

Shallow Well Jet Pump Package

Shallow Well Jet Pump c/w Mascontrol

Operating & Installation Instructions

The Pump Package utilizes the Mascontrol and a single stage pump. The Mascontrol monitors both flow and pressure, controlling the operation of the pump automatically. The package maintains constant water pressure during operation. No pressure tank or switch required. No adjustment or maintenance is required.

This manual is a supplementary manual to the Mascontrol manual and you must consult the Mascontrol manual for wiring diagrams and control functions.

Package Item #	Jet Pump Model	Pump Connections		HP	Pump Material of Construction	Mascontrol	Voltage
		Inlet	Outlet				
6072	DSW500 (Shallow Well)	1" NPT	1" NPT	1/2	Cast Iron	1" NPT, 50 FT	115/230
8102	DSW500SS (Shallow Well)	1" NPT	1" NPT	1/2	Stainless Steel	1" NPT, 50 FT	115/230
8103	DSW750SS (Shallow Well)	1-1/4" NPT	1" NPT	3/4	Stainless Steel	1" NPT, 50 FT	115/230
8104	DSW1000SS (Shallow Well)	1-1/4" NPT	1" NPT	1	Stainless Steel	1" NPT, 50 FT	115/230

Before You Start

Check national and local sanitary regulations and electrical codes. Their guidelines are provided for your protection so follow any applicable recommendations.

Ensure that your source of water is clear of all dirt and grit before installing your system.

Inspect Your Pump

Check the contents of your pump carton to ensure the following parts are included and undamaged.

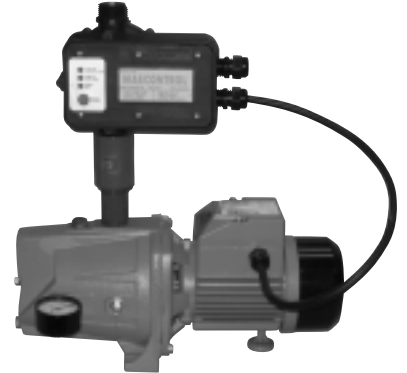
Your carton should contain:

- the pump
- 1" x 1" coupler
- 1" x 3" nipple
- 2 ft of 14 gauge wire with two liquid tight fittings inserted
- Mascontrol
- Mascontrol Installation and Owners Manual
- 1 liquid tight connector for Mascontrol

To complete the installation, you will need piping of appropriate length and size, electrical fused disconnected switch and wiring supplies, plus any adapters, fittings and clamps necessary for pipe connections.

Select a Location

Choose a location for your package that is clean, well ventilated and offers protection from weather, flooding and physical damage. A suitable location may be a dry basement. Ideally, the package should be as close as possible to a power source. A solid, level foundation should be available for mounting the system.



Cast Iron Jet Pump with Mascontrol



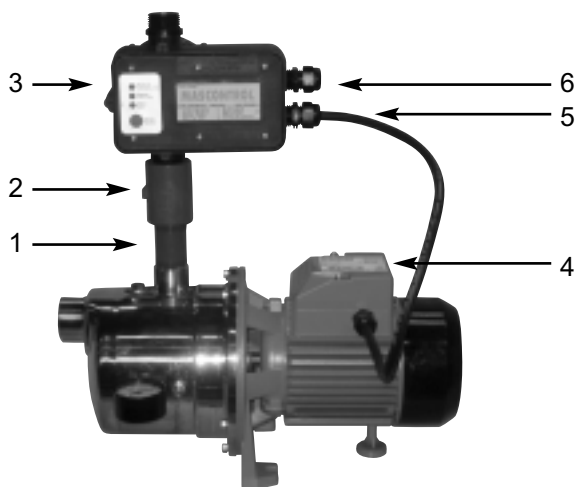
Stainless Steel Jet Pump with Mascontrol

Power Supply

All packages should be wired to a separate circuit through a fused disconnect switch or circuit breaker. The pump may be connected to a 115 volt supply with a 20 amp fuse or to a 230 volt supply with a 15 amp fuse. Instructions for wiring the pump motor to the power supply can be found on the motor name plate. "Slow blow" fuses are recommended in all installations. All motors supplied with pumps have built-in thermal overload protection with automatic reset. See Mascontrol Installation Manual for correct wiring diagrams.

Note: the pump motor comes preset to 115 VAC. Should the installation require 230 VAC, the dual voltage motor must be switched over to accept the alternate power supply. Check the pump motor label for information on how to switch the motor from 115 VAC to 230 VAC.

Figure 1: Pump c/w Mascontrol Package Installation



1. Apply teflon tape to one side of the 1"x 3" nipple threads and install it at the outlet of the pump.
2. Apply teflon tape to the other side of the 1"x 3" nipple threads and install the 1"x1" coupler to it.
3. Apply teflon tape to the Mascontrol threads and install it over the 1"x1" coupler
4. Install one end of the wire (having 5/8" liquid tight fitting inserted) inside the capacitor box of the pump (refer to figure 2 of this manual) and install the liquid tight fitting to the capacitor box.
5. Install the other end of the wire (having 1/2" liquid tight fitting inserted) on to the Mascontrol (refer to figure 3 and 4 of this manual or see Mascontrol installation and owners manual for more wiring diagrams).
6. Install the power cord (not supplied with the pump) to the Mascontrol (refer to figure 3 and 4 of this manual or see Mascontrol installation and owners manual for more wiring diagrams) and install the 1/2" liquid tight fitting (supplied with the installation kit) to the Mascontrol.
7. Install the appropriate fittings and pipes to the inlet of the pump and outlet of the Mascontrol.

Figure 2: Installation Wiring Diagram – Capacitor Box of the Pump

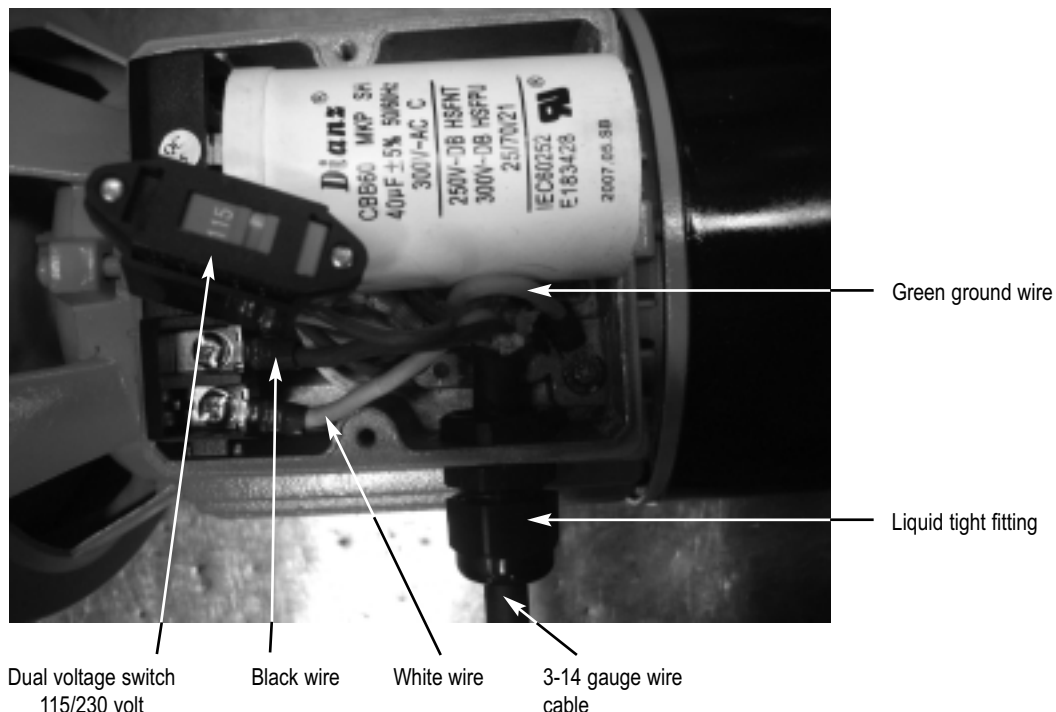


Figure 3: Standard - Installation Wiring Diagram – 115 VAC Single Phase Two Wire Pumps

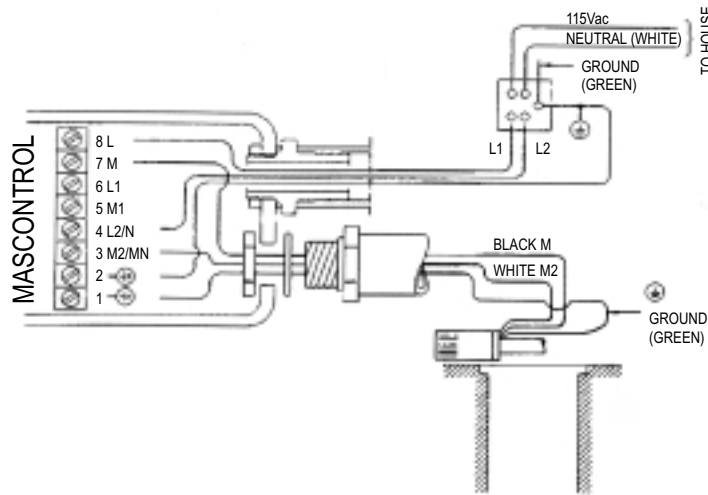


Figure 4: Standard - Installation Wiring Diagram – 230 VAC Single Phase Two Wire Pumps

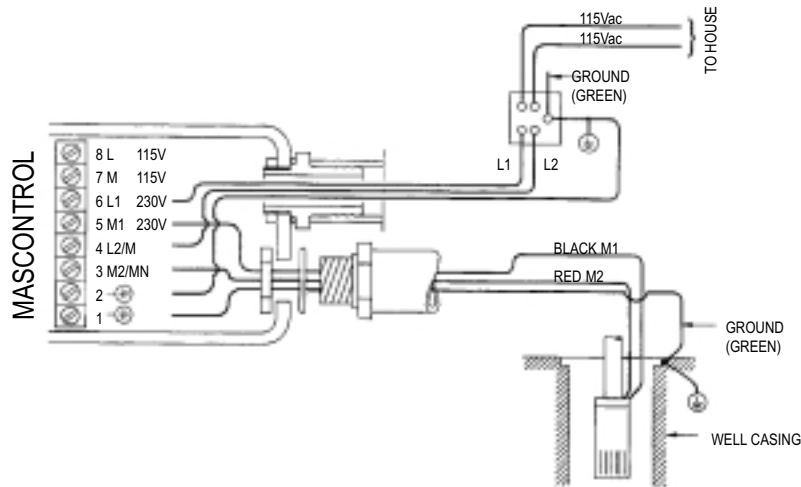
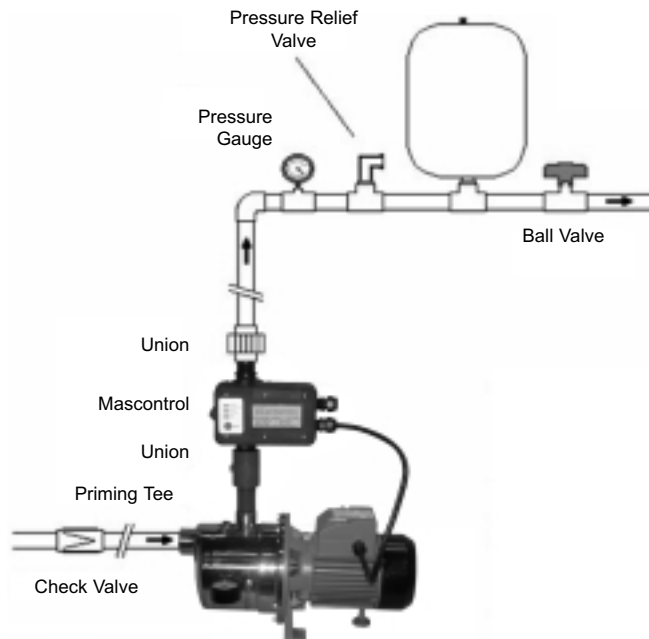


Figure 5: Typical Installation Diagram – Pump Package

The pressure tank is optional. The tank, is used, provides a "cushion" for small demands such as icemakers, reverse osmosis systems, leaks, glasses of water, etc. The tank precharge should be set at 35 to 40 psi or generally not less than 20 psi below the system pressure. With single stage surface pumps system pressure is usually between 50 and 60 psi. Do not install a pressure tank larger than 8.6 gallons gross volume as the system may perform like a standard tank set-up. Be sure to install a ball valve on the main after the Mascontrol for system maintenance. Gate valves may be used instead of ball valves. Remove the pressure switch from the pump (if supplied) and wire the Mascontrol directly to the pump.



Trouble Shooting Checklist

Problem	Cause	Solution
1. Motor will not run	a. Power supply failure b. Burned out motor	- Make sure power is turned on. Check for blown fuses, loose or broken wires, low voltage supply, malfunctioning pressure switch. - Check Mascontrol wiring guide. - Replace. Check with dealer for warranty coverage.
2. No water supply	a. Motor not running	- See No. 1 above.
3. Motor overload - kicks out	a. Improper wiring b. Voltage too low c. Inadequate ventilation	- Check wiring diagram to make sure connections are properly matched to voltage. - Check at pump with voltmeter. Make sure wiring is heavy enough for long runs from power supply. - Take steps to increase air flow through pump location or air circulation around motor.
4. Water supplied is below rated amount	a. Offset piping too small	- Replace suction and drive lines with larger diameter pipe.
5. Pump cycling too often	a. Hidden water loss	- Check for leaky faucets and pipes drawing from tank. Also check for leaks in foot valve bleeding water back to well.
6. Air delivered through faucet at low pressure	a. Leak in suction line	- Check by plugging pump discharge and screw Schrader valve into tapping on right hand side of pump. Raise pressure to about 80 lbs. with tire pump. If pressure falls off quickly, leak is present. Inspect all connections and pipe sections. Check with soapsuds.

GUARANTEE

This pump is guaranteed to do the work for which it is intended when properly installed and operated. It is warranted to be free of defects in material and workmanship for a period of two years from date of manufacture. The only exception shall be when proof of purchase or installation is provided and then the warranty period shall be from the date thereof.

How To Claim This Warranty

The dealer from whom you purchased your pump has a thorough knowledge of its operation and maintenance. If trouble develops, please consult the dealer.

If a pump or part should prove defective within 24 months, return it to your dealer, transportation charges prepaid. The repair will be made or a replacement pump or part will be supplied free of charge. The serial number of the pump must be supplied.

This warranty does not obligate the manufacturer to bear the cost of field labor or transportation in connection with the replacement or repair of defective parts or units, nor shall it apply to any product upon which repairs or alterations have been made, unless authorized by the manufacturer.

The manufacturer shall in no event be liable for consequential damages or contingent liabilities arising out of the failure of any product, its power unit or its accessories to operate properly. No express, implied or statutory warranty other than herein set forth is made authorized to be made by the manufacturer.