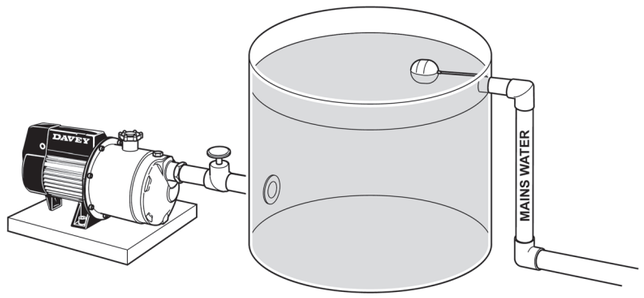
Connection of Mains Scheme or Town Water Supply to either Suction or Discharge of Pumps

Most Water Supply Authorities have strict regulations regarding direct connection of pumps to mains water supplies. In most cases an isolating tank is required between mains supply and pump. Davey also recommend this method. Directly applied mains pressure can exceed pump operating pressure and damage pump.

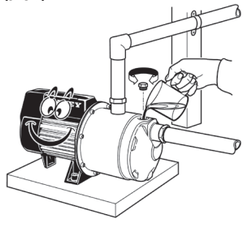
Davey Water Products Pty Ltd can not accept responsibility for loss or damage resulting from incorrect or unauthorised installations.



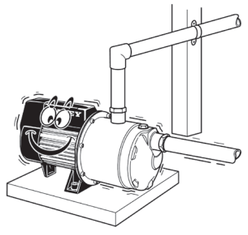
Priming and Operation

1. Ensure outlet nearest to pump is open.

2. Fill pump body and suction line through priming plug hole located above suction inlet and replace plug.



3. Switch on.



4. Prime should establish almost immediately with a strong flow of water, however, in some installations it may be necessary to repeat the above operation to remove all air from the system.

WARNING:
DO NOT RUN DRY.
DO NOT RUN WITH LOSS OF PRIME.
DO NOT PUMP WATER CONTAINING ABRASIVE MATERIALS.

Trouble Shooting Check List

MOTOR OPERATING BUT NOT PUMPING

1. Suction line and pump body not filled with water.
2. Leaking foot valve.
3. Air leaks in suction lines or suction pipe not under water.
4. Air trapped in suction lines (also possible with flooded suction) due to uneven rise in piping (eliminate humps and hollows).
5. No water at source or water level too low.
6. Valve on suction or delivery lines closed.

MOTOR NOT RUNNING

1. Power not connected.
2. Supply voltage too low.
3. Overload tripped.
4. Motor not free to turn e.g. a blocked impeller.
5. Internal motor fault.

MOTOR RUNS FOR SOME TIME THEN STOPS - RESTARTS AUTOMATICALLY AFTER SHORT TIME

Overload tripping in motor - low voltage at motor terminals
- motor in direct sunshine or in “hot box”
- motor not free to turn (eg: blocked)

***NOTE “MOTOR PROTECTION DEVICE” :**
For protection, the Davey pump motor is fitted with an automatic reset thermal overload, constant tripping of this overload indicates a problem e.g. low voltage at pump, excessive temperature (above 50°C) in pump enclosure.

WARNING: Automatic reset thermal overloads will allow the pump to restart without warning. Always disconnect the pump motor from the electrical supply before maintenance or repairs.

WARNING: When servicing or attending pump, always ensure power is switched off and lead unplugged. Electrical connections should be serviced only by qualified persons.

Care should also be taken when servicing or disassembling pump to avoid possible injury from hot pressurised water. Unplug pump, relieve pressure by opening a tap on the discharge side of the pump and allow any hot water in the pump to cool before attempting to dismantle.

IMPORTANT:
DO NOT USE petroleum based fluids or solvents (e.g. Oils, Kerosene, Turpentine, Thinners, etc) on the plastic pump components or seal components.

After Sales Service

For professional after sales service or repair contact your Davey Dealer.
For assistance in locating your nearest dealer contact the Davey Support Centre on 1300 2 DAVEY.

DEPEND ON DAVEY WATER PRODUCTS

Installation and Operating Instructions for Dynaflo® HS Series Electric Pumps

MODELS: HS50-06, HS60-08

IMPORTANT – PLEASE READ CAREFULLY

Please pass these instructions on to the operator of this equipment.

Davey® Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within two years of the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 367 866 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey Two Year Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey Two Year Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey Two Year Guarantee.

Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under the Australian or New Zealand legislation and does not affect any rights or remedies that may be available to you under the Australian or New Zealand Consumer Legislation.

In Australia, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Customer Service Centre on the number listed below.

For a complete list of Davey Dealers visit our website (davey.com.au) or call:

AUSTRALIA
Davey Support Centre
6 Lakeview Drive,
Scoresby, Australia 3179
Ph: 1300 367 866
Fax: 1300 369 119
Website: davey.com.au

NEW ZEALAND
Davey Support Centre
7 Rockridge Avenue,
Penrose, Auckland 1061
Ph: 0800 654 333
Fax: 09 527 7654
Website: daveynz.co.nz

DEPEND ON DAVEY WATER PRODUCTS

Davey Water Products Pty Ltd
Member of the GUD Group
ABN 18 066 327 517

P/N 402105

* **Installation and operating instructions are included with the product when purchased new. They may also be found on our website.**

Prior to using this pump you must ensure that:
- The pump is installed in a safe and dry environment
- The pump enclosure has adequate drainage in the event of leakage
- Any transport plugs are removed
- The pipe-work is correctly sealed and supported
- The pump is primed correctly
- The power supply is correctly connected
- All steps have been taken for safe operation

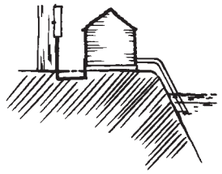
Appropriate details for all of these items are contained in the following Installation and Operating Instructions. Read these in their entirety before switching on this pump. If you are uncertain as to any of these Installation and Operating Instructions please contact your Davey dealer or the appropriate Davey office as listed on the back of this document.

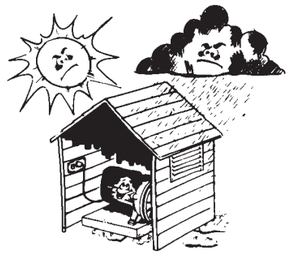
Before installing your new pump, please read all instructions carefully as failures caused by incorrect installation or operation are not covered by the guarantee. Your Dynaflo® HS Electric Pump is designed to handle clean water. The pump should not be used for any other purpose without specific referral to Davey. The use of the pump to pump flammable, corrosive and other materials of a hazardous nature is specifically excluded.

NOTE: Prior to installation remove the red transport plugs & associated seals from the suction and/or discharge ports.

Choosing a Site

Choose a site with a firm base as close to the water source as possible with correct power supply. Make sure your pump is always connected to an adequate, reliable source of clean water.





Housing your Davey Pump

To protect your pump from the weather, make sure the pump house is both water proof, frost free and has adequate ventilation.

The pump should be mounted on a firm base allowing for drainage, to avoid damage to flooring etc., that over time may occur from leaking pipe joints or pump seals.

Do not mount the pump vertically.

Power Connection

Connect lead to power supply designated on pump label, do not use long extension leads as they cause substantial voltage drop, poor pump performance and may cause motor overload.

The electrical connections and checks must be made by a qualified electrician and comply with applicable local standards.

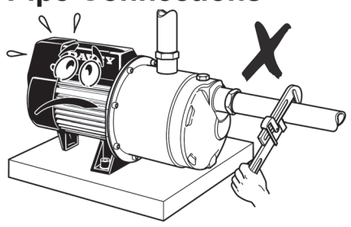
In accordance with AS/NZS 60335.2.41 we are obliged to inform you that this pump is not to be used by children or infirm persons and must not be used as a toy by children.

DO NOT USE THREAD SEALING COMPOUNDS, HEMP OR PIPE DOPE!

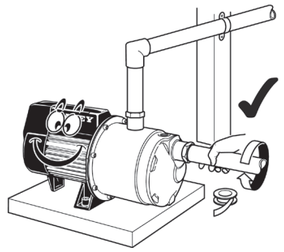
IP55 Compliant Connection

For some installations, such as wet areas in dairies, the pump is required to be IPX5 compliant. The Dynaflo® HS pump is IP55 compliant.

Pipe Connections

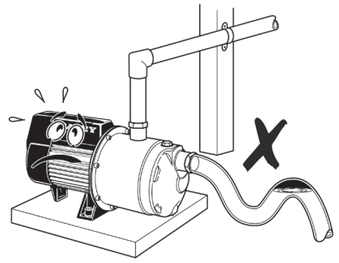


For best performance use P.V.C. or polythene pipe at least the same diameter as the pump's inlet. Larger diameter pipe may be used to minimise resistance to flow when pumping longer distances.



Use unions at pipe connections to enable easy removal and servicing. Use sufficient tape to ensure airtight seal and hand tighten only, do not screw connections all the way into suction port. To prevent strain on pump thread always support heavy inlet and outlet pipes.
Lay suction pipe at a constant gradient to avoid air pockets which may reduce pump efficiency.

NOTE: Suction leaks are the largest cause of poor pump performance and are difficult to detect. Ensure all connections are completely sealed using thread tape only. DO NOT USE SEALING COMPOUNDS OR PIPE DOPE.

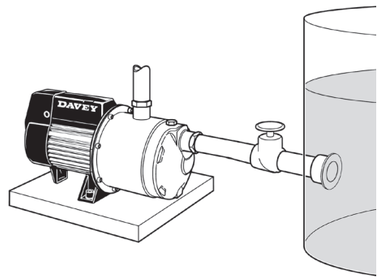


Connection to your Water Source

ABOVE GROUND WATER SOURCES

Installations with flooded suction require a gate valve so water supply can be turned off for pump removal and servicing.

Leave the in-built one-way check valve installed to avoid water draining back past the pump while not in operation and causing possible pump damage.

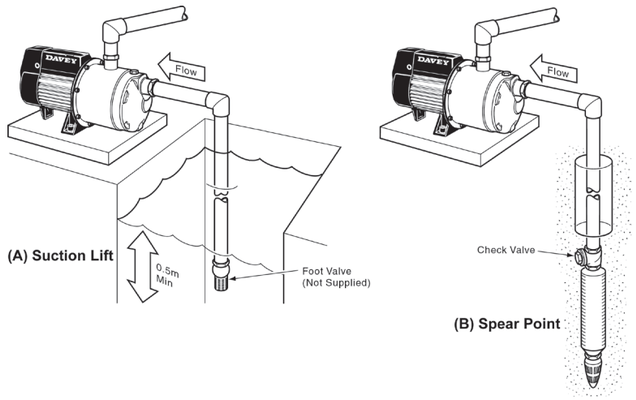


Connection to your Water Source

BELOW GROUND WATER SOURCES

NOTE: HS models are fitted with an in-built suction check valve which should be removed on all suction lift applications and a foot valve or check valve installed in the suction pipework as appropriate.

Whenever the installation position of the pump is higher than the lowest water level, a foot valve fitted to the end of the suction pipe as illustrated in (A) below is required. Ensure that the foot valve is at least $^1/_2$ metre below minimum water level.



SPEAR POINT INSTALLATIONS

When a Dynaflo® HS is installed on a spear or well point, the in-built check valve **MUST** be removed and a check valve fitted immediately on top of the spear point itself, as shown in (B) above.

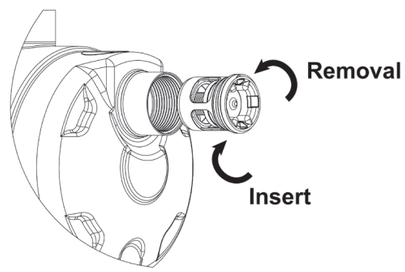
NOTE: DO NOT install the check valve at the pump or at the top of the well. DO NOT run the pump without water.

NOTE: Be certain to select the spear point to suit the well conditions and regulate the flow rate from the pump accordingly.

Spear Size	Mesh	Approx. Max. Capacity of Spear Point
$1^1/_4$" (32mm)	60	15 - 23 l/min or 200 - 300 gal/hr
$1^1/_2$" (38mm)	60	23 - 38 l/min or 300 - 500 gal/hr
2" (50mm)	60	38 - 75 l/min or 500 - 1000 gal/hr

Removal of in-built check valve

If your installation requires the removal of the in-built check valve or the in-built check valve requires removal for servicing, this can be achieved without difficulty.
The in-built check valve is a cassette design, which is screwed in through the suction inlet.



Removal of the check valve cassette is achieved by inserting any suitable tool (eg: a pair of pliers or the handle from an adjusting spanner) into the inlet.
The check valve cassette has various ribs and recesses to allow a variety of nonspecific tools to be used in the removal or insertion process.