

Rx Clear™

LITTLE NIAGARA & NIAGARA SERIES ABOVE GROUND POOL PUMPS

INSTALLATION & OPERATION MANUAL



RX CLEAR™
Little Niagara ½ HP Above
Ground Pump
MLA- PM1-LN05



RX CLEAR™
Niagara 1 HP Above Ground
Pump
MLA-PX1-NG10



RX CLEAR™
Niagara 2 HP
Above Ground Pump
MLA-PX1-NG20

Notice: This manual contains important information and must be kept for reference.
Installers: after installation is complete this manual must be given to owner / operator of
equipment.





Millstream
Distribution LLC

Millstream Distribution LLC
1-800-253-4775
www.millstreamdstr.com


SAFETY INFORMATION

READ THESE INSTRUCTIONS THOROUGHLY BEFORE OPERATING YOUR FILTER. REFER TO PRODUCT DATA PLATE(S) FOR ADDITIONAL OPERATION INSTRUCTIONS AND SPECIFICATIONS.

 **WARNING** To reduce risks of injury do not permit children to use this product unless they are closely supervised at all times.

 **WARNING** **Risk of Electric Shock**

- Hazard voltage. Can shock, burn, or cause death. To reduce the risk of electric shock, do NOT use an extension cord to connect unit to electric supply. Provide a properly located outlet. It is required that licensed electricians do all the electrical wiring.
- To reduce the risk of electric shock, replace damaged cord immediately. Do NOT bury cord. Locate cord to prevent abuse from lawn mowers, hedge trimmers and other equipment.
- Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact an electrician only if you cannot verify that the receptacles are protected by a GFCI.
- Failure to bond pump to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation instructions and consult a licensed electrician on how to bond pump. Contact a licensed electrician for information on electrical codes for bonding requirements.
- Important – Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

 **WARNING** **Suction Entrapment Hazard.** Drain covers that are damaged, broken, cracked, missing, or unsecured can cause severe injury and / or death due to entrapment. Entrapment hazards are:

- *Hair Entrapment* – Hair can become entangled in suction outlet cover.

- *Limb Entrapment* – A limb inserted into an opening of a suction outlet or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.
- *Body Suction Entrapment* – A pressure applied to a large portion of the body or limbs can result in an entrapment.
- *Evisceration / Disembowelment* – A negative pressure applied directly to the intestines through an unprotected suction outlet or suction outlet cover which is damaged, broken, cracked, missing, or unsecured can result in evisceration / disembowelment.

 **WARNING**

Suctions in drains and suction outlets can cause:

Drowning, disembowelment, hair or body entrapment, severe injury, and death. Disembowelment, entrapment, or drowning is possible when body parts or hair come in contact with damaged, broken, cracked, missing, or unsecured drain covers and suction outlets. Suction from pumps with only one drain or suction outlet can cause disembowelment, entrapment, or drowning. Pumps for pools and spas require two (2) functioning suction outlets at least three (3) feet apart, on two (2) walls or on the floor and one (1) wall of the pool or spa. Installation of pump and suction outlets must be in compliance with all applicable local building codes. Replace damaged, broken, cracked, missing, or unsecured drain covers and suction outlets immediately.

 **WARNING**

Hazardous Pressure. Pool and spa water circulation systems operate under hazardous pressure during start-up, normal operations, and after pump shut-off. Stand clear of circulation system equipment during pump start-up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cove due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation system, all systems and pump controls must be in off position and filter manual air relief valve must be in open position. Before starting system pump, all system valves must be set in a position to allow system

water to return back into pool. Do not change filter control valve position while system pump is running. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air or air and water) is discharged. All suction and discharge valves **MUST** be **OPEN** when starting the circulation system. Failure to do so could result in severe personal injury and / or property damage.

 **WARNING**

Separation Hazard. Failure to follow safety and operation instructions could result in violent separation of pump components. Strainer cover must be properly secured to pump housing. Do not operate pool and spa circulation system if a system component is not assembled properly, damaged, or missing. Do not operate pool and spa circulation system unless filter manual air relief valve body is in locked position in filter upper body. All suction and discharge valves **MUST** be **OPEN** when starting the circulation system.

Failure to do so could result in severe personal injury and / or property damage. Never operate or test the circulation system at more than 25 PSI.

 **WARNING**

Fire and Burn Hazard. Motors operate at high temperatures and if they are not properly isolated from any flammable structures or foreign debris they can cause fires, which may cause severe personal injury or death. It is also necessary to allow the motor to cool for at least 20 minutes prior to maintenance to minimize the risk for burns.

 **WARNING**


DO NOT allow anyone under the influence of drugs or alcohol use your pool, pool filter, pool pump, or any other pool products.

INSTALLATION INSTRUCTIONS

List of tools that are required for the assembly / installation process that is not included:

- 7/16 open or ratchet wrench
- Teflon tape
- PVC Flex or filter hose (to make pump connection to filter and pool)
- Hose connectors
- Lubricant
- Hose Clamps

Important: The pump has already been mounted to the base at the factory. Hardware will need to be tightened before installation or operation of pump. Use a 7/16 wrench to do so. Do not over tighten; this will result in a cracked base.

 **WARNING** Risk of Electrical shock can result in death or serious injury

 **WARNING** Electrical current must be AC, 115 volts, 60 hertz

1. Locate the system below the pool waterline, for best pump performance.
2. Install pump on a firm, level base or pad to meet all local and national codes. The field supplied base or pad must be level.
3. Though the pump is designed for outdoor use, it is strongly advised to protect the electrical components from the weather. Select a well-drained area, one that will not flood when it rains. Pump motors require free circulation of air for cooling. **DO NOT** install pump in a damp or non-ventilated location.
4. Use Teflon tape to seal threaded connections on molded plastic components. All plastic fittings must be new or thoroughly cleansed before use. **NOTE: Do NOT use Plumber's Pipe Dope as it may cause cracking of the plastic components.**

NOTE: When applying Teflon tape to plastic threads, wrap the entire threaded portion of the male fitting with one to two layers of tape. Wind the tape clockwise as you face the open end of the fitting, beginning at the end of the fitting.

5. The pump suction and outlet ports have molded-in thread stops. Do NOT attempt to force hose connector fitting past this stop. It is only necessary to tighten fittings enough to prevent leakage. Tighten fitting by hand. Use care when using Teflon tape as friction is reduced considerably; **do NOT over-tighten** fitting or you may cause damage. If leaks occur, remove connector, clean off old Teflon tape, re-wrap with one to two additional layers of Teflon tape, and re-install connector.

ATTACH STRAINER HOUSING TO PUMP

Rx Clear™ Little Niagara Series

1. Loosely slide clamp over lower fitting on strainer housing.
2. Connect lower fitting end of strainer housing to end of pump housing by pushing until it fits all the way on.
3. Tighten clamp 1/8" from end fitting.

Note: If pump is leaking where 2 ends connect remove strainer housing and add a layer of Teflon tape around pump housing end and reassemble.

Rx Clear™ Niagara Series

1. Connect lower fitting end of strainer housing to end of pump housing by turning threaded end clockwise into pump end.

Note: Tighten strainer housing by hand only.

If the pump is leaking:

- Verify O-Ring is on strainer house threaded end, free of damage.
- Remove strainer housing and add a layer of Teflon tape around threaded end.

Grounding / Bonding

⚠ WARNING – Risk of Electric Shock. Failure to bond all electrical equipment to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation information and consult a professional electrician on how to bond all electric equipment. Also, contact a licensed electrician for information on local electrical codes.

IMPORTANT – Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

Wiring

If other lights or appliances are also on the same circuit, be sure to add their amp loads before figuring wire and circuit breaker size. (NOTE: If unsure how to do this or if this is confusing, consult a licensed electrician). Use the load circuit breaker as the Master On-Off switch.

NOTE: if you do not use conduit when wiring motor, be sure to seal wire opening on end of motor to prevent dirt, bugs, etc., from entering.

START UP INSTRUCTIONS

⚠ WARNING – NEVER run pump dry. Running pump dry may damage seals, causing leakage and flooding. Fill strainer housing with water before starting motor.

⚠ WARNING – Do NOT add chemicals to pool/spa system directly in front of pump suction. Adding undiluted chemicals may damage pump and voids warranty.

⚠ WARNING – Before removing strainer cover:

1. **STOP PUMP** before proceeding.
2. **CLOSE VALVES** in suction and outlet pipes.
3. **RELEASE ALL PRESSURE** from pump and piping system.

⚠ WARNING – If pump is being pressure tested, be sure pressure has been released before removing strainer cover.

Priming Pump

1. Fill strainer housing with water to suction pipe level. NEVER operate the pump without water. Water acts as a coolant and lubricant for the mechanical shaft seal.
2. Clean and lubricate strainer cover O-ring, each time it is removed.
3. Clean and inspect O-ring; re-install on strainer cover.
4. Open all valves before starting system.
5. Release all air from filter and piping system.
6. With suction and outlet valves open and water source higher than the pump and flowing, pump will prime itself.

If pump does NOT prime within ten minutes, stop motor and determine cause. Be sure all suction and discharge valves are open when pump is running. See Troubleshooting Guide.

WINTERIZATION

- ⚠ WARNING - Explosion Hazard.** Purging the system and compressed air can cause components to explode, with risk of severe injury or death to anyone nearby. Use only a low pressure (below 5 PSI), high volume blower when air purging the pump, filter, or piping.
- ⚠ WARNING –** Allowing the pump to freeze will void the warranty.
- ⚠ WARNING –** Do NOT use anti-freeze solutions (except Propylene glycol) in your pool spa system. Propylene glycol is non-toxic and will not damage plastic system components; other anti-freezes are highly toxic and may damage plastic components in the system.
- ⚠ WARNING - Electric Hazard.** To avoid dangerous or fatal electrical shock hazard, turn OFF power to motor before draining pump.

NOTE: Drain all water from pump and piping when expecting freezing temperatures or when storing pump.

1. Drain water level below all inlets to the pool.
2. Remove strainer housing from pump.
3. Remove drain plug from pump housing cover.
4. Disconnect pump from base.
5. Once the pump is drained of water, re-install the drain plug and strainer housing.
6. Store pump in a dry enclosure. Keep motor dry and covered during storage. To avoid condensation/corrosion, DO NOT cover or wrap pump with plastic bags or film.

MAINTENANCE

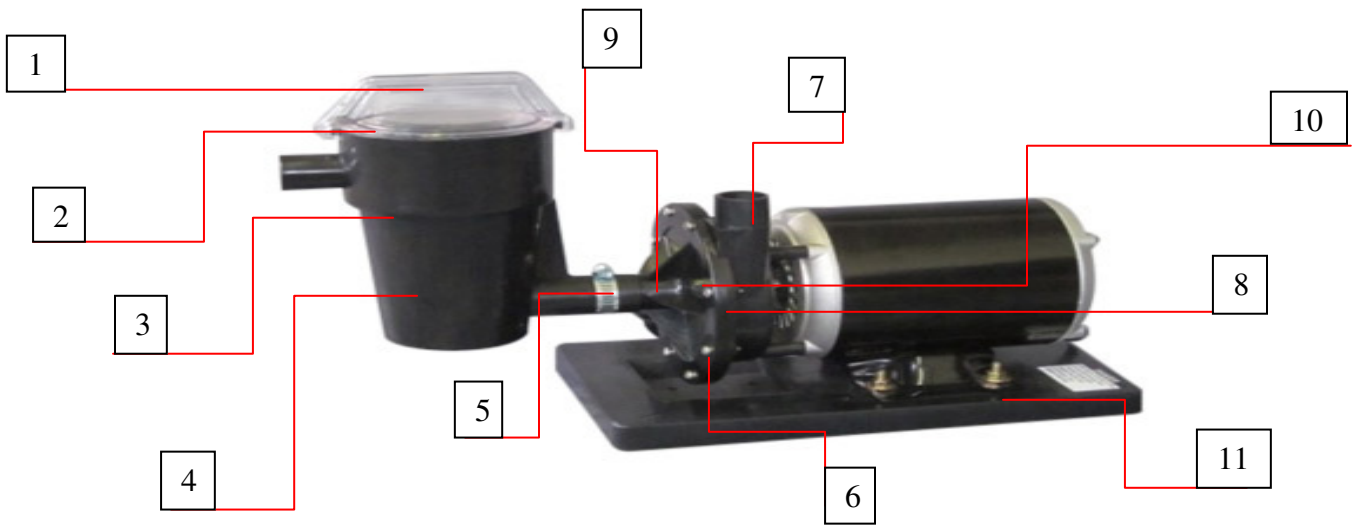
- Clean strainer basket regularly. Do NOT strike basket to clean.
- Keep motor clean. Ensure air vents are free from obstruction.
- Pumps have self-lubricating motor bearings and shaft seals. No lubrication necessary.
- Inspect all O-rings and gaskets regularly and replace as necessary.





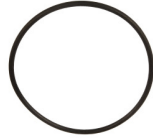
TROUBLESHOOTING

Issue	Suggestion
Motor will not start	<ul style="list-style-type: none"> - Improper/loose wiring - Open switches or relays - Tripped: Circuit breakers, GFCI - Blown fuses - Check timer (if applicable) - Verify shaft and impeller are free of obstruction
Motor shuts off	<ul style="list-style-type: none"> - Undersized/loose wiring or connections - Low voltage - Mechanical binding and electric overload - Overheating
Motor Hums, will not start	<ul style="list-style-type: none"> - Binding of motor shaft or impeller
Pump won't prime	<ul style="list-style-type: none"> - Make sure strainer housing is filled with water - Check all O-Rings and gaskets - Verify it is below water level (Above-ground Pools)
Low flow	<ul style="list-style-type: none"> - Clogged or restricted lines - Check media, backwash if needed - Check motor shaft and impeller - Air leak – check filter and connections
Noisy pump	<ul style="list-style-type: none"> - Air leak - check fittings and connections - Vibration due to improper mounting or base positioning - Check strainer housing for debris

RX CLEAR™ LITTLE NIAGARA PARTS BREAKDOWN

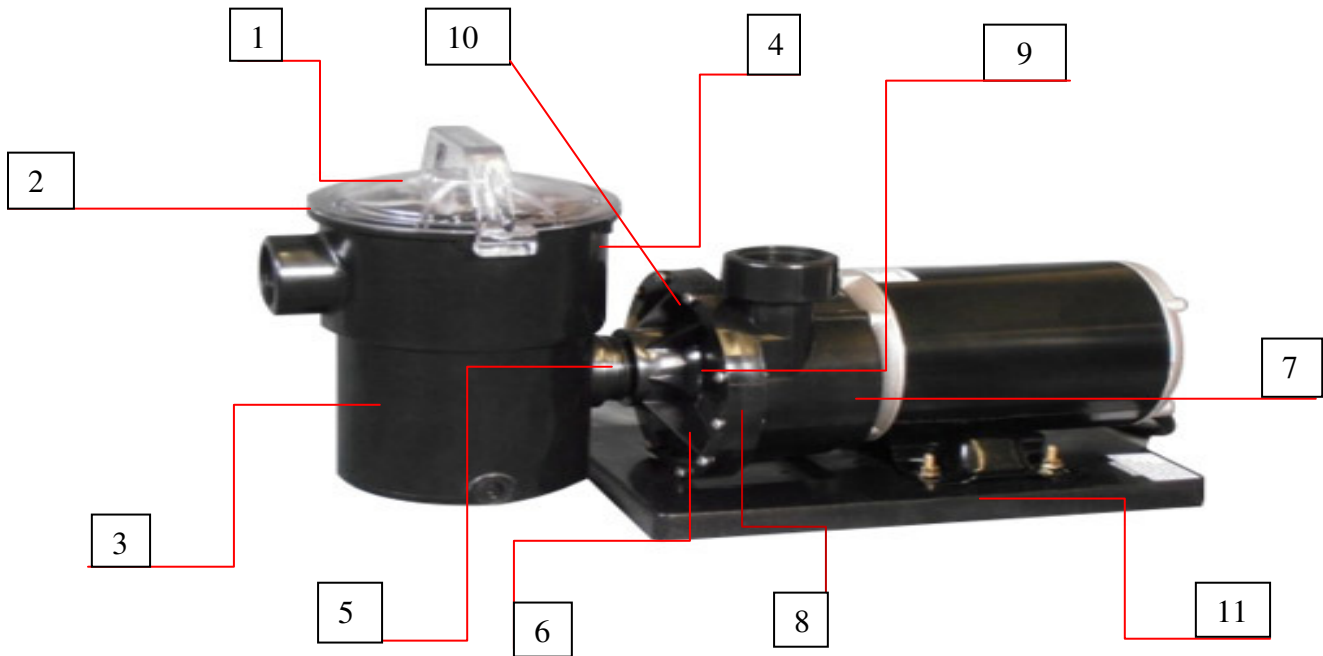
MLA-PM1-LN05



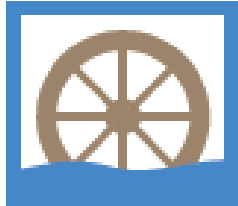
Ref	Part #	Description	Req	Image
1	MLC-SL1-LDBK	Lid for H&L Strainer	1	
2	MLC-SL1-LR00	Lid O-Ring for H&L Strainer	1	
3	MLC-SL1-SHBK	Strainer housing body	1	
4	MLC-SL1-SBBK	Strainer basket for H&L Strainer	1	
5	MLC-F91-HC16	#16 Hose Clamp Zinc	1	
6	MLC-PM1-HCBK	Pump housing cover	1	
7	MLC-PM1-PHBK	Pump housing	1	
8	MLC-PM1-IMBK	Impeller	1	
9	MLC-PM1-SS00	Seal Set	1	
10	MLC-PM1-OR00	Pump O-Ring	1	
11	MLC-M91-MBBK	Universal motor platform	1	

RX CLEAR™ NIAGARA PARTS BREAKDOWN

MLA-PX1-NG10 and MLA-PX1-NG20



Ref	Part #	Description	Req	Image
1	MLC-SX1-LDBK	Lid for HLX Strainer	1	
2	MLC-SX1-LR70	Lid O-ring for HLX Strainer housing	1	
3	MLC-SX1-SHBK	Strainer housing body for HLX	1	
4	MLC-SX1-SBBK	Strainer basket for HLX	1	
5	MLC-SX1-BR00	Bottom seal O-ring for HLX	1	
6	MLC-PX1-HCBK	Pump housing cover	1	
7	MLC-PX1-IMBK	Pump housing body	1	
8	MLC-PX1-IMBK	Impeller	1	
9	MLC-PX1-SS00	Seal Set	1	
10	MLC-PX1-OR55	Pump O-Ring	1	
11	MLC-M91-MBBK	Universal motor platform	1	



Millstream
Distribution LLC

1 **YEAR**
MANUFACTURER'S
LIMITED WARRANTY

RX CLEAR™ LITTLE NIAGARA AND NIAGARA PUMPS

Thank you for your purchase from Millstream Distribution LLC.

The RX Clear™ Little Niagara Pump & RX Clear™ Niagara Pump comes with a 1 year manufacturer's limited Warranty to the original purchaser. This limited Warranty covers manufacturers defect during the first year from date of sale.

The Warranty for the first year from date of sale covers the full cost of replacement of the pump or the cost of replacement parts.

Pumps that fail due to abuse, improper use or handling, alteration, wear and tear or an accident are not covered under this Warranty. Millstream Distribution LLC is not responsible for any labor charges, loss of water or any damages that may occur. The purchaser is responsible for all shipping and handling fees for the replacement of the pump and/or replacement parts covered by the Warranty.

This Warranty gives you specific legal rights. This Warranty provides the exclusive remedy for any damages, including direct, consequential, special or incidental loss or damage when a claim is made under this Warranty. You may have other rights, which may vary from state to state. For example, some states do not permit a limitation on direct, consequential, special or incidental loss or damage.

Warranty claims for the RX Clear™ Little Niagara Pump & RX Clear™ Niagara Pump are handled directly with Millstream Distribution LLC. To make a Warranty claim, contact Customer Service at 1-800-253-4775.