#### **Priming and Operation**

- 1. Fill the pump body with water at the priming hole adjacent to the delivery outlet.
- 2. Replace priming plug and switch on.
- 3. Open gate valve in pump outlet to allow air from suction line to be expelled. With long suction lines it may be necessary to reprime the pump more
- 4. Once prime has been established a strong flow of water out of the pump will be evident. Adjust valve to required flow rate.

#### **Spear Point Installations**

The pumping capacity of your Dynaprime may need to be adjusted to match the water supply available from your bore. This should be done by closing the gate valve in the pump outlet until the flow to the sprinklers is equal to the water available to the spear point.

Be sure to choose the correct spear point to suit your water supply.



Note: If this pump is allowed to continually pump water containing sand or other abrasive material, the effective life of the pump will be shortened.



NOTE: 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.



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.



WARNING: Do not use hydrocarbon based or hydrocarbon propelled sprays around the electrical components of this pump.



In accordance with AS 3350.2.41 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

# WARNING: When servicing or attending pump, always ensure power



WATER PRODUCTS

## struction and Pumps prime Installation ynai **Operating**







operator of this equipment.

these instructions on to the

### **Trouble Shooting Check List**

- a) Motor runs when switched on but does not pump or pumps poorly
  - 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 (due to uneven rise in piping; eliminate humps and hollows).
  - No water at source or water level too low.
  - Valve on suction lines closed.
  - Check valve installed in wrong direction.
  - 7. Suction lift too high.
  - 8. Blocked impeller.
- b) 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 eg a jammed impeller.
  - 5. Internal motor fault.



Note: For protection, the Davey pump motor is fitted with an automatic "over temperature" cut-out. Constant tripping of this overload device indicates a problem eg low voltage at pump, motor overloaded.

ailure and f fail to be c alia, you are entitled to a replacement entitled to have the goods repaired o

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

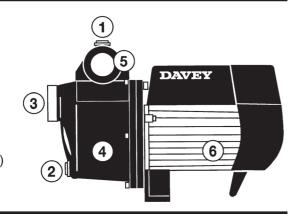
Appropriate details for all of these items are contained in the following Installation and Operating Instructions. Read these in their entirety before switching on this pump. If you are uncertain as to any of these Installation and Operating Instructions please contact your Davey dealer or the appropriate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

Congratulations on your purchase of a high quality, Australian built Davey 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 Dynaprime X201 is designed to handle water containing soft solids to 10mm. It 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.

#### **DYNAPRIME X201**

- 1. Priming Plug
- 2. Drain Plug
- 3. Suction Inlet (1<sup>1</sup>/4" BSPF)
- 4. Pump Body
- 5. Delivery Outlet (11/4" BSPF)
- 6. Motor

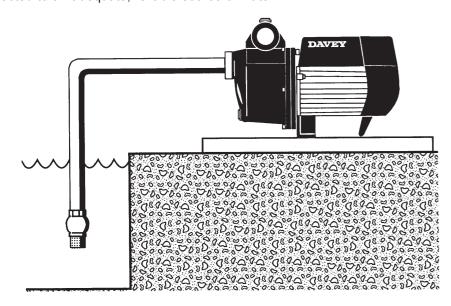




Do not use pipe thread sealing compound on any part of this pump. ONLY use teflon thread sealing tape.

#### **Choosing a Site**

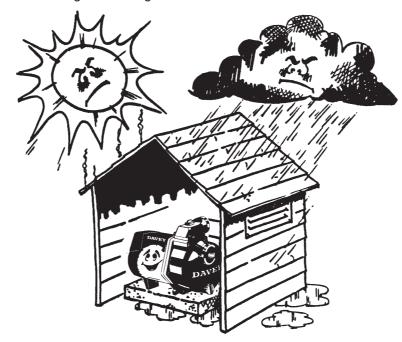
Choose a site with a firm base and as close to the water source as possible with correct power supply. Make sure your Dynaprime pump is always connected to an adequate, reliable source of water.



#### **Housing your Pump**

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

The pump should be horizontally mounted on a firm dry base allowing for drainage, to avoid damage to flooring





WARNING: Some insects, such as small ants, find electrical devices attractive for various reasons. If your pump enclosure is susceptible to insect infestation you should implement a suitable pest control plan.



Power Connections and Wiring must be carried out by an authorised electrician.

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.

#### Type of Piping to be used

It is recommended that polythene piping be used for the pump suction and the delivery lines immediately adjacent to the pump. PVC piping may be used as an alternative to polythene pipe, however, unions should be used with PVC pipe so that the pump may be removed without cutting the piping.

#### **Connection to your Water source**

As your Davey Dynaprime pump has an inbuilt check valve, no external check valve or foot valve is required. (On some suction lifts it may be advisable to fit a foot valve to assist with priming. With a foot valve installed at the bottom of the suction pipe, it may be beneficial to incorporate a "priming tee" in the suction pipework adjacent to the pump to aid in initial priming of the suction line).

Installation of a suction strainer is recommended to prevent large items of foreign matter entering the pump. The suction strainer should have sufficient area so as to not restrict the water flow to the pump. Ensure that the strainer on the end of the suction pipe does not rest in debris or mud at the bottom of your water source as (B) opposite.

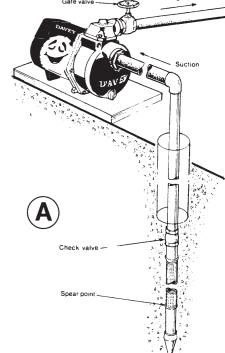
#### **Suction Piping**

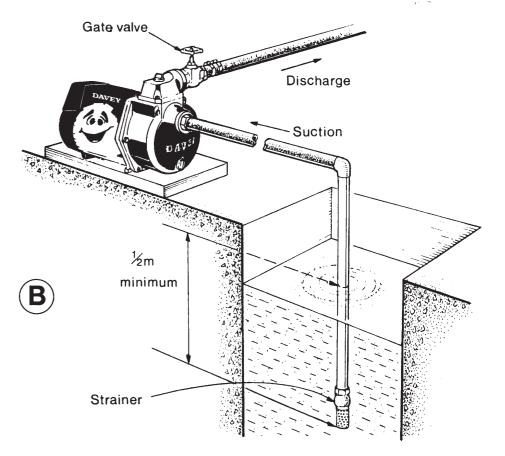
Suction piping should be laid so there is a constant rise from the water source to the pump. Any high spots will cause pockets of air to form which may reduce the efficiency of the system. For best performance use pipe of at least the same diameter as the pump's inlet.

#### **Spear Point Installations**

When installing a Dynaprime on a spear or well point as (A) right, a check valve immediately above the spear will greatly assist pump operation (when repriming).

The Pump may require "topping-up" with water at initial priming after the trapped air in the suction pipe between pump and water level is pumped out.







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.

#### **Connection of Outlet Pipework to Pump**

To control the flow of water from the pump it is recommended that a gate valve be installed on the pump outlet - this is particularly advisable when there is a possibility of the pump delivering water at a faster rate than may be available at the source (e.g. spear point, spring, well etc.). Use thread tape at all times and do not over-tighten fittings. For best performance use pipe of at least the same diameter as the pump outlet.