

# FREQUENTLY ASKED QUESTIONS CONCERNING **Jet Pumps**

## Q1. Why is the jet pump not building pressure?

**A1.** The jet pump is not building pressure due to a few different reasons, there is a leak in the suction line, the incorrect size venturi tube is installed or the venturi tube is installed incorrectly.

## Q2. Why is the pump producing a low volume of water?

**A2.** The jet pump is producing a low volume of water because of one or more of the following reasons:

- The pump is not primed correctly, please reprime pump and try again.
- The suction lift is too high or too long, move the pump closer to the water source, the lift for a shallow well application should be no more then 25 foot and 70 foot for deep wells.
- There is a hole or leak in the suction line, review suction line and repair or replace where necessary.
- The foot valve or suction line is not submerged deep enough into the water.
- The foot valve is too small, replace foot valve and match the valve sizing to the size of the pipe or larger.
- The voltage conversion switch is incorrect, confirm your voltage and be sure that the conversion switch correlates.
- The casting gasket is leaking, please replace.

## Q3. Why is the pump short cycling?

**A3.** The jet pump could be short cycling because of the following:

- · Leak in the tank
- Bad air volume control
- The pressure switch installed in faulty
- There is a leak on the discharge side of the tank
- There is a leak in the suction pipe
- A check valve and/or foot valve installed in the system is leaking
- The pressure tank could be water logged
- The jet pump is furthur then 4' from the pressure tank
- There are high friction loss valves between pump and tank

#### Q4. Why is the pump tripping on thermal overload?

**A4.** One of the following reasons could be why the jet pump is thermal overloading:

- The wrong voltage is connected to the jet pump
- · The jet pump has been wired incorrectly
- There is not enough ventilation for the jet pump
- · The incorrect electrical wire size is being used

## Q5. How do I wire this jet pump?

**A5.** The wires from your power source will need to be attached to the pressure switch and then wires between the pressure switch and the motor must be connected, ensure the wires are connected to the motor for the proper electrical source voltage, i.e. 115V or 230V. Also, please be sure the conversion switch reads the corresponding voltage.

#### Q6. What wire size do I need for this pump?

**A6.** The wire size we recommend will depend on the voltage you are running and also the distance from the pump to the electrical source, please refer to the graph below.

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Distance	Recommended Wire Size (AWG)	
	115V	230V
0-50 ft	12	14
50 - 100 ft	12	14
100 - 150 ft	10	12
150 - 200 ft	8	12
200 - 300 ft	6	10

#### Q7. Why will the pump not prime?

**A7.** The jet pump is not priming due to there being a leak in the suction line, please review your suction line, you do not have a check valve and/or foot valve installed in your suction line or your check valve and/or foot valve has failed.

## Q8. What size does my pressure tank need to be?

**A8.** We require that all pumps have a minimum of one minute run time therefore the smallest pressure tank size we suggest for our jet pumps is 20 gallons.

## Q9. Why is this jet pump cavitating?

A9. The jet pump is cavitating because you have a leak in your suction line, please review your suction line.

## Q10. Why is the pump losing its prime?

**A10.** The jet pump is not keeping its prime due to there being a leak in the suction line or you are having an operation issue with your check valve and/or foot valve. Please review the suction line for leaks and be sure your check valve and/or foot valve is operating correctly.

## Q11. What voltage does this pump run on?

**A11.** We manufactured our jet pumps to be able to run on either 115 or 230 volt current. Please be sure that the conversion switch reads the correct voltage.

## Q12. What is the maximum depth a "shallow" jet pump can be used for?

**A12.** The maximum depth a shallow well jet can pump from is 25 foot.

## Q13. What is the maximum depth a "deep" jet pump can be used for?

A13. The maximum depth a deep well jet can pump from is 70 foot.

#### Q14. How to determine what size horsepower jet pump should be used?

**A14.** The higher the horsepower the pump is, the more water it will pump at once. You will want to take into consideration the amount of bathrooms and people you have in the home, the higher the number the higher horsepower pump you will want to purchase. For example, if you have a small home with one bathroom and a few people, you will want to purchase the 1/2 HP jet pump.

## Q15. Should a check valve or foot valve be used with a jet pump?

**A15.** We suggest that a check valve or foot valve is utilized in the suction line as close to the water source as possible. The valve will keep the pump primed between uses, if you do not install one the pump will need primed each time it is used.