



**Installation and  
Operating Instructions  
for Davey  
JY Jet Pumps**

**High Pressure Transfer Pump**

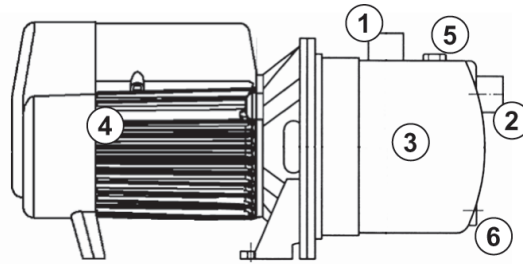


Please pass these instructions on to the operator of this equipment.

Congratulations on your purchase of a high quality, Davey high pressure water transfer pump. All components have been designed and manufactured to give trouble free, reliable operation.

**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 JY Jet 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 handle flammable, corrosive and other materials of a hazardous nature is specifically excluded.**

1. Delivery outlet - 1" BSP(M)
2. Suction inlet - 1" BSP(F)
3. Pump body
4. Motor
5. Priming port and plug
6. Drain port and plug



## Choosing a Site

Choose a site with a firm base and 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 JY Jet Pump

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

The pump should be horizontally 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.



### EARTH CONNECTION

The pump power lead includes an earth wire which **MUST** be correctly connected to a suitable earth on the electrical supply.

## Pipe Connections

For best performance use P.V.C. or polythene pipes at least the same diameter as the pumps inlet and delivery outlet openings. Larger diameter pipe may be used to minimise resistance to flow when pumping longer distances.

Use unions as pipe connections to enable easy removal and servicing. Use sufficient tape to ensure airtight seal and hand tighten only. To prevent strain on pump threads always support heavy inlet and outlet pipes. If there is a likelihood the water supply may contain solid particles such as pieces of plant or vegetable matter, a suction strainer should be installed before the pump to avoid blocking of the pump. Lay suction pipe at a constant gradient to avoid air pockets which 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.**

## Installations with a Suction Lift

Installations with a suction lift over 1 metre require a good quality foot valve to avoid loss of prime.

## Installations with Flooded Suction

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



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

## Abrasive Materials

The pumping of abrasive materials will cause damage to the pump which will then not be covered by the guarantee.

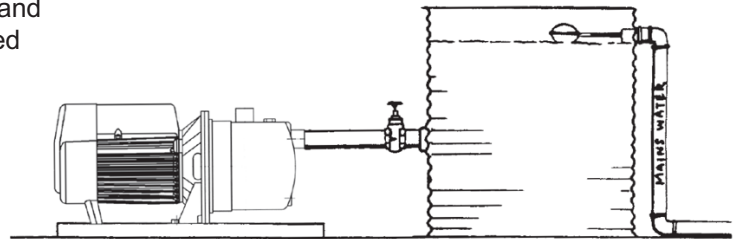


**Water temperature in pump must not exceed 45°C, or damage caused will not be covered by guarantee.**

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

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 Products Pty Ltd cannot accept responsibility for loss or damage resulting from incorrect or unauthorised installations.**

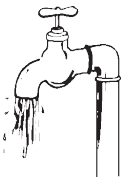


**NOTE - If connecting your JY Jet Pump direct to mains water, the casing pressure (maximum outlet pressure) must not exceed 600kPa (6bar/87psi).**

## Priming and Operation



1. Fill pump and suction line through the pump discharge or priming port (on flooded suction, simply open gate valve to pump).
2. Ensure outlet nearest to pump is open.
3. Ensure all valves in suction line are open and switch on pump at power outlet.
4. Prime should establish almost immediately and a strong flow of water should be evident from the outlet. Allow water to flow for 10-20 seconds to expel air then close outlet and switch off pump.
5. If no flow is evident from tap, switch off at power point and repeat from step 1 ensuring there is an adequate supply of water available to the pump.



## Trouble Shooting Check List

### MOTOR DOESN'T START WHEN SWITCHED ON

1. Power not connected.
2. Supply voltage too low.
3. "Over temperature" cut-out tripped.
4. Motor not free to turn e.g. a jammed impeller.
5. Internal motor fault.

# Trouble Shooting Check List

## MOTOR RUNS WHEN SWITCHED ON BUT DOES NOT PUMP

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

## PUMP DOESN'T SUPPLY ADEQUATE PRESSURE

1. Suction lift is too high.
2. Pump impellers partially blocked.
3. Jet blocked.
4. Partially blocked suction line.
5. Wrong pump selected.
6. Change the installation.



**NOTE:** For protection, the pump motor is fitted with an automatic "over temperature" cut-out. Constant tripping of this overload device indicates a problem e.g. low voltage at pump, excessive temperature (above 50°C) in pump enclosure.



**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 pump to cool before attempting to dismantle.



During servicing, use only approved, non-petrochemical based o-ring and gasket lubrication. If unsure, consult your Davey Dealer for advice.



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.

## After Sales Service

For professional after sales service or repair contact your Davey Dealer.

For assistance in locating your nearest dealer contact the Davey International Sales Office.



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

### AUSTRALIA

#### Head Office

6 Lakeview Drive,  
Scoresby, Australia 3179  
Ph: 1300 232 839  
Fax: 1300 369 119  
Email: sales@davey.com.au  
Website: davey.com.au

### INTERNATIONAL

#### Australian Head Office

Ph: +613 9730 9124  
Fax: +613 9753 4248  
Email: export@davey.com.au  
Website: davey.com.au

### EUROPE

ZAC des Gaulnes  
355 Avenue Henri Schneider  
69330 Meyzieu, France  
Ph: +33 (0) 4 72 13 95 07  
Fax: +33 (0) 4 72 33 64 57  
Email: info@daveyeurope.eu  
Website: daveyeurope.eu

### NEW ZEALAND

7 Rockridge Avenue,  
Penrose, Auckland 1061  
Ph: 0800 654 333  
Fax: 0800 654 334  
Email: sales@dpw.co.nz  
Website: daveynz.co.nz

### NORTH AMERICA

Ph: +1 866 328 7867  
Email: export@davey.com.au  
Website: daveyusa.com

### MIDDLE EAST

Ph: +971 50 6368764  
Fax: +971 6 5730472  
Email: info@daveyuae.com  
Website: daveyuae.com