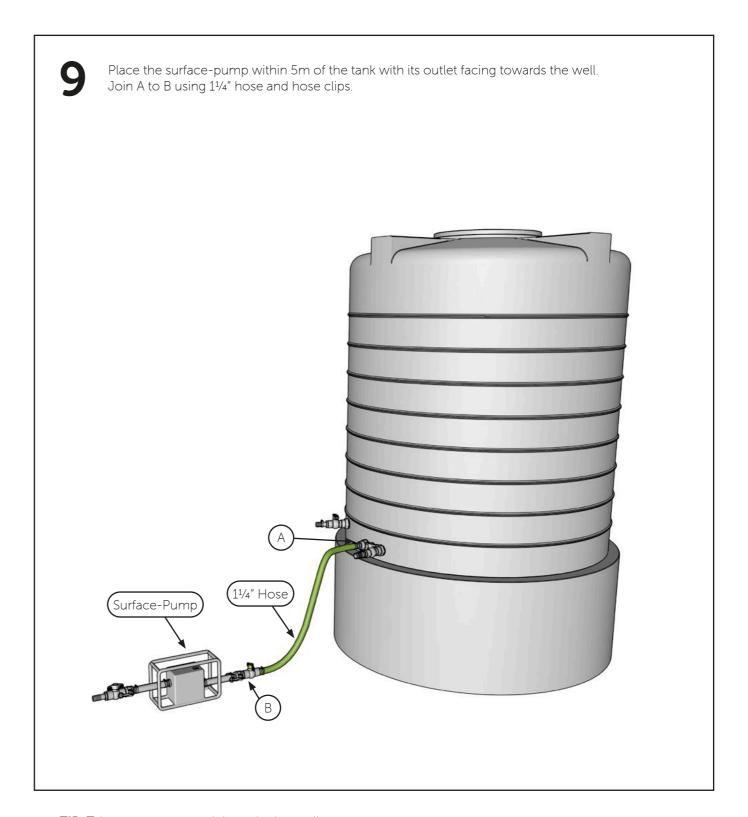
TIP: A tank level switch or overflow return to the well should be installed if the pump will operate unsupervised.

7

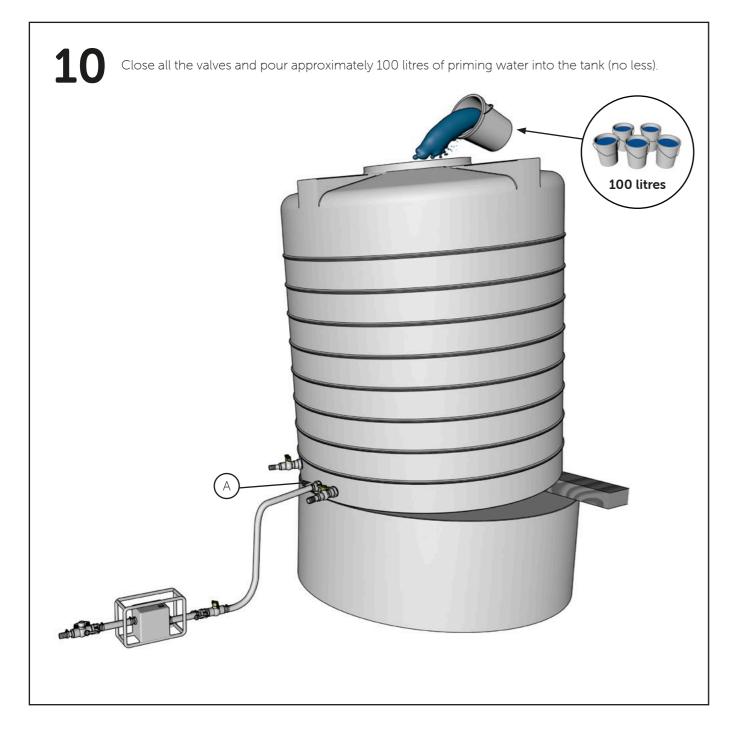
Place the tank in its final intended location.



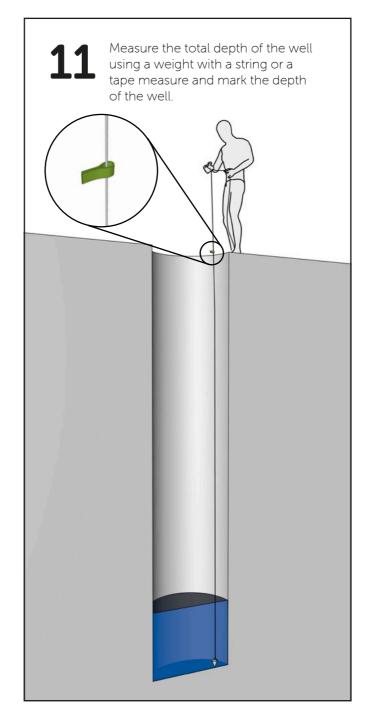
TIP: If the user would like to keep the surface-pump full of water while being removed, stored then replaced, two longer hose lengths can be used to join B and C to the surface-pump. If these lengths of hose on the surface-pump are sufficiently long, they can optionally be joined together to keep the surface-pump primed. This will make it heavier to transport, but introduce less air for removal the next time it is used.

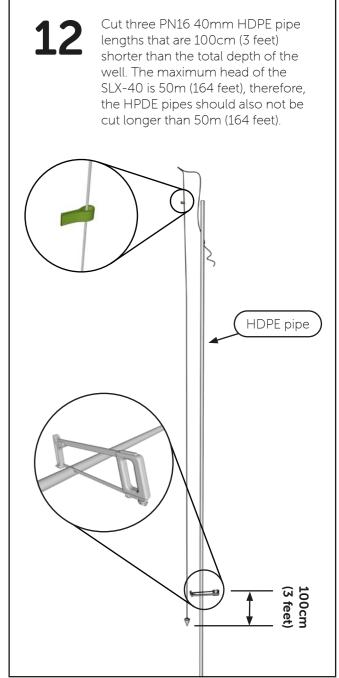


TIP: Take care not to overtighten the hose clips.



TIP: If the tank is large, tip it to submerge A. Temporarily support the tank, e.g. with a block of wood...

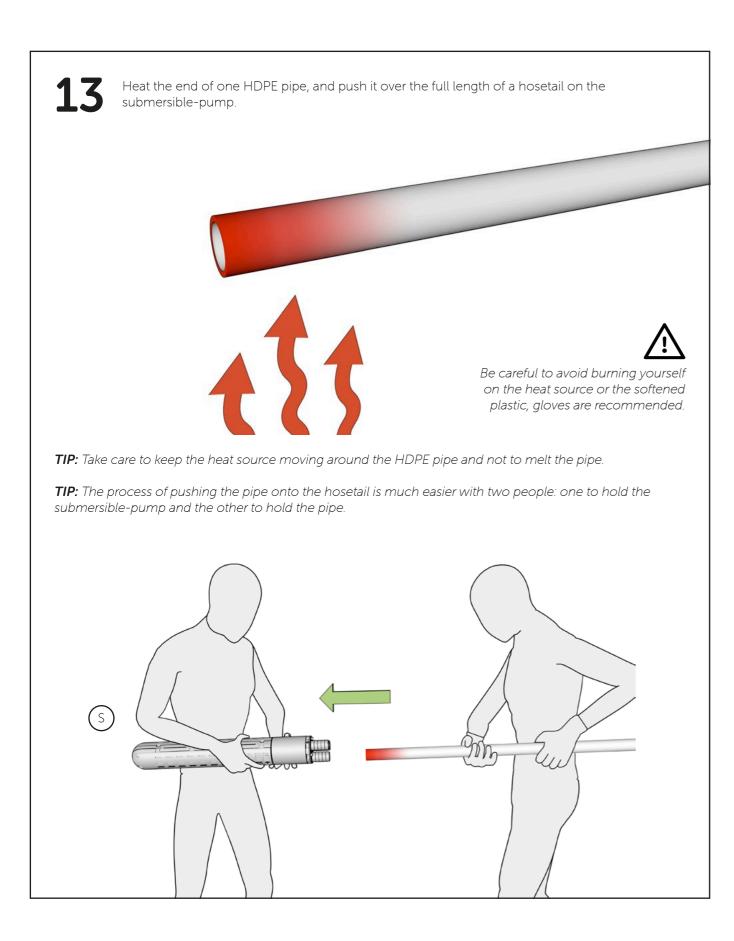


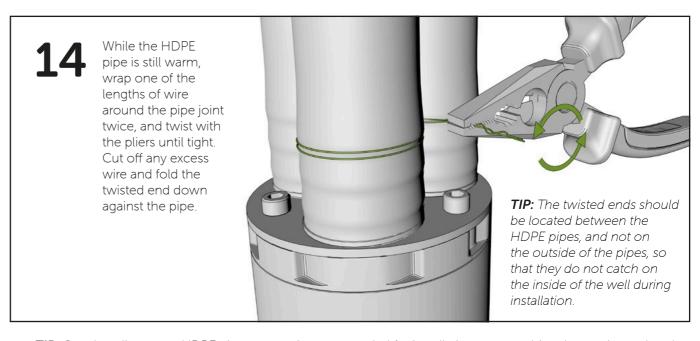


TIP: The submersible-pump is 60cm (2 feet) long, therefore, with the HDPE pipes cut to 100cm (3 feet) less than the total well depth, the bottom of the submersible-pump will be installed no deeper than 30cm (1 foot) from the bottom of the well. This allows for the largest possible drop in water level while pumping during the dry season.

TIP: Use the string to measure the correct length of the first HDPE pipe, then use this pipe to measure and cut the remaining 2 pipe lengths.

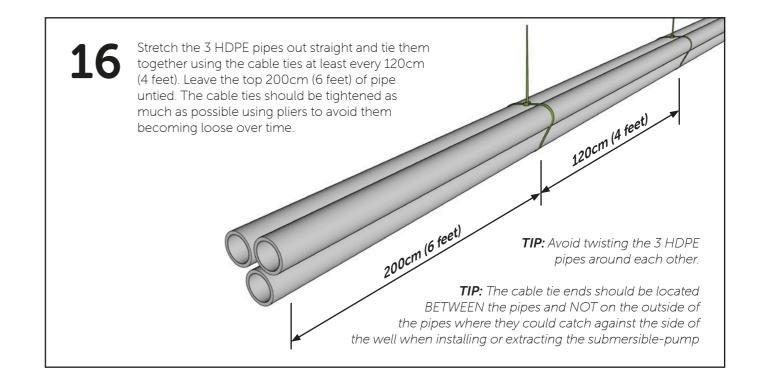
TIP: If the well depth is much greater than the water depth, the water level may be measured instead. The submersible-pump should be located below the lowest expected well water level at the driest time of year.

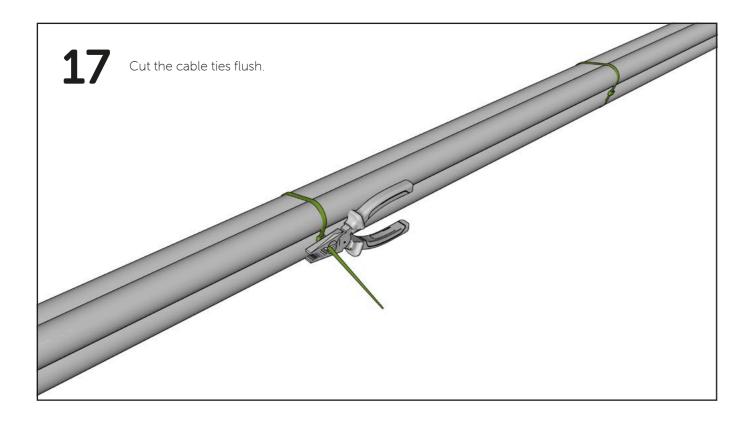


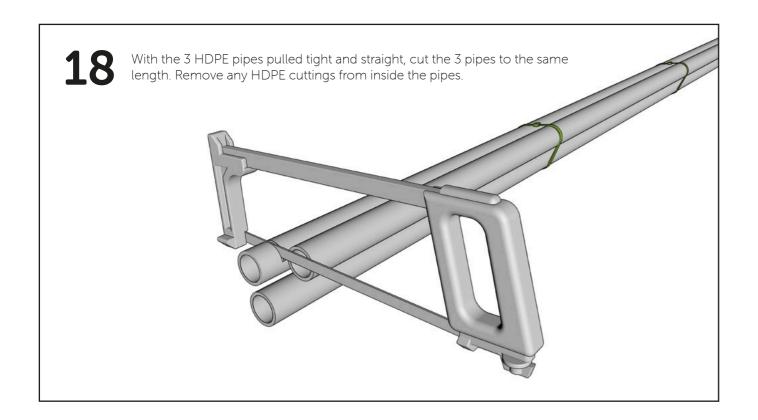


TIP: Good quality strong HDPE pipe connections are needed for installations approaching the maximum heads or flows of the SLX-40. You may find it easier to ensure good quality strong hose connections by using hose clips instead of twisted wire.





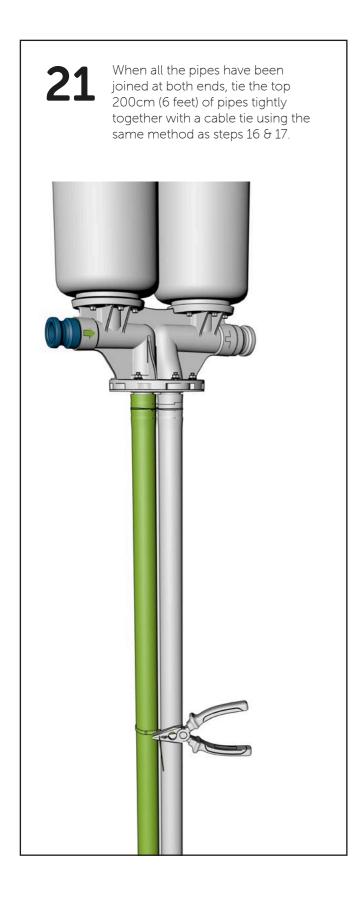


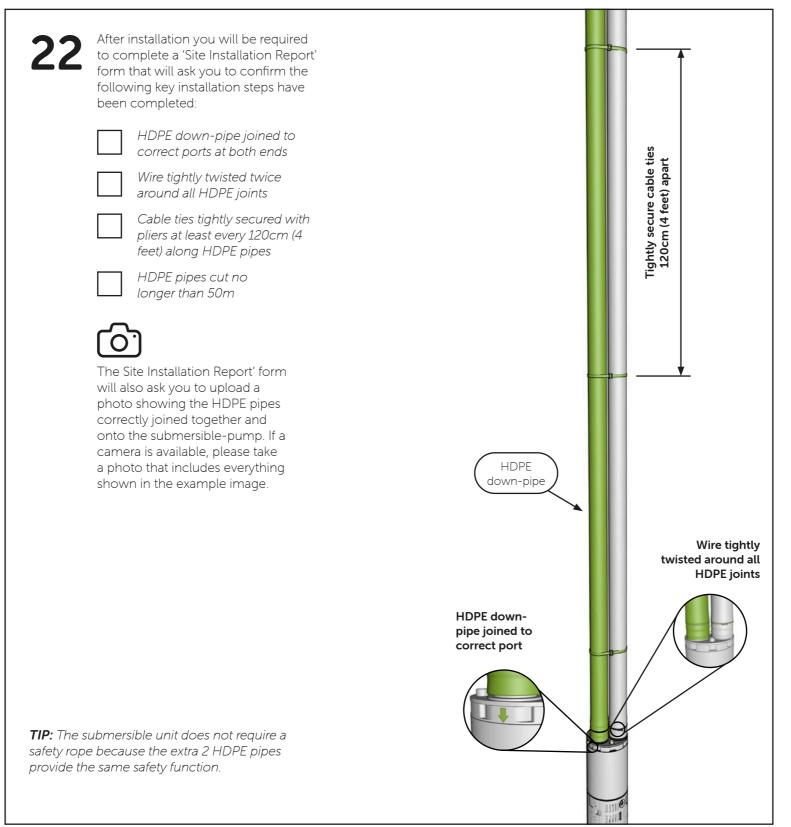


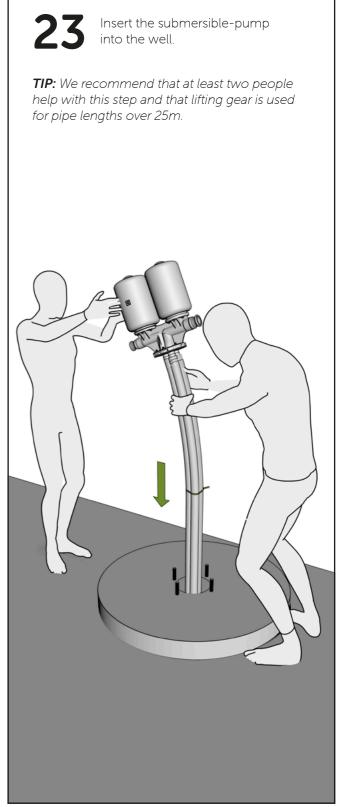
Check which pipe is connected to the down-pipe port on the submersible-pump, identified by the downwards pointing arrow shown. Connect this HDPE down-pipe to the down-pipe port on the well-head (D) using the method described in step 13 and 14. down-pipe Submersible-pump

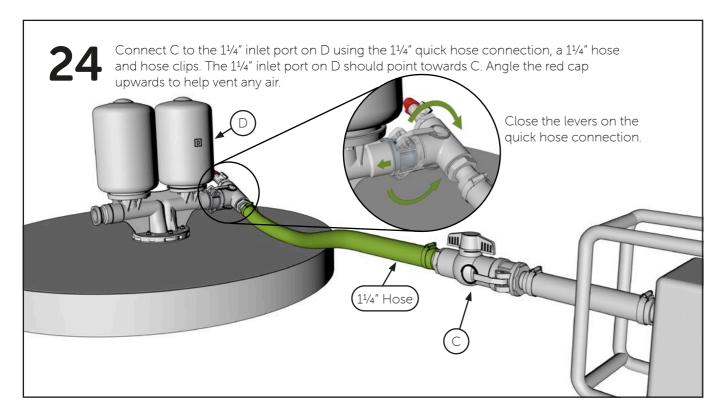
TIP: Mark the down-pipe using a cable tie, pen or knife.

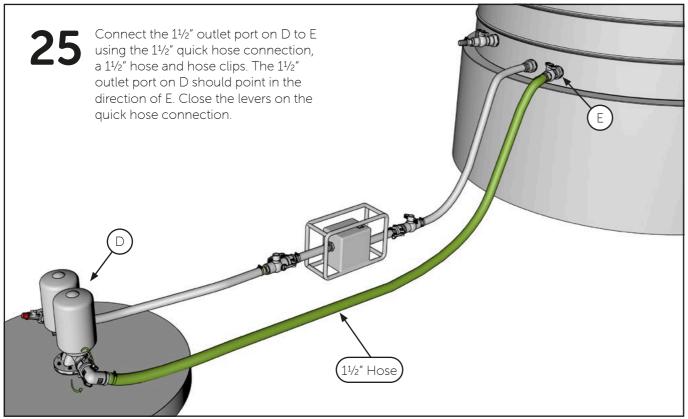
20 Connect the other two pipes to the remaining two ports on the well-head (D) by repeating steps 13 and 14 above.

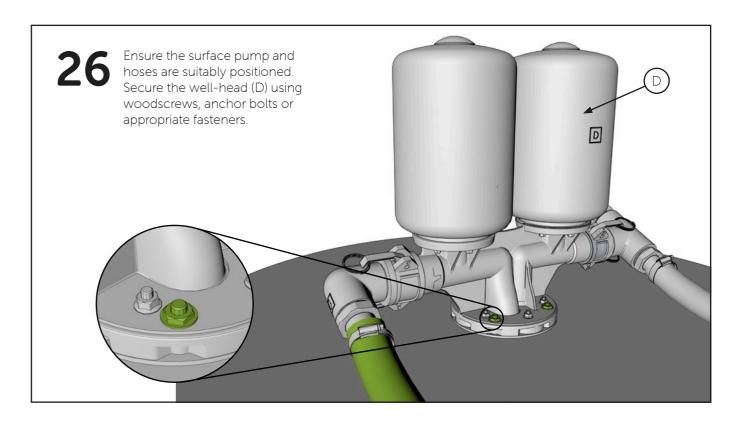




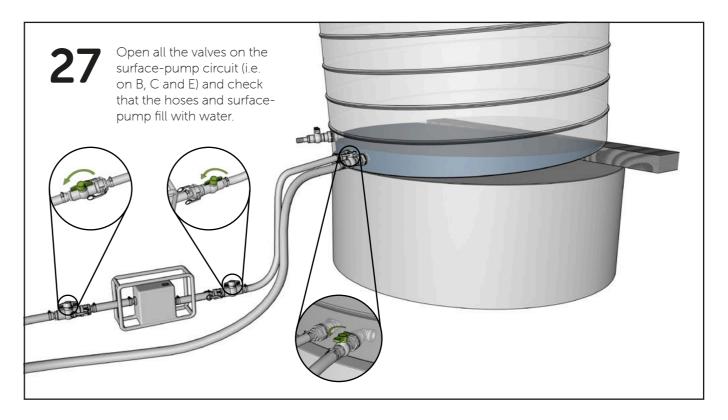




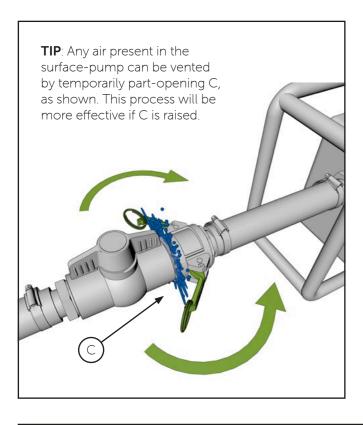


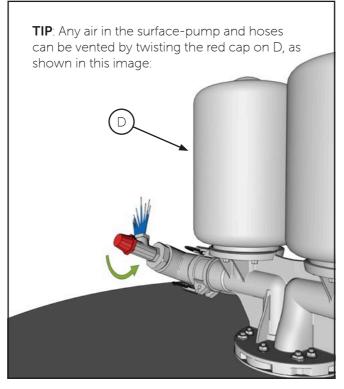


TIP: A padlock can be used through one of the bolt holes for added security.

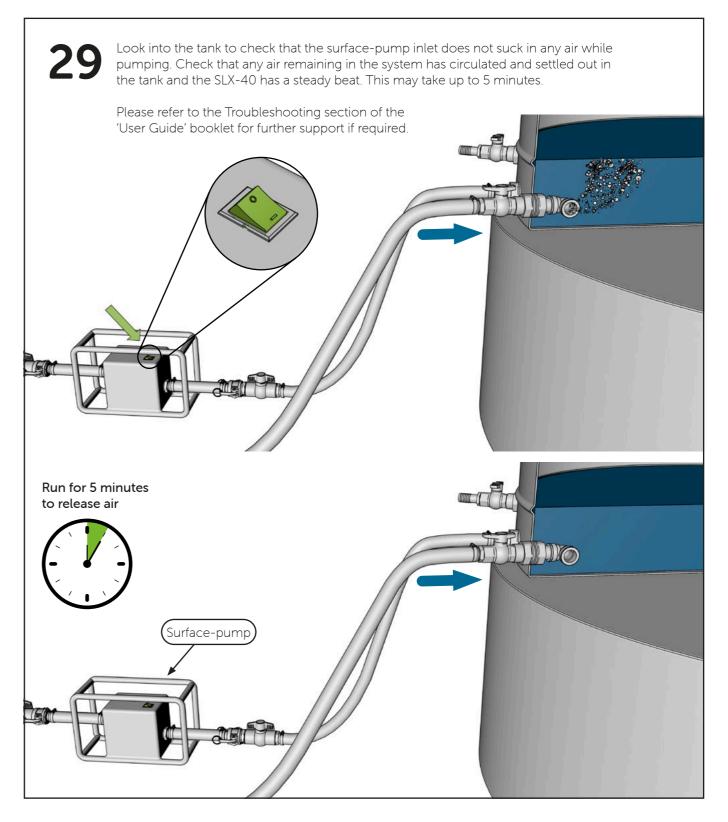


TIP: If the tank is large, tip it to submerge A. Temporarily support the tank, e.g. with a block of wood.

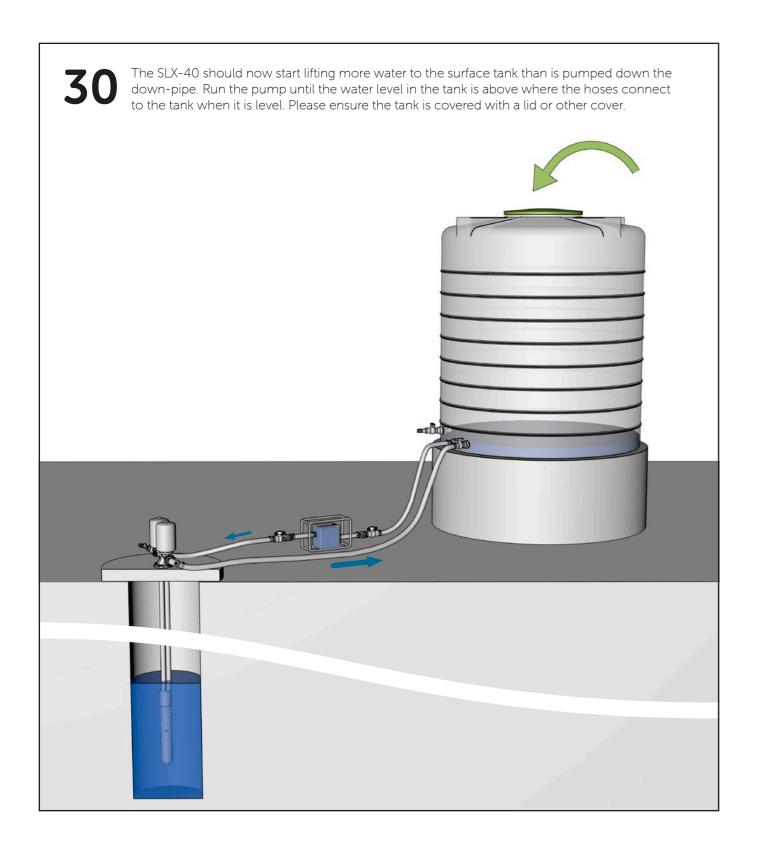




The surface-pump manual should be rollo surface-pump and run the surface-pump. The surface-pump manual should be followed carefully. Connect the power source to the The valve on C may need to be adjusted for some surface-pumps to reduce the output flow and pressure supplied to the SLX-40. The valve on C should be adjusted so that the red cap on D is normally closed. The SLX-40-S must also lift an output flow of no more than 3,000 L/h. 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. WARNING! EXCEEDING THE PRESSURE HEAD AND FLOW SPECIFICATIONS MAY DAMAGE THE SLX-40 AND VOID THE WARRANTY. Ensure any electrical supplies are isolated before connecting.



TIP: A tank level switch or overflow return to the well should be installed if the pump will operate unsupervised.



31

Before the 5 year warranty can be activated a 'Site Installation Report' must be submitted to Impact Pumps. Please complete the 'Site Installation Report' by visiting www.impactpumps.com/support or by scanning this code:



The 'Site Installation Report' form will ask you to confirm the following key installation steps have been completed:

Maximum head (i.e., the height from the deepest seasonal ground water level to the maximum tank level) is no more than 50m
Tank raised above the highest point on the well-head (D)
Outlet (F) is installed above the tank-hose connection (A)
Good quality UV resistant suction hoses are installed
Hose clips are used on all hose joints
Surface-pump is installed in the correct direction
Tank has a lid

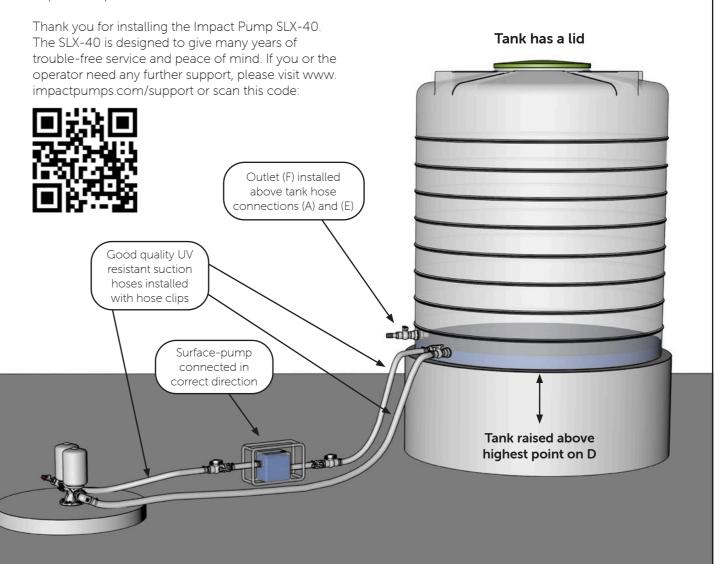
Please talk through the "User Guide" with the operator of the SLX-40. Confirm that they know how to connect and run the pump including how to expel air.

Please complete the 'New Pump Owner's Copy' of the 'Site Installation Report'. Please leave this 'Site Installation Report: New Pump Owner's Copy' with the New Pump Owner.

If you cannot access the online Site Installation Report, please also complete the 'Distributor's Copy' of the 'Site Installation Report'. Please return this 'Site Installation Report: Distributor's Copy' to your distributor who will submit it to Impact Pumps.



If a camera is available, please also upload a photo showing the above installation steps have been completed with the well-head (D), surface-pump and tank correctly installed and connected.





Appendix A

SLX-40 Basic Set-Up

Installation and User Guide



SLX-40 Basic Set-Up

Installation and User Guide

This document explains how to complete a basic installation of an Impact Pump SLX-40 without an Impact Pumps well-head or optional quick connections kit. For applications requiring a raised tank for pressurised output (e.g. to sprinklers or drip irrigation), or remote tank, an Impact Pumps well-head should be used. To benefit from rapid surface pump removal and replacement, enabling it to be used for other applications (e.g. around a farm), an Impact Pumps quick connections kit can be used. This set-up should only be used for output flows less than 3,000 L/h.

See separate "SLX-40-S & SLX-40-HF Installation Guide" for instructions where appropriate.

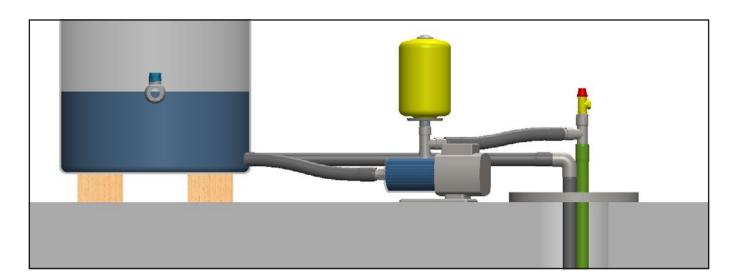
For operating and troubleshooting help, please also refer to the accompanying "SLX-40-S & SLX-40-HF User Guide".

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

- Français,
- Español,
- Português,

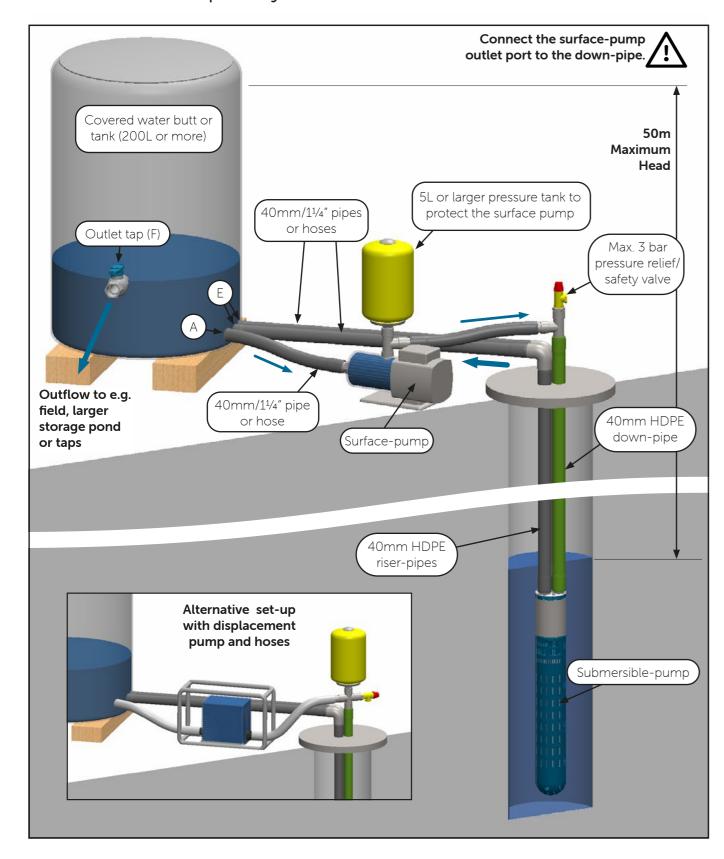
visit www.impactpumps.com/support or scan this code:





SLX-40 Basic Set-Up

Installation Example Layout



Water pumped down into the SLX-40 submersible-pump is returned up the riser pipes with extra water lifted from the well.

2

Required Items Not Included With The SLX-40 Submersible:

• Surface-pump

- Some surface pumps may need to be limited to supply a pressure of less than 27m, so that the 3bar pressure relief valve remains closed in normal operation.
- In addition, the SLX-40 must lift an output flow of no more than 3,000 L/h.

WARNING! Exceeding the pressure head and flow specifications may damage the SLX-40 and void the warranty.

- Water butt or tank (200L or more)
- HDPE (PE100) PN16 (SDR11) pipes, 40mm outside diameter
- 40mm or 1¹/₄" pipe or hose between well and tank
- Pipe and tank connection fittings as shown
- **Pressure tank** to protect the surface pump (Shown yellow *)
 - Minimum 5L capacity
 - Minimum 3/4" port.
- Maximum 3 bar Pressure Relief/Safety valve. (Shown yellow *)
- * Components shown in yellow MUST be included to obtain Impact Pumps' guarantee. If these fittings are not used the guarantee will be void.

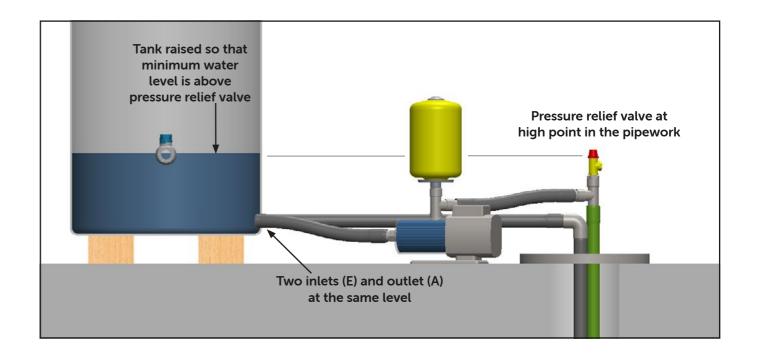
Optional or recommended items:

- 3 x 11/4" steel hosetails and hose clips for top of vertical pipes
- 2 elbows
- Fixing plate or brackets for firmly securing pipes at top of well

Extra Installation Instructions

Use these instructions in addition to the SLX-40 Installation Guide. Step numbers refer to steps in the Installation Guide (e.g. 3a refers to step 3).

- **3a**. Cut two inlet holes (E) and one outlet hole (A) at the same level.
- **4a**. The outlet hole (F) must also be higher than the pressure relief valve (shown in yellow) and minimum 10cm above A and E. Install outlet tap here.
- **5a**. Install connections to both submersible pump riser pipes at (E) and to the surface pump suction port at (A).
- **7a.** Outlet tap (F) must be higher than the pressure relief valve.



SLX-40 Basic Set-Up Installation Guide SLX-40 Basic Set-Up Installation Guide SLX-40 Basic Set-Up Installation Guide

SLX-40 Basic Set-Up

Extra Installation Instructions (continued)

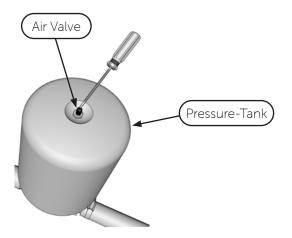
12a. and 18a. Cut the down-pipe longer than the riser pipes if necessary. The pressure relief valve must be at the highest point in the pipework between the surface pump and the well.

19a. Secure the pipes together. Attach the tee (or cross) to the down-pipe. Attach any elbows to the riser pipes.

24a. Join the surface-pump outlet port to the down-pipe (shown green) using 1½ pipe or hose and tee if needed.

24b. Attach the pressure tank and pressure relief valve.

24c. Ensure any air pre-charge is released from the pressure tank by depressing the pin at the centre of the air-valve as shown. This should be done BEFORE the surface pump is turned on.



26a. Secure pipes firmly in place above middle of well. PIPES SHOULD BE SECURE TO STOP THEM FROM SHAKING.

Extra User Instructions

Please refer to the SLX-40 User Guide.

Removal of the SLX-40 from the well

TIP: Air can be blown down one or both riser pipes simultaneously to remove water.



Appendix B

SLX-40 Site Installation Report Forms

New Pump Owner's Copy Distributor's Copy

Site Installation Report: New Pump Owner's Copy

In addition to completing the online 'Site Installation Report' or the paper 'Site Installation Report: Distributor's Copy', please also complete this 'Site Installation Report: New Pump Owner's Copy' and leave it with the new owner of the SLX-40.

Well-head Serial Number Please enter the serial number that is printed on the well-head, D.	Submersible Serial Number* Please enter the serial number that is printed on the SLX-40 submersible pump.
Certified Installer's First Name*	Certified Installer's Family Name*
Installer's Certification Number* Please enter your unique 6 digit Certification	Certified Installer's Phone Number*
Number from your 'Authorised Installer Certificate'.]
New Pump Owner's First Name*	New Pump Owner's Family Name*
Town*	County, State or Province*
Country or Region*	
	Navy Dugan Ovygan's Dhana Alygahart
New Pump Owner's Email Address	New Pump Owner's Phone Number* Impact Pumps will send an SMS to this number to confirm that the 5 year guarantee has been activated.

Please confirm the following key

Site Installation Report: New Pump Owner's Copy

installation steps h	nave been completed:*		
HDPE down-pipe at both ends	joined to correct ports		
Wire tightly twiste	Wire tightly twisted twice around all HDPE joints		
Cable ties tightly s 120cm (4 feet) alo	secured with pliers at least every ong HDPE pipes		
HDPE pipes cut n	o longer than 50m		
	-		
	Tightly secure cable ties 120cm (4 feet) apart		
HDPE down-pipe joined to correct port	Wire tightly twisted around all HDPE joints		

Please also confirm the following key installation steps have been completed:*

Maximum head (i.e., the height from the deepest seasonal ground water level to the maximum tank level) is no more than 50m
Tank raised above the highest point on the well-

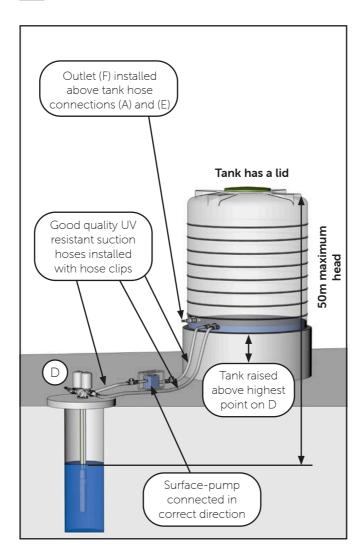
head (D)
Outlet (F) is installed above the tank-hose

 connection (A)
Good quality UV resistant suction hoses or pipes are

Hose clips are used on all hose joints

Surface-pump is installed in the correct direction

Tank has a lid



SLX-40-S and SLX-40-HF

Site Installation Report: New Pump Owner's Copy

Surface-pump*
Please enter the manufacturer and model number of the surface-pump that is powering the Impact Pump SLX-40
What is the cut length of HDPE pipes?*
feet
metres
What is the height of the top of the tank from the well cover?*
feet
metres
Is the pump installed in a hand-dug well or a borehole?
Hand-dug well Borehole
<u> </u>
Estimated deepest seasonal depth to well water level from ground
level before pumping
feet
metres
Estimated daily water demand
Please estimate the approximate average number of litres per day the customer intends to pump
litres/day
How long did the installation take after you arrived at site with the tank stand
and well-head support installed?
hours

Site Installation Report: New Pump Owner's Copy

Please confirm the new pump owner is fully satisfied with the SLX-40, the installation and that the following statements are true:*
The pump runs as it should, any air has been expelled and there are no leaks.
The new pump owner understands how to connect and run the pump including how to expel air.
The new pump owner knows where to get additional support if needed.
Additional Notes
Please add any additional information you have regarding this installation.

Site Installation Report: Distributor's Copy

If you do not have access to the internet, please also complete this 'Distributor's Copy' of the 'Site Installation Report'. Please return all 4 pages of this 'Site Installation Report: Distributor's Copy' to your distributor who will photograph it and submit it via www.impactpumps.com/support.

Please leave the following 'Site Installation Report: New Pump Owner's Copy' with the new owner of the SLX-40.

Well-head Serial Number Please enter the serial number that is printed on the well-head, D.	Submersible Serial Number* Please enter the serial number that is printed on the SLX-40 submersible pump.
Certified Installer's First Name*	Certified Installer's Family Name*
Installer's Certification Number* Please enter your unique 6 digit Certification	Certified Installer's Phone Number*
Number from your 'Authorised Installer Certificate'.	
New Pump Owner's First Name*	New Pump Owner's Family Name*
Town*	County, State or Province*
Country or Region*	1
	New Pump Owner's Phone Number*
New Pump Owner's Email Address	Impact Pumps will send an SMS to this number to confirm that the 5 year guarantee has been activated.

Please confirm the following key

Site Installation Report: Distributor's Copy

HDPE down-pipe joined to correct ports at both ends Wire tightly twisted twice around all HDPE joints Cable ties tightly secured with pliers at least every 120cm (4 feet) along HDPE pipes HDPE pipes cut no longer than 50m Wire tightly twisted around all HDPE joints HDPE down-pipe Wire tightly twisted around all HDPE joints HDPE down-pipe joined to correct port	insta	allation steps h	nave	been	completed:*
Cable ties tightly secured with pliers at least every 120cm (4 feet) along HDPE pipes HDPE pipes cut no longer than 50m Lightly secure caple ties tightly secure caple ties at least every 120cm (4 feet) along HDPE pipes HDPE down-pipe Wire tightly twisted around all HDPE joints HDPE down-pipe joined to			joine	d to corre	ect ports
HDPE down-pipe joined to		Wire tightly twisted	d twic	e around	I all HDPE joints
HDPE down-pipe Joined to Lightly secure caple ties Tightly secure caple ties HDPE down-pipe joints					
HDPE down-pipe joined to Wire tightly twisted around all HDPE joints		HDPE pipes cut no	o long	ger than 5	50m
Wire tightly twisted around all HDPE joints HDPE downpipe joined to				Tightly secure cable ties 120cm (4 feet) apart	
pipe joined to				twi	sted around all
	pip	e joined to			
			6		

Please also confirm the following key installation steps have been completed:*

Maximum head (i.e., the height from the deepest seasonal ground water level to the maximum tank level) is no more than 50m
Tank raised above the highest point on the

well-head (D)
Outlet (F) is installed above the tank-hose

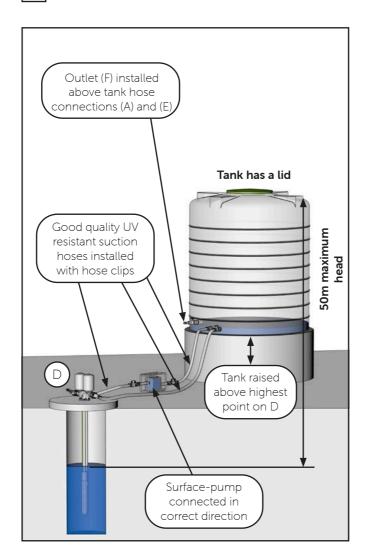
Outlet (F) is installed above the tank-hose
connection (A)

Good quality UV resistant suction hoses or pipes are installed

Hose clips are used on all hose joints

Surface-pump is installed in the correct direction

Tank has a lid



SLX-40-S and SLX-40-HF

Site Installation Report: Distributor's Copy

Surface-pump*
Please enter the manufacturer and model number of the surface-pump that is powering the Impact Pump SLX-40
What is the cut length of HDPE pipes?*
feet
metres
What is the height of the top of the tank from the well cover?*
feet
metres
Is the pump installed in a hand-dug well or a borehole?
Hand-dug well Borehole

Estimated deepest seasonal depth to well water level from ground
level before pumping
feet
metres
Estimated daily water demand
Please estimate the approximate average number of litres per day the customer intends to pump
litres/day
How long did the installation take after you arrived at site with the tank stand
and well-head support installed?
hours

Site Installation Report: Distributor's Copy

Please confirm the new pump owner is fully satisfied with the SLX-40, the installation and that the following statements are true:*		
The pump runs as it should, any air has been expelled and there are no leaks.		
The new pump owner understands how to connect and run the pump including how to expel air.		
The new pump owner knows where to get additional support if needed.		
Additional Notes		
Please add any additional information you have regarding this installation.		