



Your pump has been carefully packaged at the factory to prevent damage during shipping. However, occasional damage may occur due to rough handling. **Carefully inspect your pump** for damages that could cause failures. Report any damage to your <u>carrier or your point of purchase.</u>

**BRASS IMPELLER** 

MODEL 700506Z 700508Z 700516Z 700518Z SPRINKLER PUMP

Please read these instructions carefully. Failure to comply to instructions and designed operation of this system, may void the warranty.

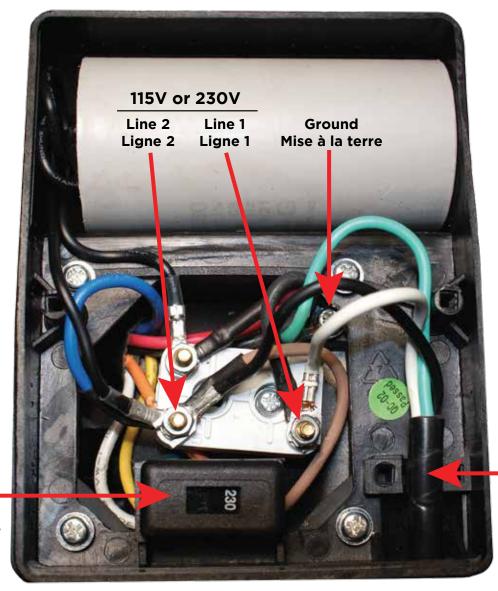


# 700506Z - 700508Z 700516Z - 700518Z

# Wire diagram

# Diagramme de branchement

Connect your electrical supply line to the appropriate connectors as per this diagram, then slide the voltage selector in accordance with the voltage of your electrical supply line. Brancher votre câble d'alimentation électrique aux bornes appropriés tel qu'indiqué, puis glisser le sélecteur de voltage selon la tension de votre alimentation électrique.



Voltage selector 115-230V

Sélecteur de voltage 115-230V Electric supply line

Câble d'alimentation électrique

#### **SAFETY INSTRUCTIONS:**

This fine pump that you have just purchased is designed from the latest in material and workmanship.

Before installation and operation, we recommend the following procedures:

- Check with your local electrical and plumbing codes to ensure you comply with the regulations. These codes have been designed with your safety in mind. Be sure you comply with them.
- A separate circuit have to be lead from the home electrical distribution panel properly protected with a fuse or a circuit breaker. We also recommend that a ground fault circuit be used. Consult a licensed electrician for all wiring.
- The ground terminal on the three prong plugs should never be removed. They are supplied and designed for your protection.
- Never make adjustments to any electrical appliance or product with the power connected. Do not only unscrew the fuse or trip the breaker, remove the power plug from the receptacle.

# Material required for drilled well application

Pump installation	Pump installation		
Suction line	Discharge line		
<ul> <li>□ Desired length of polyethylene 2" pipe CSA or UL approved, to link up from pumping level to pump.</li> <li>□ 1 2" foot valve (750756).</li> <li>□ 2 2" male adaptors.</li> <li>□ 4 2" stainless steel clamps.</li> </ul>	<ul> <li>□ Desired length of polyethylene 1 1/2" pipe, 100PSI, CSA or UL approved.</li> <li>□ 1 1/2" male adaptor.</li> <li>□ Teflon tape.</li> <li>□ Desired quantity of sprinkler for irrigation</li> </ul>		
☐ Teflon tane.			

#### **Tools**

Screwdrivers, hacksaw to cut pipe, knife to assist in pipe cutting, round file to smooth pipe ends, pipe wrench adjustable wrench to tighten fittings, propane torch and welding material.

#### **APPLICATION:**

- ☐ This pump is designed to be used with automatic sprinkler systems.
- ☐ Ideal for lakes, ponds, for residential, farm and cottage use.
- □ Capacity :

700516Z 700516Z	700518Z 700518Z	Friction loss in pipe not included.
1.5 HP	2.0 HP	
3900	4200	US GPH
3600	3900	US GPH
3300	3600	US GPH
3000	3300	US GPH
	<b>700516Z 1.5 HP</b> 3900 3600 3300	700516Z     700518Z       1.5 HP     2.0 HP       3900     4200       3600     3900       3300     3600

#### **FEATURES:**

- ☐ Easy to prime large pump body.
- ☐ Thermally protected motor, stainless steel shaft, bearing to bearing.
- ☐ Capacity up to 25 sprinklers, 70 GPM US maximum flow, 100' maximum head.
- □ **1.5 HP** 115V/230V AC, 60Hz, 15.2 A/7.6 A (30 A/15 A at start up).
- □ **2.0 HP** 115V/230V AC, 60Hz, 15.6 A/7.8 A (31 A/15.5 A at start up).

#### **INSTALLATION STEPS**

see typical installation diagram in page 6

#### STEP 1

We recommend that you install your pump in a clean and dry location where there is adequate room for servicing at a later date. Protection from freezing temparatures and good ventilation should be considered as well, to provide the pump an environment for long life. Locating the pump as close as possible to the water source will reduce friction losses encountered in the suction pipe.

Friction lossees in the suction pipe must be taken into consideration when the horizontal offset is greater than 50 feet. The suction pipes should be increased from 2" to 2 1/4". This will reduce friction losses and allow the pump to give maximum performance.

**Never run the pump dry.** Damage to the seal may occur. Fill pump body and suction pipe with water before turning on the power.

THE RUN OF THE HORIZONTAL PIPE FROM THE TOP OF YOUR WELL TO THE PUMP MUST BE INSTALLED IN A TRENCH, BELOW THE FROST LEVEL OF YOUR AREA, FOR A YEAR ROUND APPLICATION.

# STEP 2

Cut the desired lenght of poly pipe to run from the top of the well to the pumping level. Smooth the pipe cuttings with your round file. (Check that no cut-out parts are left inside of pipe. This may block the pump injector or impeller).

Tale male adaptor threads with teflon tape and thread adaptor into the foot valve. Slide 2 stainless steel clamps over one end of pipe and use torch to soften pipe. Insert the male adaptor and foot valve into this pipe end. Tighten clamps with screwdriver when cool. For security against leaks, we suggest to install 2 stainless steel clamps on each adaptor.

# STEP 3

Insert the well seal elbow thru the opening of the seal.

Slide 2 stainless steel clamps over the free end of the previously cut pipe and soften pipe with your torch. Attach pipe to the well seal elbow (end protruding at bottom of well seal). Tighten clamps with screwdriver when cool.

# STEP 4

Install the well seal and piping assembly into your well casing. Tight down the well seal bolts using your adjustable wrench.

To facilitate servicing at a later date, you may use a pitless adaptor and a sealed well cap instead of an elbow and a well seal as described in steps 3 and 4.

#### STEP 5

Install your pump on a sound foundation, as close as possible to the water. Locate the suction inlet in the front of the pump body. Thread an adaptor into inlet using teflon tape. Do not over tighten.

## STEP 6

Cut the desired length of pipe from pump location to the well seal and connect both ends using the previous way, with stainless steel clamps and torch.

Do not fill in your trench until you have checked for any leaks in your connections or trouble in your water system.

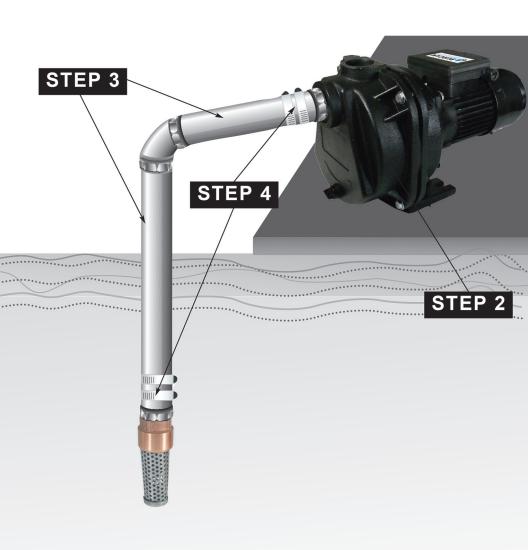
# STEP 7 For sand or well point

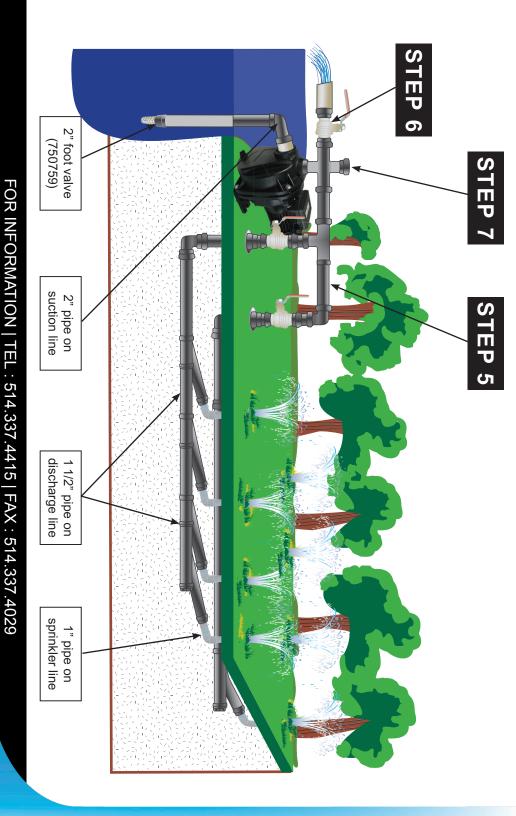
Sand or well points are limited to areas where water bearing sand or gravel lies below the surface, and where there are no boulders or rocks to interfere with the driving into the ground of the point.

The amount of water any "one" well point will supply is usally rather limited. Sometimes, it is necessary to use more than one point to increase the supply of water entering to the pump's suction.

THE IMPORTANT INSTALLATION STEP IN USING WELL POINTS IS THAT A CHECK VALVE MUST BE USED IN THE SUCTION PIPE LEADING TO THE SUCTION INLET, AS CLOSE TO THE PUMP AS POSSIBLE. TO KEEP LINE AND PUMP WELL PRIMED.

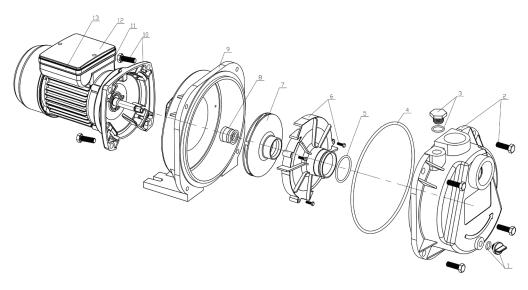
# TYPICAL PUMPING INSTALLATION DIAGRAM





# **REPAIR PARTS**

REF	F. PART	DESCRIPTION	REF	F. PART	DESCRIPTION
1	710936	Drain plug with "O" ring	8	750943	Mechanical seal
2	710937	Pump body with bolts	9	710944	Seal plate
3	710938	Plug with "O" ring	10	10 710945	Motor & bolts (700506Z - 700516Z 1.5 HP)
4	710939	Pump body "O" ring			
5	710940	Diffuser "O" ring	10	710951	Motor & bolts
6	710941	Diffuser with bolts	10	710951	(700508Z - 700518Z
7	710942	Noryl impeller			2.0 HP)
7	710942B	Brass impeller	11	710946	Connection box base
			12	710947	Connection box cover
			13	710948	Capacitor



## TROUBLE SHOOTING GUIDE CHECKLIST

NEVER MAKE ADJUSTMENTS TO ANY ELECTRICAL APPLIANCE OR PRODUCT WITH THE POWER CONNECTED. DON'T JUST UNSCREW THE FUSE OR TRIP THE BREAKER, REMOVE THE POWER FROM THE RECEPTACLE.

TROUBLE	PROBABLE CAUSE	ACTION
Motor does not run.	Switch is off position Blown fuse Tripped breaker Defective motor	Turn switch to on position Replace Reset Replace
Motor runs but no water is delivered.	Pump not primed Leaky suction line Foot valve plugged Water level below foot valve Suction lift to great Improper voltage	Prime with clean water Check pipe and pipe connections Clean Check foot valve level Water level lower than lift capacity Check voltage
Pump does not deliver to full capacity.	Water level below foot valve Excessive friction in pipe Improper voltage	Check foot valve level Too small or dirty pipe Check voltage
Air spurts from fawcets.	Leaky suction line Gaz in water	Check pipe and pipe connections Check and consult factory

#### TO THE END CONSUMER

If you have any problems with the product, before advising the store, where you've purchased the pump, please contact us at **514 337-4415**, and ask for our sales department, and they will be pleased to help you with any questions you might have, concerning your installation.