

NEW GENERATION



**AUTOMATIC IN-FLOOR CLEANING & CIRCULATING SYSTEM
INSTALLATION MANUAL**



U.S. Patent No.: 4,188,673, 4,212,088, 4,391,005,
4,592,379 5,265,631 6,311,728 6,314,999 6,360,767
6,810,537 7,089,607 D,531,888 D,532,684 7,178,179

Notice to Installers:

Read and follow these instructions. Give these instructions to the facility owner. Follow all codes and regulations that apply to the design, installation and use of suction outlet fittings.

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PVA0687 004-027-8701-00 REV040513



Paramount

Pool Life. Simplified.

FORWARD

The Paramount In-Floor Systems and the Paramount Automatic Active Main Drain/Debris Removal System are protected patented products and the “methods and installation” of said products are patented. An installer of these products must be trained and licensed by Paramount. Only authorized installers may construct the designed systems. Non-authorized installers are infringing upon the protected patents owned by Paramount and subject themselves to legal litigation.

Paramount’s Active Main Drain/Debris Canister & MDX-R3“ method and concept” is protected from usage of other similar products and others may not construct the system without the direct written authorization and licensing from Paramount.

This Paramount In-Floor Cleaning Systems is the culmination of years of extensive testing and engineering which provides your customers with the most advanced and trouble-free system available. The information contained in this manual is intended to answer some of the most common questions associated with the installation of the System. We urge you to take time to review it thoroughly.

If you have any questions call Toll Free 1.800.621.5886
or visit www.1Paramount.com

IMPORTANT NOTICE

The Paramount In-Floor Systems and other optional Paramount products are protected patented products and the “methods and installation” of said products are patented. An installer of these products must be trained and licensed by Paramount. This manual and documents contained within have been copyrighted and any reproductions are illegal without the written permission of Paramount Pool and Spa Systems.

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PRINCIPLE OF OPERATION

The IN-FLOOR SYSTEM cleans by injecting pressurized water through a series of nozzles strategically located throughout the pool. The pressurized water flow keeps dirt in suspension for removal by the pool filtration system, an active main drain, and an optional in deck debris canister.

Various cleaning nozzles direct water flow in a sequential manner by a water actuated distributor valve. The flow is constant and lasts for approximately 60 seconds. When the flow stops, the nozzle will retract and rotate slightly to a new position so that when it is energized again it will clean a different portion of the pool.

POOL VALET BENEFITS

- Reduction in chemical costs
- Reduction of heating costs
- Elimination of unsightly devices and/or hoses which impair swimmers
- 3 year warranty and replacement under warranty conditions of cleaning nozzles
- Elimination of large leaves and debris with patented ADR active main drain system (Debris Canister & MDX-R3)

If the SYSTEM is installed properly, it will clean the pool. BRUSHING IS NOT COMPLETELY ELIMINATED. Although the system GREATLY reduces the time and cost of maintaining a pool, it DOES NOT ELIMINATE the need to:

- Maintain a proper chemical balance
- Brush the pool periodically
- Clean baskets and filters on a regular basis

In conclusion, the IN-FLOOR SYSTEM is not a 100% cleaner and should never be presented as such.

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SURFACE RETURNS

Surface returns used in conjunction with the IN-FLOOR SYSTEM are a builders option. If all six ports of the water valve are not required, the use of surface returns (particularly in areas with excessive surface debris) is highly recommended.

If all six ports of the water valve are utilized for the floor, steps and/or spa, and automatic surface returns are desired, Paramount recommends a separate pump for the in-floor system. Another option is to oversize the pump and plumb a manual return. The flow through the manual return would have to be regulated in order to insure adequate flow through the floor system.

Surface returns are also advisable in shallow "game" pools. They would enable people to use the pool and have the filtration system operating without the possibility of stepping on the cleaning nozzles.

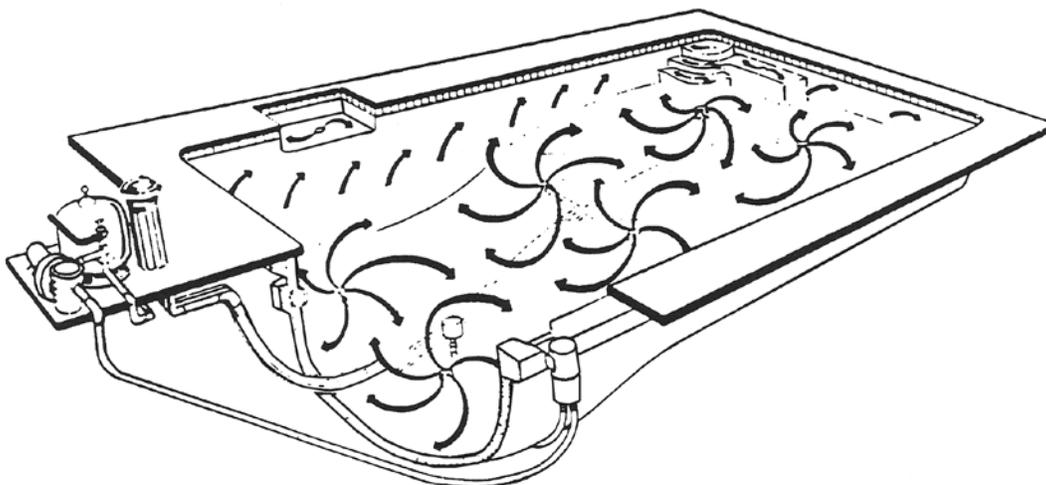
PROPER NOZZLE PLACEMENT

Proper nozzle placement is the single most important item in making the SYSTEM clean properly. As a rule, one head is required for each 50 square feet of surface area (in pebble - 40 sq. ft.). Pools with breaks will generally require two (2) additional nozzles. This formula does not include nozzles required for steps and benches. The exact total cannot be determined until a scaled drawing has been made and nozzles have been properly placed.

NOZZLE PLACEMENT CRITERIA

1. 5'6" RADIUS CLEANING PLASTER POOLS
2. DISTANCE FROM VERTICAL SURFACES (WALL OR STEP) MINIMUM 2' - MAXIMUM 3½'.
3. MAXIMUM DISTANCE FROM CORNER (5 FEET).
4. ALL AREAS MUST INTERSECT OR OVERLAP.

NOTE: Calculations based on a 1' radius dig in the shallow end and a 5' radius in the deep end (assuming maximum depth of 4' shallow and 9' deep).



FILTER REQUIREMENTS

Selecting Proper Filter Size

When selecting filter sizes, if the filter requirements fall in between available sizes, select the next larger filter. Refer to Equipment Spec Chart for required rate.

Diatomaceous Earth (D.E.)

D.E. filters are rated at 2 GPM per square foot of filter area.

Sand

Sand filters are rated at 20 GPM per square foot.

1½" MULTI-PORT VALVES CANNOT BE USED WITH AN IN-FLOOR CLEANING SYSTEM INCREASED. PARAMOUNT RECOMMENDS THE USE OF 2" PUSH/PULL OR 2" MULTI-PORT VALVES ON SINGLE PUMP SYSTEMS.

NOTE: Filter rates in excess of 20 GPM per sq. ft. can cause channeling of the filter bed.

Cartridge

Cartridge filters are rated at .50 GPM per square foot of filter area.

NOTE: Excess flow rates can cause the fibers of a cartridge to become impacted.

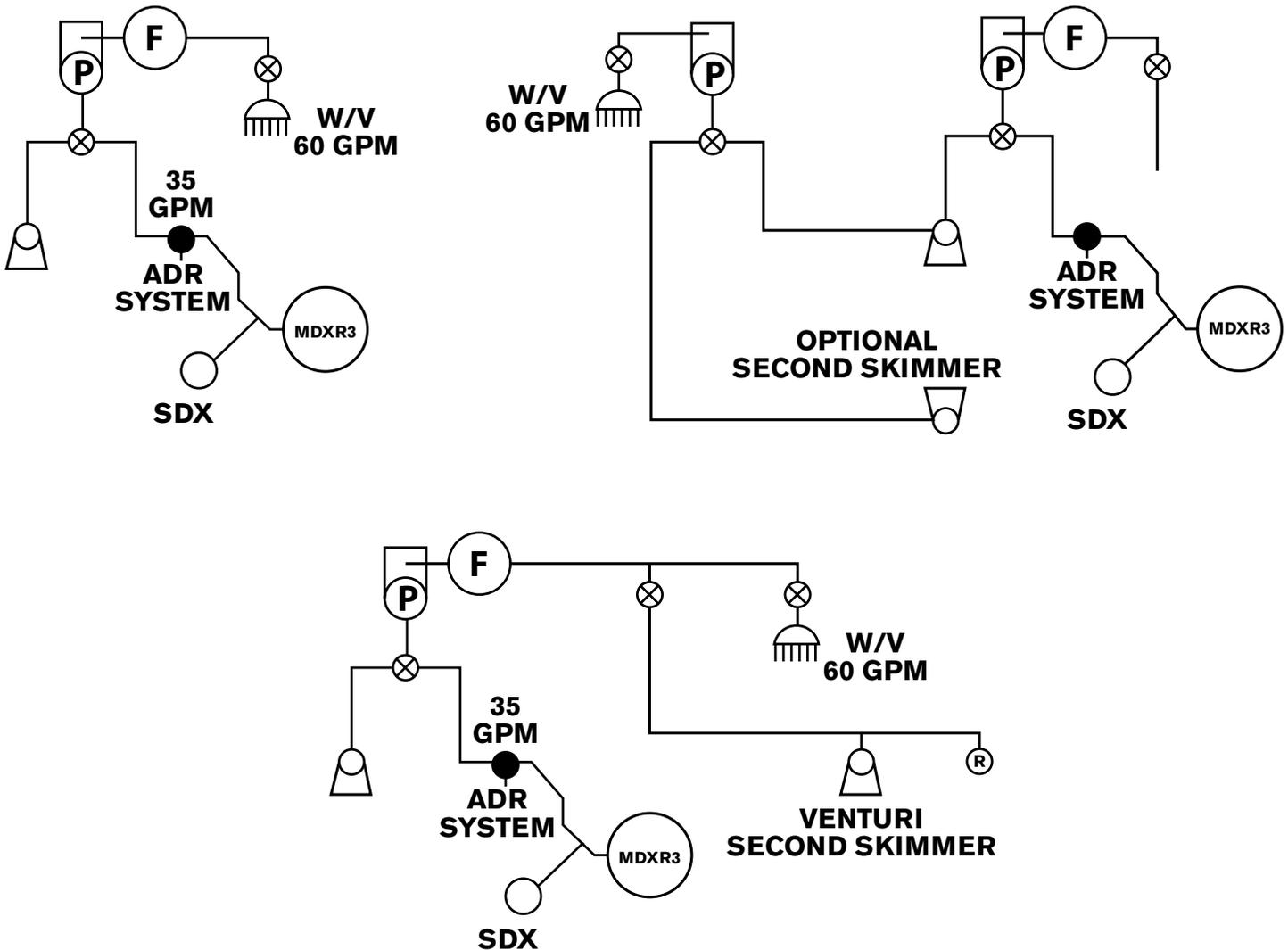
1½" MULTI-PORT VALVES CANNOT BE USED WITH AN IN-FLOOR CLEANING SYSTEM BECAUSE HEAD LOSS IS GREATLY INCREASED. PARAMOUNT RECOMMENDS THE USE OF A 2" PUSH/PULL OR A 2" MULTI-PORT VALVES ON SINGLE PUMP SYSTEMS.

MULTIPLE SKIMMERS

Important Technical Notice Regarding Multiple Skimmers

Minimum flow through Paramount's MDX-R3 debris accepting drain and the BuzzTop Channel drain is 35 gpm and any increases in that flow will enhance cleaning even more. The use of more than one skimmer on a single pump cleaning system will diminish the flow through the main drain and affect the cleaning ability of the system.

To insure proper drain performance when two or more skimmers are needed, a separate pump for the cleaner is recommended. If a second pump for the cleaning system is not an option then Venturi skimmers should be used for additional skimmer/s needed on the single pump system.



DESIGN REQUEST & LAYOUT

Drawing Request Form

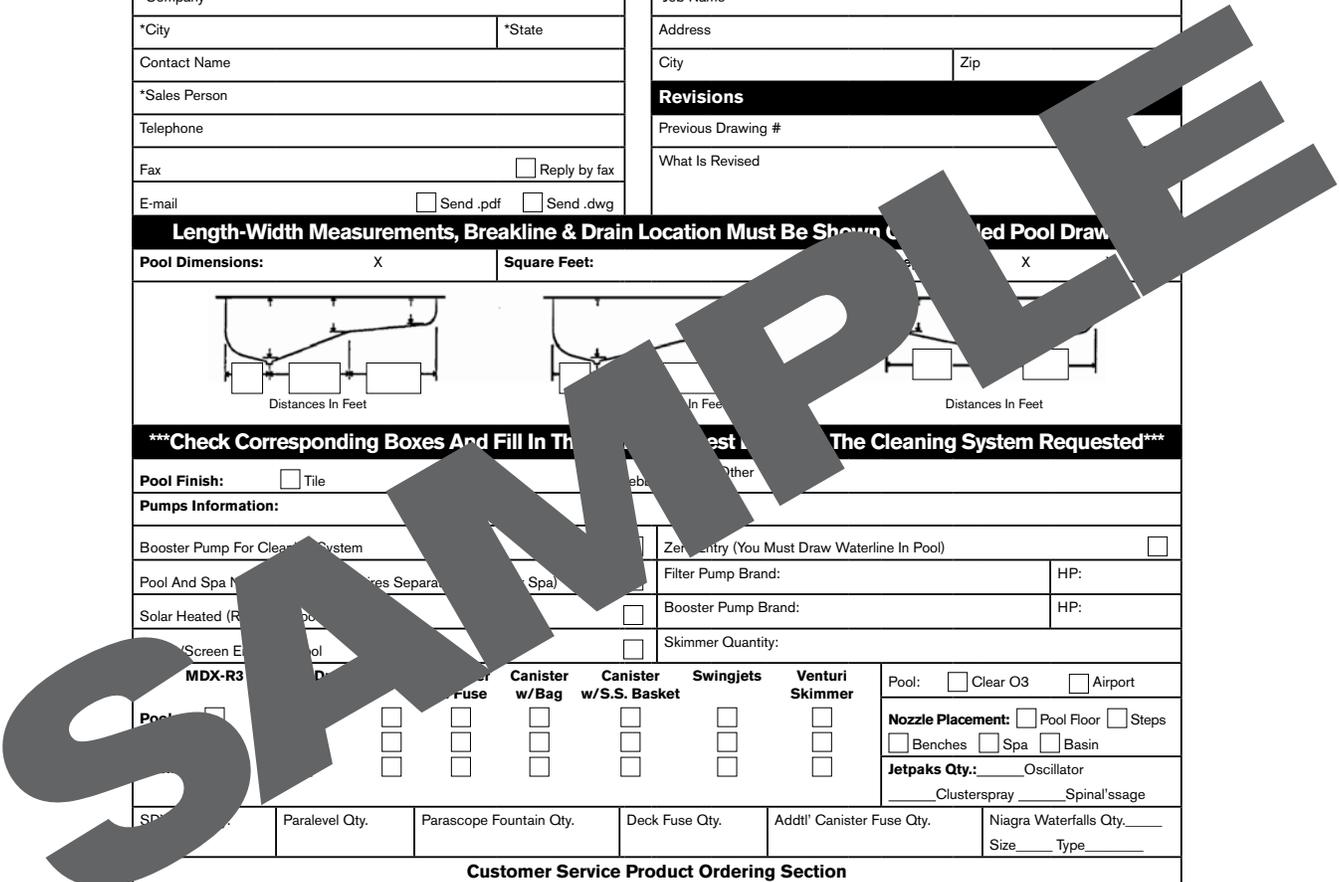
Please Allow 2 Business Days For Layout



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 www.1Paramount.com

REV. 040413

If You Would Like Information On E-Mailing Drawings Please E-Mails Us At Cad@1Paramount.com					
Pool Builder Information			Pool Owner Information		
*Company			*Job Name		
*City		*State	Address		
Contact Name			City		Zip
*Sales Person			Revisions		
Telephone			Previous Drawing #		
Fax <input type="checkbox"/> Reply by fax			What Is Revised		
E-mail <input type="checkbox"/> Send .pdf <input type="checkbox"/> Send .dwg					
Length-Width Measurements, Breakline & Drain Location Must Be Shown On All Pool Drawings					
Pool Dimensions: X		Square Feet:		X	
Check Corresponding Boxes And Fill In The Appropriate Boxes For The Cleaning System Requested					
Pool Finish: <input type="checkbox"/> Tile <input type="checkbox"/> Pebble <input type="checkbox"/> Other					
Pumps Information:					
Booster Pump For Cleaning System			Zero Entry (You Must Draw Waterline In Pool) <input type="checkbox"/>		
Pool And Spa (If Pumps Separated) (Spa)			Filter Pump Brand:		HP:
Solar Heated (R) <input type="checkbox"/>			Booster Pump Brand:		HP:
Screen Element Pool <input type="checkbox"/>			Skimmer Quantity:		
MDX-R3 <input type="checkbox"/>			Pool: <input type="checkbox"/> Clear O3 <input type="checkbox"/> Airport		
Canister Fuse			Nozzle Placement: <input type="checkbox"/> Pool Floor <input type="checkbox"/> Steps		
Canister w/Bag			<input type="checkbox"/> Benches <input type="checkbox"/> Spa <input type="checkbox"/> Basin		
Swingjets			Jetpaks Qty.: <input type="checkbox"/> Oscillator		
Venturi Skimmer			<input type="checkbox"/> Clusterspray <input type="checkbox"/> Spinal'ssage		
Paralevel Qty.		Parascope Fountain Qty.		Deck Fuse Qty.	
Addtl' Canister Fuse Qty.		Niagra Waterfalls Qty. _____		Size _____ Type _____	
Customer Service Product Ordering Section					
Completing this section will result in an order being processed and product being shipped based on the bill of materials in the drawing					
Order Type: <input type="checkbox"/> Pre-Gunite Order <input type="checkbox"/> Complete Order					
Color Selections					
Nozzle/Drain/Fountain: <input type="checkbox"/> White - 01 <input type="checkbox"/> Grey - 02 <input type="checkbox"/> Black - 03 <input type="checkbox"/> Blue - 05 <input type="checkbox"/> Beige - 07 <input type="checkbox"/> Light Grey - 08					
Canister/Paralevel Lid: <input type="checkbox"/> White - 01 <input type="checkbox"/> Grey - 02 <input type="checkbox"/> Beige - 07					
Jetpaks: <input type="checkbox"/> Pearl - 51 <input type="checkbox"/> Mirage - 52 <input type="checkbox"/> Tanzanite - 57 <input type="checkbox"/> Midnight Canyon - 59					
Shipping Priority: <input type="checkbox"/> Ground <input type="checkbox"/> 2-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day AM <input type="checkbox"/> Next Day PM <input type="checkbox"/> Will Call Desk					
** In order to receive a quote you must email paramount@1paramount.com and provide them with the drawing number on your plan**					
To insure incentive points are awarded accurately be sure to fill out the pool builder information completely					



DRAWING

- 2-HOLE NOZZLE 10
- 1-HOLE NOZZLE 4
- 6-PORT VALVE 1
- 9-PORT VALVE 0
- 12-PORT VALVE 0
- 2-PORT 4-GEAR 0
- MDX-R3 1
- CANISTER 0
- DOWNJET 0
- SWINGJET 0
- MDX2 0
- BUZZTOP 0
- CANISTER W/MVFUSE 1
- MVFUSE DECKMOUNT 1
- CLEAR O3 AIRPORT 0
- SDX 2-PACK 0
- PARALEVEL 1
- PARASCOPE 0
- JETPACK 0
- NIAGARA WATERFALL 0

	2-HOLE	1-HOLE	SPECIAL
1.	2	2	
2.	3		
3.	3		
4.	2	2	
5.	2	2	
6.	3		

DATE IN: _____ DATE OUT: _____
 CUSTOMER: _____ SHEET: _____
 ADDRESS: _____ FINISH: _____
 CITY: _____ STATE: _____ FAX: _____
 ZIP: _____
 DRAWING: _____
 COMPANY: _____
 CONTACT: _____

DRAWN BY:

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 800.621.5886 cad@1Paramount.com

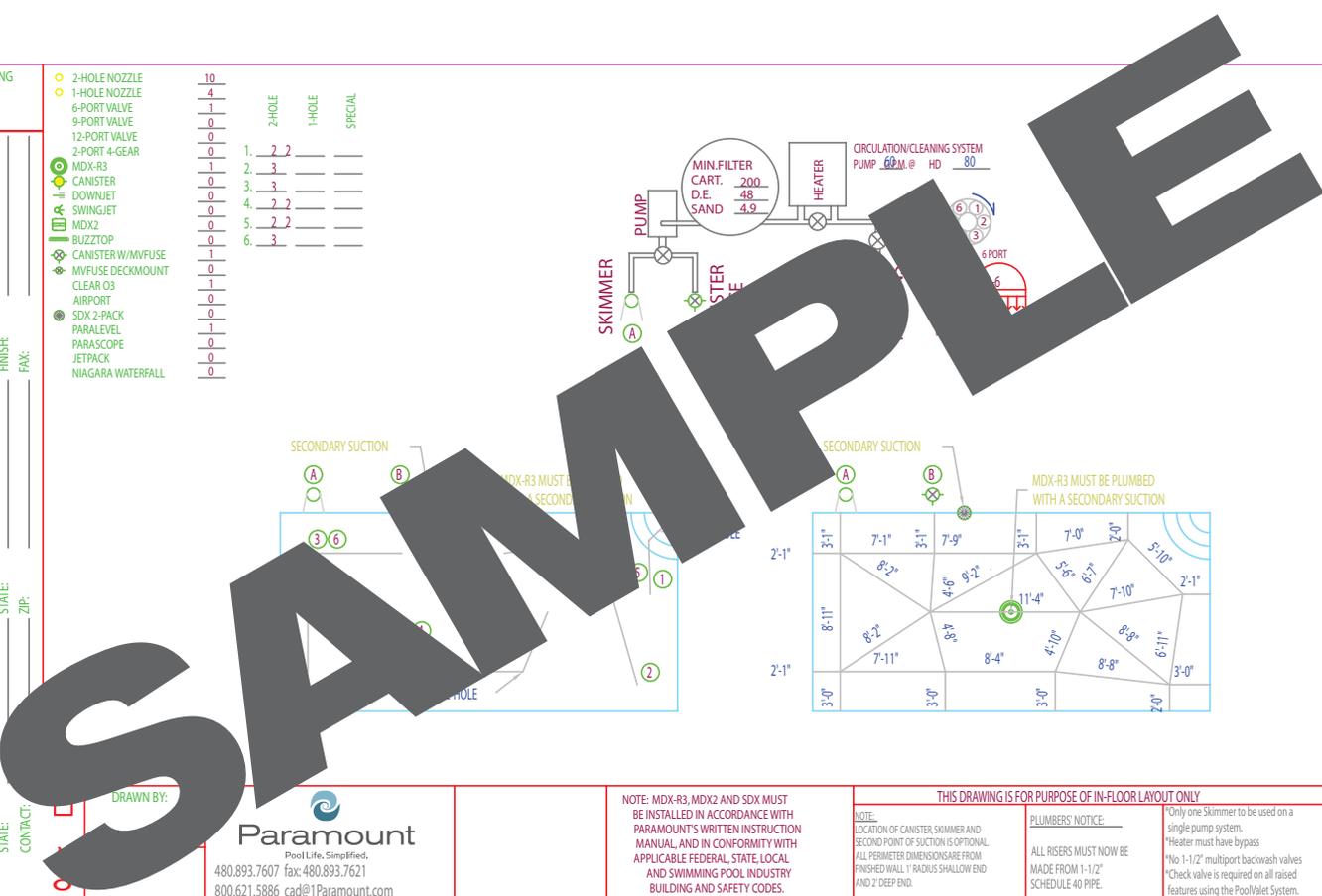
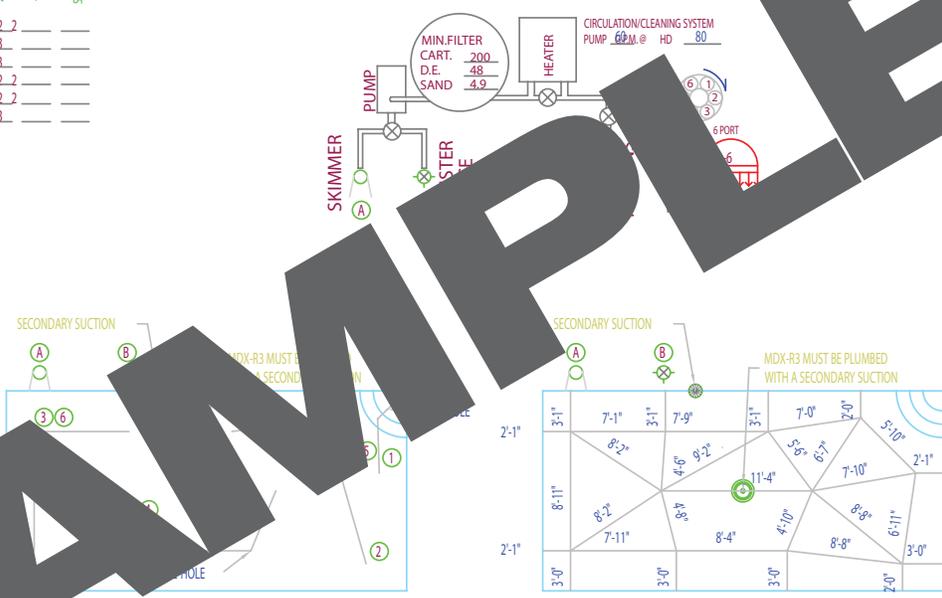
NOTE: MDX-R3, MDX2 AND SDX MUST BE INSTALLED IN ACCORDANCE WITH PARAMOUNT'S WRITTEN INSTRUCTION MANUAL, AND IN CONFORMITY WITH APPLICABLE FEDERAL, STATE, LOCAL AND SWIMMING POOL INDUSTRY BUILDING AND SAFETY CODES.

THIS DRAWING IS FOR PURPOSE OF IN-FLOOR LAYOUT ONLY

NOTE:
 LOCATION OF CANISTER, SKIMMER AND SECOND POINT OF SUCTION IS OPTIONAL. ALL PERIMETER DIMENSIONS ARE FROM FINISHED WALL. 1" RADIIUS SHALL OW END AND 2" DEEP END.

PLUMBERS NOTICE:
 ALL RISERS MUST NOW BE MADE FROM 1-1/2" SCHEDULE 40 PIPE.

*Only one Skimmer to be used on a single pump system.
 *Heater must have bypass
 *No 1-1/2" multiport backwash valves
 *Check valve is required on all raised features using the PoolValet System.



FLOOR PLUMBING

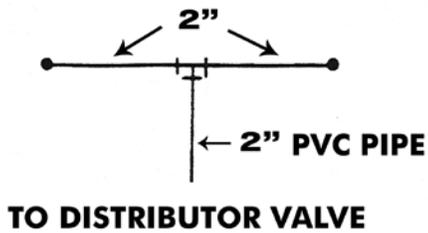
Using the dimensioned layout plan, drive a stake into the exact location of each nozzle. Please note that dimensions indicate from finish, not excavation. Allow for thickness of wall. All piping under the floor of the pool is to be Schedule 40 PVC or equivalent. Use 45 degree fittings instead of 90 degree whenever possible or when practical. Paramount recommends the use of a “hot box” which enables you to shape and form the pipe to almost any configuration you need. In areas such as down the slope of a break or in the diving bowl, the “hot box” can eliminate fittings and save a lot of time.

The SYSTEM feed lines are 2". Paramount recommends that the lines enter at the center of length of pool. By doing this a niche can be excavated to the bottom of pool depth at that location. This large niche allows ample room for the six feed lines. There are occasions when it may be advantageous to feed part of the lines in places other than the center. However, as a rule, this will provide for the least amount of pipe. The lines will then feed the banks of nozzles. At each nozzle location, install a 2" elbow and stub up a 2" Schedule 40 PVC 12" above the finished pool floor (except for steps and benches). Step and bench nozzles should be on a separate port. Dig out around each stub-up to provide area for body cutouts (see page 16). All pipes should have a minimum of 2" of cover. Trenches should be backfilled and raked smooth. We also recommend soaking and tamping the ground.

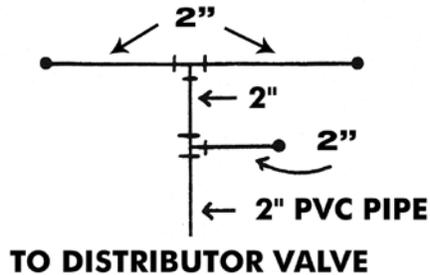


It is imperative that the stub-up angle be 90 degrees from the finished floor angle. Verify this and readjust prior to placing gunite or concrete shell. The stub-up pipes should NEVER be in a location in which the slope of the floor exceeds 45 degrees, as the cleaning nozzles will not retract. Use primer on all joints underground. Cap all lines and pressure test to a minimum of 35 psi. Install the pressure testing device at the equipment header or on one of the stub-up pipes in the pool floor. Pressure should remain on system throughout construction.

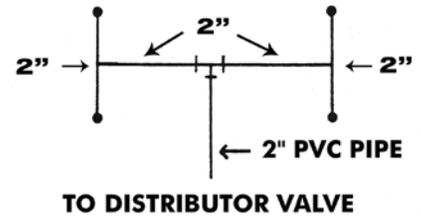
2 HEAD CIRCUIT



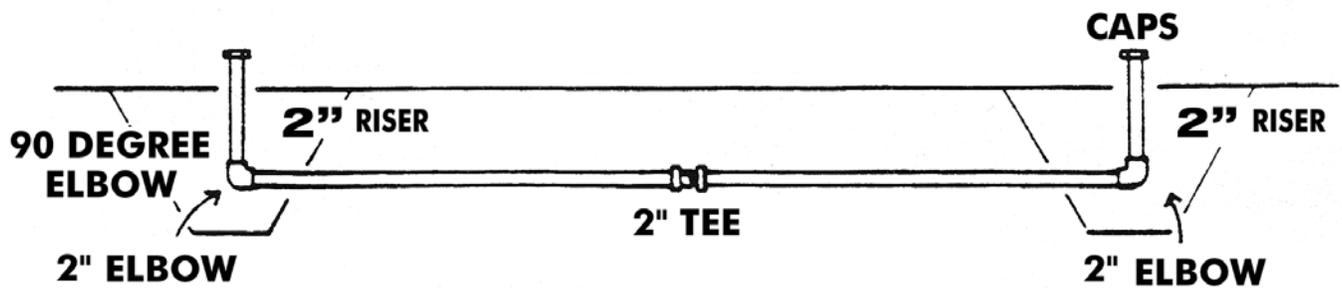
3 HEAD CIRCUIT



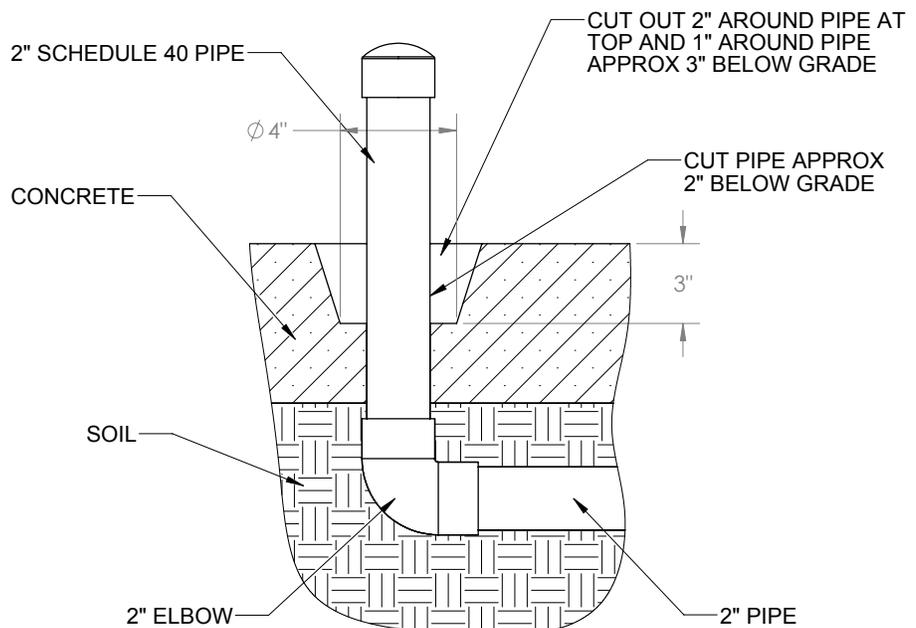
4 HEAD CIRCUIT FOR STEPS



RISER INSTALLATION



PLUMBING FOR FLOOR NOZZLES

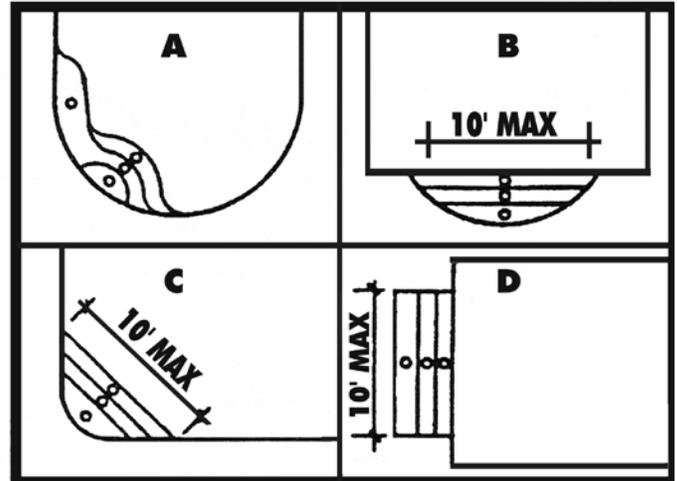


NOTE: All risers must be 90 degrees (perpendicular) to the finished floor

NOZZLE PLACEMENT FOR STEPS, BENCHES, SWIM-OUTS

1. Using a 5' radius, indicate location of step-cleaning nozzle.

NOTE: Each nozzle will not clean more than 5' radius on steps or benches.



2. Nozzles should be pulled out as far as possible in order to reach corners.



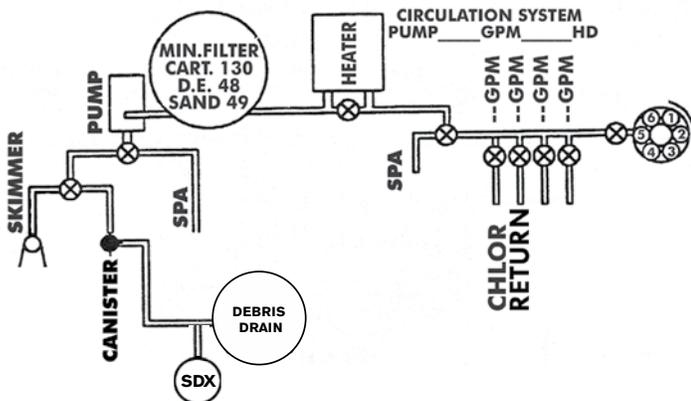
3. Reversed radius* of step corners will help to eliminate dirty steps.

* This will also help with the floor cleaning where the bottom step meets the pool wall.

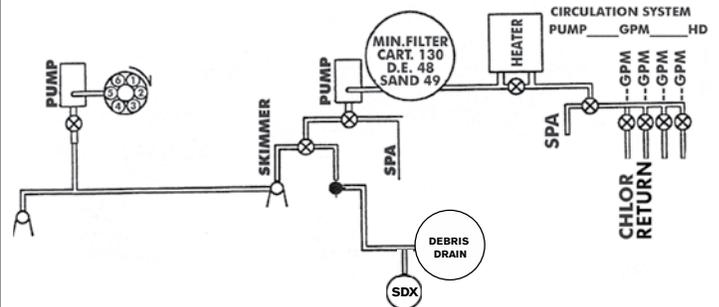


EQUIPMENT LAYOUT

Single Pump



Dual Pump



PLUMBING WATER VALVE

1 1/2" Valve Base Plumbing Guide

NOTICE: All pipe fittings MUST be staggered. All plumbing should be 1 1/2 " or 2".

The water valve is normally set 6" above water level in a convenient location pool side. This results in dramatic reduction in plumbing runs and increased cost savings. The center port of the bottom housing is the inlet to the valve. Cut all pipes square, this allows maximum gluing surface to the bottom housing. USE PVC PRIMER AND PVC GLUE ON BOTTOM HOUSING AND ON PVC PIPES. (IPS WELDON P68 PRIMER and 746 GLUE or 705 GLUE or EQUIVALENT)

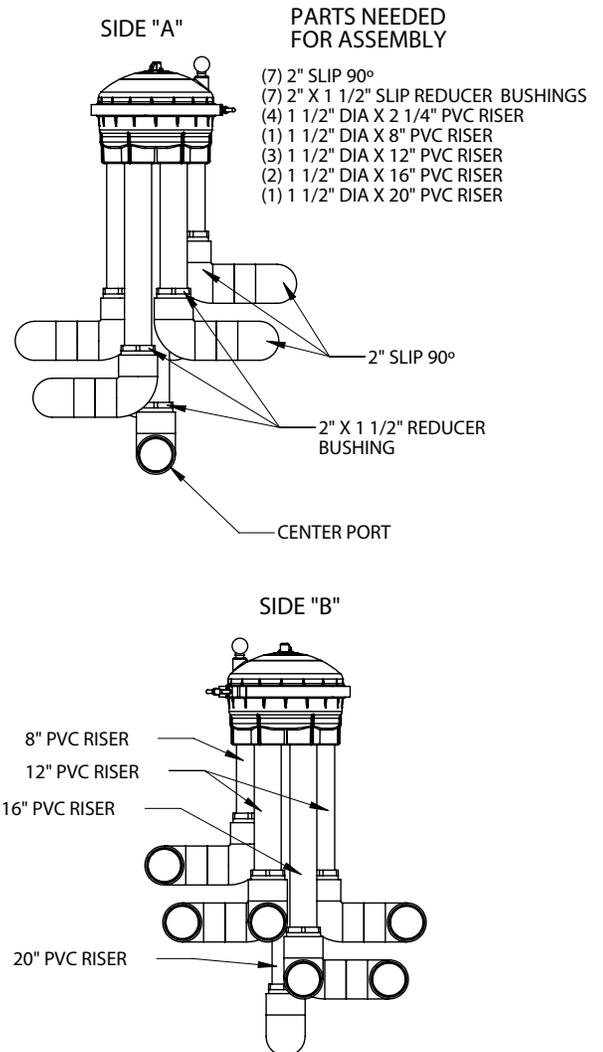
Glue pipe all the way into the stop and allow at least 24 hours drying time before pressure test. To prevent glue damage to internal ribs, always glue with the valve right side up.

If not all six (6) ports are required, use one of the ports twice to feed one return line. The common ports should not be plumbed next to each other, always skip a port when double firing. The pipes from the water valve should be connected together underground.

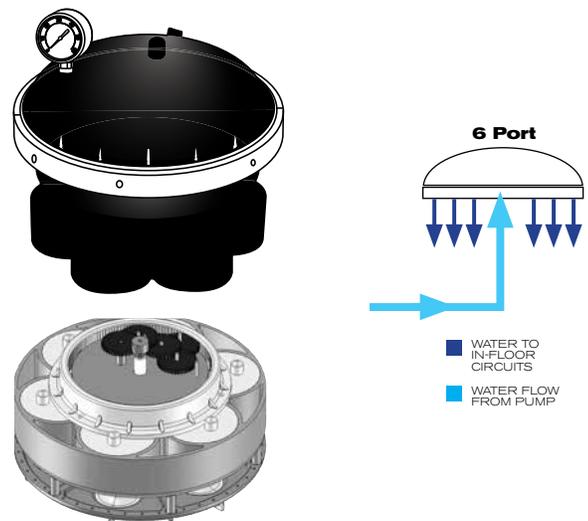
Gluing Instructions

1. Remove Clamp
2. Lift off dome (save O-ring)
3. Remove pressure gauge and knob from inside valve housing assembly.
4. Primer valve base two times
5. Make sure pipes are glued all the way into the stop. Be careful not to allow glue to run into module area.*
6. The center port is the inlet to the valve and should be approximately 3" longer than the perimeter pipes.
7. Allow 24 hours before pressure testing.
8. Reposition o-ring in groove in the valve base.
9. Replace dome and V-Clamp and tighten until snug.
10. Thread the pressure gauge to the top of the dome. **DO NOT USE TEFLON TAPE**
11. Pressurize with pool plumbing (do not exceed 35 psi.)
12. Store the module assembly in a safe place and install after the pool has been started up.

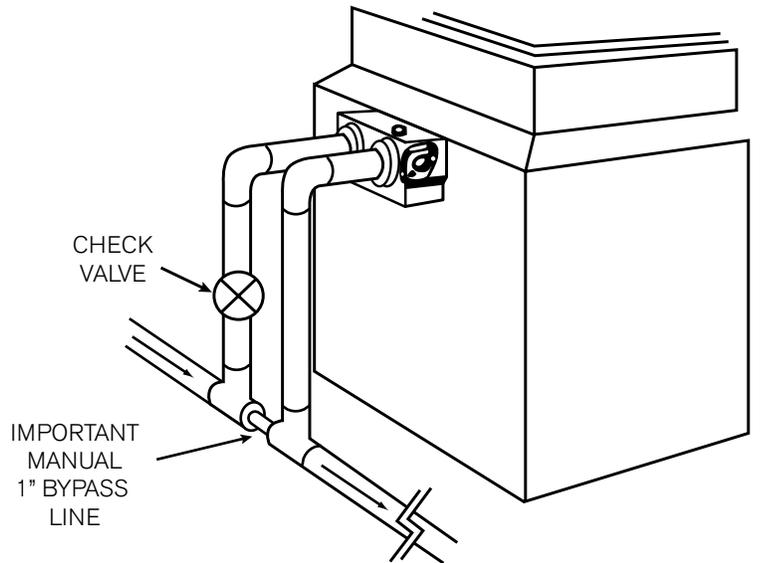
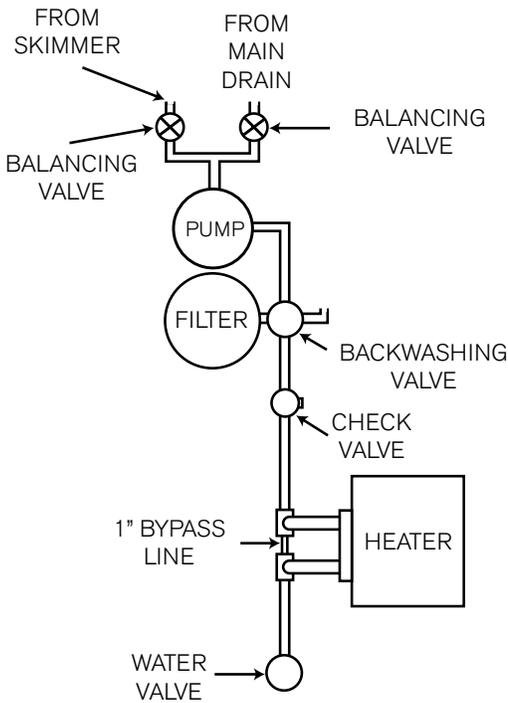
* Pipes should be a minimum of 12" in length and should insure the valve be at least 6" above water level.



6 CIRCUIT VALVE LAYOUT PART# 004-302-4184-03



PLUMBING HEATERS / SOLAR SYSTEMS

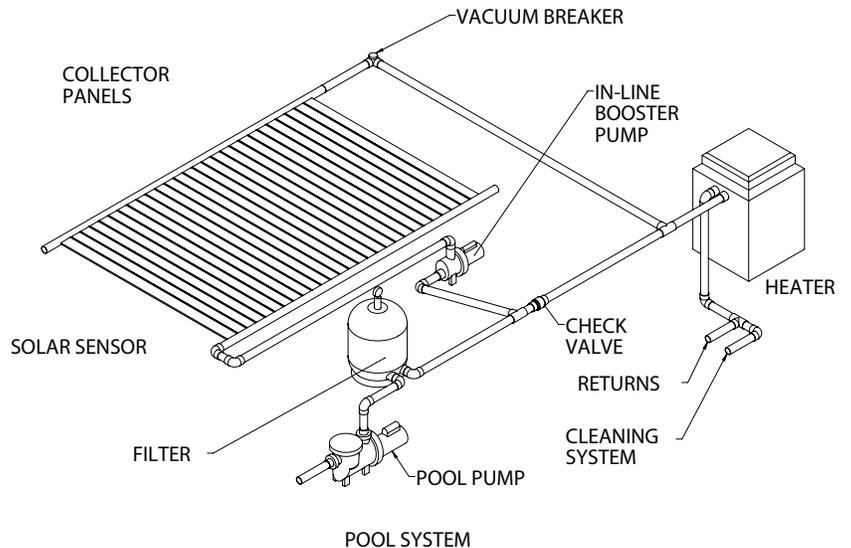


HEATERS

When installing a heater on the pool, a 1" BY-PASS TO PARTIALLY DIRECT WATER AROUND THE HEATER IS NECESSARY. This allows part of the water through the heater for heating but limits the head loss created when all the water is directed through the heater. THE IN-FLOOR SYSTEM WILL NOT FUNCTION PROPERLY WITHOUT THIS BY-PASS.

SOLAR SYSTEMS

Paramount recommends solar systems be operated independently with a booster pump, separate suction, and returns, or as shown below with a secondary booster pump, and the in-floor system valve installed after the solar and heater pack.



PLUMBING RAISED SPA

AN IN-LINE CHECK VALVE IS REQUIRED IN ALL RAISED SPAS. PLUMB THE CHECK VALVE ABOVE GROUND FOR EASE OF FUTURE MAINTENANCE.

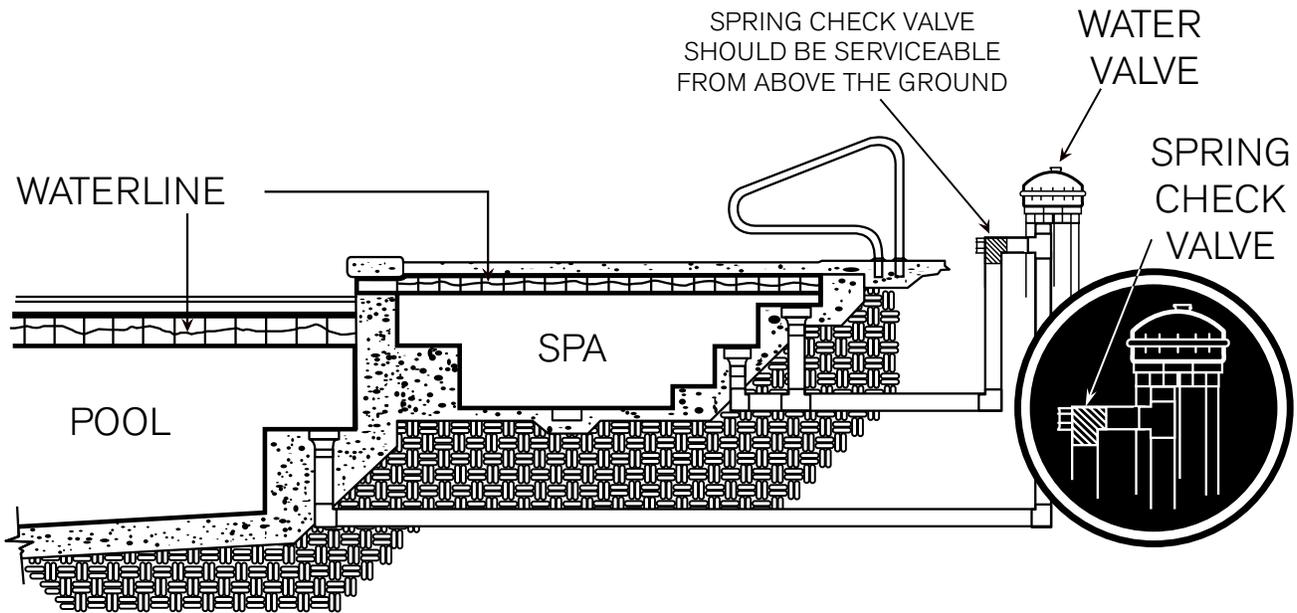
NOZZLE PLACEMENT - SPAS

Cleaning nozzles in the spa should be located in accordance with the previously mentioned criteria.

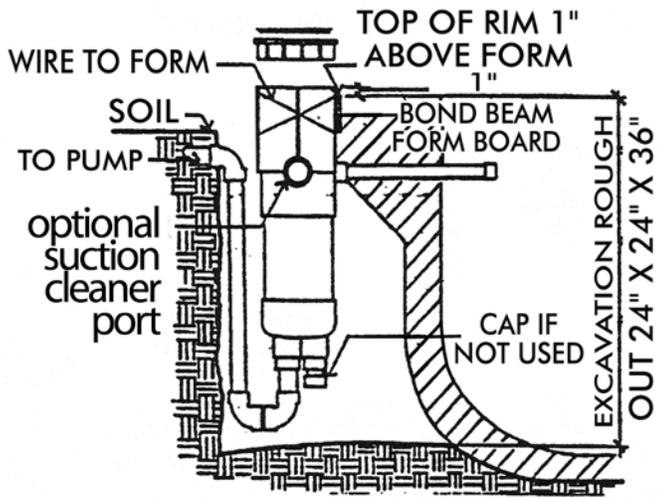
Keep in mind that if cleaning nozzles in the spa are part of the cleaning cycle of the swimming pool, consideration must be given to the additional water being injected into the spa. This water must be removed via dam wall overflow, equalizer line, etc.

When plumbing a spa or water feature in a separate body of water, it is recommended the nozzles be on a separate port of their own especially when there is an elevation difference.

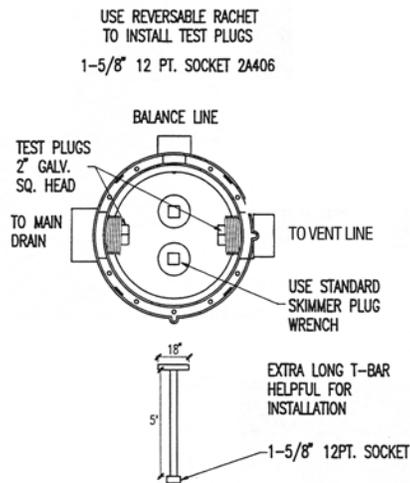
NOTE: Separate line with check valve required on raised water features or spas.



PLUMBING IN-DECK DEBRIS TRAP



PRESSURE TEST DETAIL



POOL DRAIN SYSTEM

System Design:

WARNING: The drain used must be installed in accordance with the manufacturer's written instruction manual, and in conformity with applicable Federal, State, Local and Swimming pool industry building and safety codes.

If you use one of the Paramount MDX 'VGB Compliant Debris Drains' consult the applicable manual for specific instruction on how to plumb.

MANUAL PART NUMBERS:

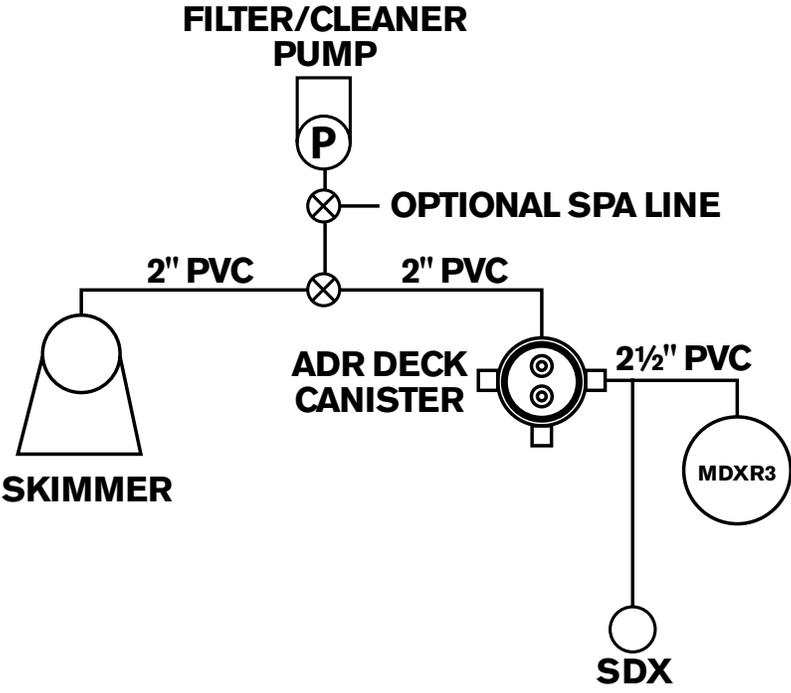
MDX-R3 Non Adjustable Concrete: 004-027-8810-00

MDX-R3 Adjustable Concrete: 004-027-8815-00

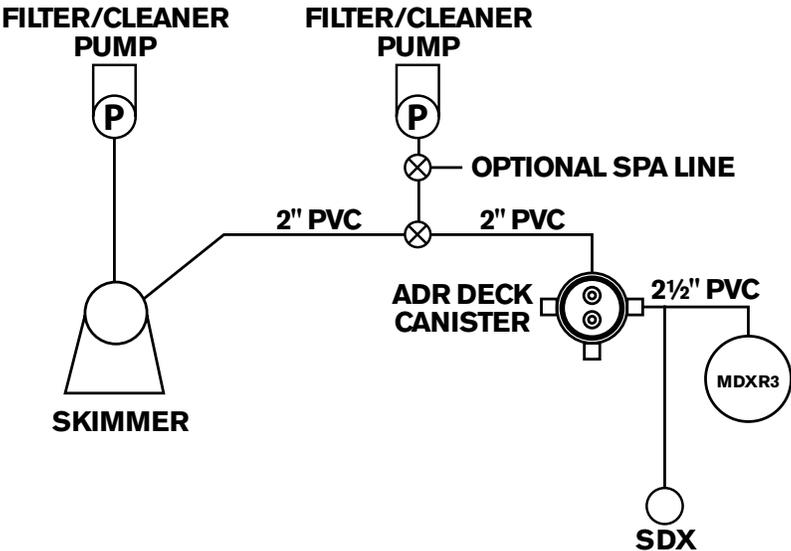
MDX2 Concrete: 004-027-8793-00

Notice: Release pressure on the system before removing plugs

SINGLE PUMP SYSTEM



DUAL PUMP SYSTEM



STEEL DETAIL

REBAR MUST BE KEPT AWAY FROM 2" PVC RISER. REBAR SHOULD BE BENT AROUND RISER SO THAT STEEL IS MINIMUM OF 2" AWAY FROM THE PIPE.



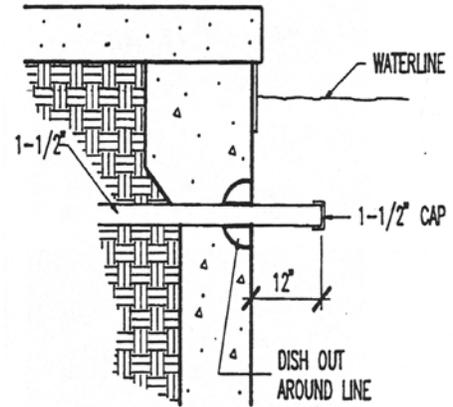
CONCRETE DETAIL

DOWN JETS AND STEP OR BENCH SIDE JETS

Concrete crew to cut out sufficient area around the floor risers, main drain and down jet lines.

Cut out around riser must be 2" x 4" deep around pipe. Verify the angle of the stub-up as it is imperative that the stub-up angle be 90 degrees from the finished floor angle. Check to make sure the pressure has not dropped prior to shooting the pool and also upon completion.

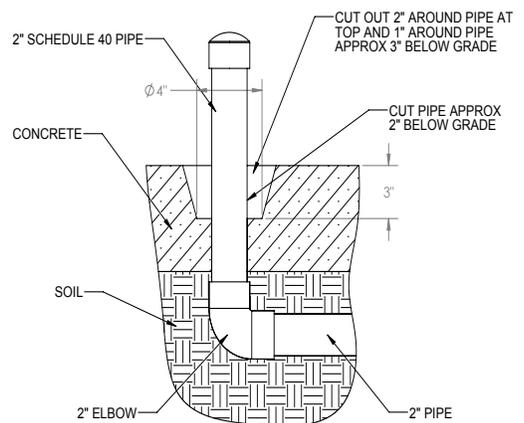
Make sure that the concrete crew cuts out sufficient area around the stub-up so the body can be installed.



PLUMBING FOR FLOOR NOZZLES

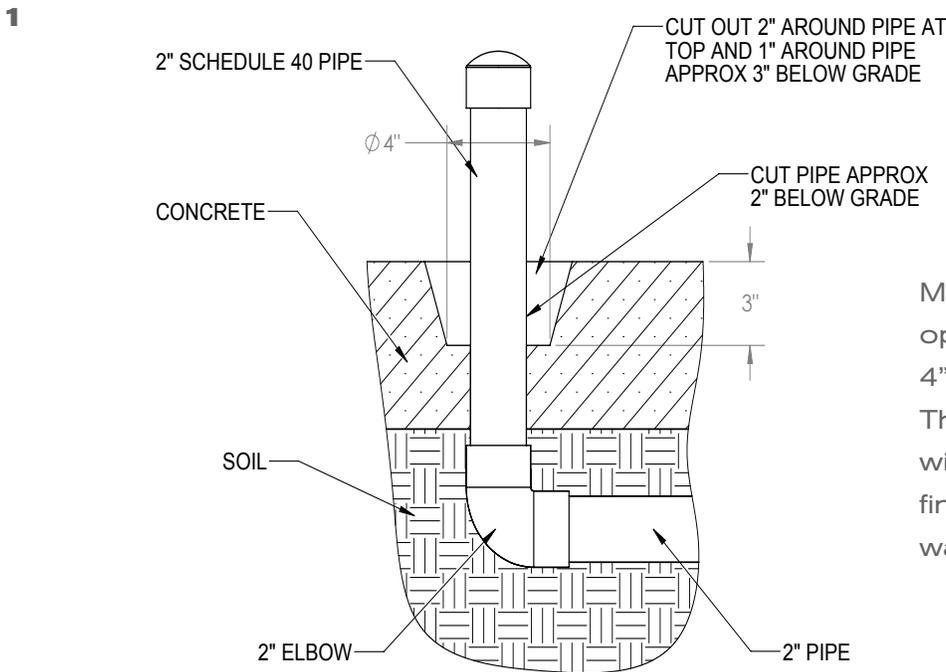
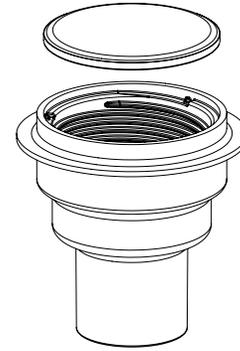
NOTE: All risers must be 90 degrees (perpendicular) to the finished floor.

*The stub-up pipes should NEVER be in a location in which the slope of the floor exceeds 45 degrees, the cleaning heads are weighted and will not retract.



BODY INSTALLATION GUIDE

NOTICE: You can use regular PVC glue on smooth body



Make a cutout or opening approximately 4" diameter by 3" deep. This cutout will be filled with plaster or other finish coat to create a water stop

2

CUT OFF RISER PIPE BELOW CONCRETE SURFACE

CONCRETE

SOIL

2"

Using an insider saw (#004-252-5490-00) cut off riser pipes 2" below concrete surface.

3

CONCRETE

SOIL

Remove cap and Pool Valet nozzle. Prime the inside of the pipe.

4

HYDRAULIC CEMENT

CONCRETE

SOIL

Glue the body into the pipe with a regular PVC glue.

The glue must cover the full length of the body barrel and 3" deep inside the riser pipe. Push the body into the pipe until the shoulder hits the top edge of the pipe.

Let fumes vent for 30 minutes then blow out all lines and re-insert all Pool Valet nozzles.

5

HYDRAULIC CEMENT

PLASTER

CONCRETE

SOIL

2" RISER SCHED 40

2" ELBOW

PLASTERING THE POOL

Leave all plaster caps in place for removal at start up.

NOTE: Optional, the plaster crew may remove the plaster caps as they finish.

NOTE: If the lines are blown out the nozzles may be re-installed prior to plaster and then the plaster cap put on.

START-UP

1. Remove all pressure test plugs.



2. Install all baskets and lids



VALVE INSTALLATION

Before installing the valve, startup the pump and run without the module in place to clear any debris from the feed lines. The equipment needs to run for a minimum of ten minutes before installing the valve module.

Install the valve module assembly next. Turn off the pump. Remove the band clamp. Install the module assembly in the housing. There are guide pins on the module that will line up with the holes in the bottom housing. Place the Run/Pause knob selector in the run position. Replace dome and band clamp and tighten until snug. Lightly tap on band clamp while tightening. Turn the pump on.



CLEANING NOZZLE INSTALLATION

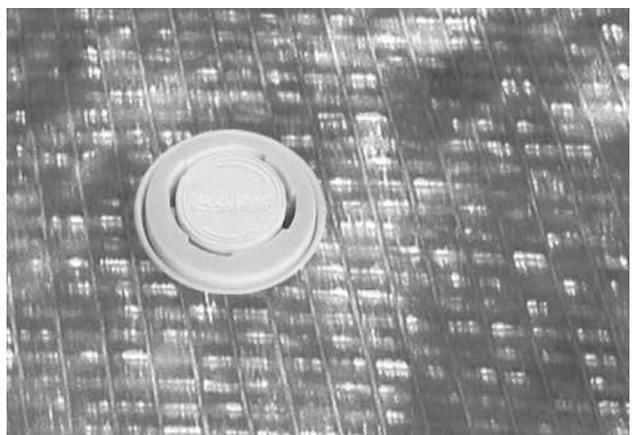
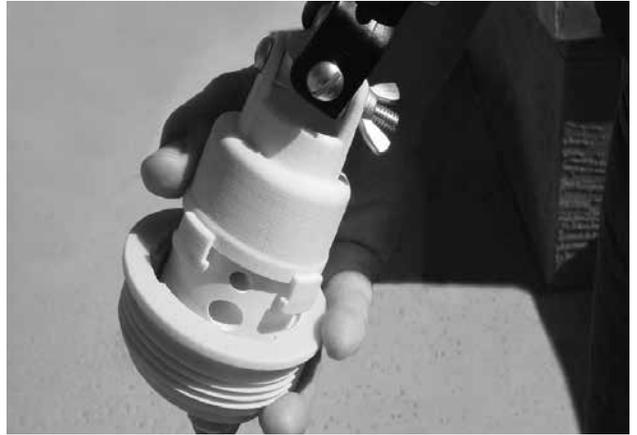
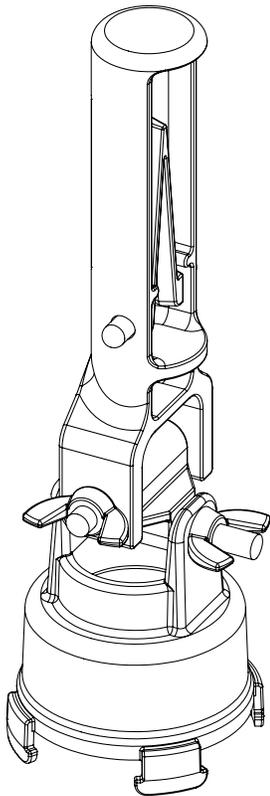
After filling the pool with water, the filtration system should run for several days. Instruct the customer to brush the pool daily (several times) and backwash daily. This should clarify the water and enable you to install the cleaning nozzles. Install the cleaning nozzles with an installation tool from outside the pool, or if the nozzles were pre-installed remove the plaster caps as the blow off.

1. If the plaster caps are still in place start with nozzle closest to the valve and as red plaster caps blow out install nozzles if not pre-installed.
2. Snap the nozzle onto the install tool by twisting.
3. Install nozzle in body by turning clockwise one-quarter turn.

NOTE: If the plaster caps come off during the interior finish process, check the body for residue.

Nozzle Tool

PART# #004-520-5410-00

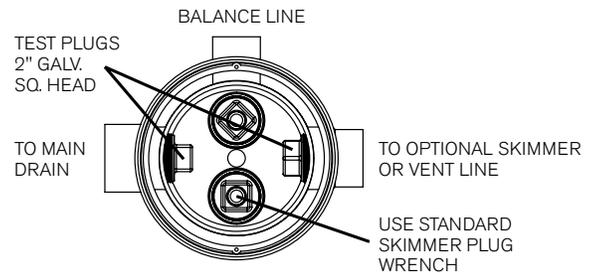


WINTERIZING INSTRUCTIONS

Winterizing a Paramount Pool & Spa Systems in-floor pool is the same as any pool with a main drain; it just has a few more lines to winterize. These procedures are to be used in addition to standard winterization methods normally used in your area.

To Do List:

- ❑ Store the Paramount valve module, canister inner lid and basket in a safe, dry place.
- ❑ Remove and store any “swingjets” located above the freeze line.
- ❑ Blowout and airlock all pool lines.
- ❑ Remove all water from the canister and replace with swimming pool anti-freeze and an empty jug, the same way you winterize skimmers.



The following steps are procedures recommended for proper winterization of all Paramount In-Floor Cleaning Systems. These procedures do not replace normal winterization procedures but are instead in addition to them.

PARAMOUNT CANISTER WINTERIZATION

1. Remove outer lid, inner lid and basket, clean and dry off, and store in same area as modules
2. Install and secure regular winterization plug in equalizer line of canister to pool at pool side.
3. Install and secure Schrader plug or blow out plug from canister to main drain. Blow out and obtain air lock as previously described, if skimmer is tied into canister, repeat procedure to skimmer.
4. Bottom port of canister to pump may require an extended pipe for ease of blowing out. Install and blow out line from canister to pump. Install and secure plug in pump. Using a wet/dry shop vac, remove all water from within canister components.
5. Extension pipe can be removed and replaced with plug or Gizmo type container if Gizmo not used. Be sure to install device to absorb ice expansion in canister area. Failure to do this may result in potential ice freeze damage to canister.

Winterization anti-freeze is to be used as necessary or when required.

Water Valve

1. Turn off and drain out all pool equipment.
2. Remove valve lid or lids from valve(s).
3. Remove module(s) from valve housing(s).
Store module in dry clean area out of the winter elements for winter until reinstallation in spring.
4. Remove any down jet returns in pool (threaded or slip) including down jet body for a secure fit of winterizing plug. Store with module(s).
5. From valves to pool, place a Schrader plug or blow out plug as recommended
6. Install and secure Schrader or blow out plugs in all parts of valve.
7. Proceed to blow out lines through Schrader or blow out plugs to pool.
8. While blowing out the in-floor nozzles, once a good amount of air has come through the nozzle, you have accomplished an air lock. (This procedure is similar to obtaining an air lock when blowing out the bottom drain in the pool.)
9. Blow out center port of first valve back to filter equipment and plug.
10. Repeat until all ports are blown out.
11. Step/bench heads or returns that are on a port of the water valve and are above the freeze line must be plugged off so the water does not travel back up the line. This is done by blowing out the port on the water valve and when air starts bubbling out the body or return fitting you must remove the head/return fitting and plug the fitting. Continue doing this until all but the last one on the line is either below the freeze line or blowing out air. Then put the standard expansion plug with a schrader valve that fits inside a 1 1/2" schedule 40 pipe (available at your local distributor) in while having the air stop being injected into the line at the same time.
12. When necessary, pool winter anti-freeze solution should be poured into each line.
13. Valve housing(s) should be wiped clean and dry of water, reinstall top lid and secure.

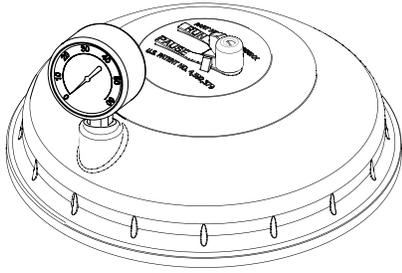


SYSTEM TROUBLE SHOOTING

<p>DIRTY SPOTS APPEAR THROUGHOUT POOL</p>	<ul style="list-style-type: none"> • Clean Filter • Clean pump basket, skimmer basket(s) • Make sure auxiliary valves are in the proper position
<p>SET OF CLEANING NOZZLES REMAIN UP (WITH PUMP ON)</p>	<ul style="list-style-type: none"> • Valve module should be serviced or replaced. • Particle of debris lodged between nozzle and body. Lightly depress nozzle, with pressure on that nozzle, to discharge any particles between nozzle and body.
<p>PRESSURE INCREASES ON FILTER</p>	<ul style="list-style-type: none"> • Clean Filter. • Make sure auxiliary valves are in the proper position.
<p>WATER LOSS IN RAISED SPA (WITH CLEANING NOZZLES)</p>	<ul style="list-style-type: none"> • Check to make sure in-line check valves are installed properly and that they are free of debris.
<p>ONE OR MORE CLEANING NOZZLES REMAIN UP WHILE FLOW CONTINUES TO OTHER CIRCUITS</p>	<ul style="list-style-type: none"> • Lightly depress nozzle, with pressure on that nozzle, to discharge any particles between the nozzle and body. • Remove, if necessary, and clean nozzle and inner body (check for plaster or debris). • Damaged piston assembly in water valve. Replace the Module.
<p>CLEANING NOZZLE POPS UP BUT DOES NOT CLEAN</p>	<ul style="list-style-type: none"> • Debris is lodged in nozzle. Remove and clean, allowing the valve to cycle through at least two (2) times before reinserting the nozzle assembly.
<p>VALVE DOES NOT CYCLE</p>	<ul style="list-style-type: none"> • Control knob on dome pause phase. • Check turbine shaft for restricted movement. • Valve gears not meshing.
<p>VALVE CYCLES - BUT MORE THAN ONE CIRCUIT OF NOZZLES REMAINS UP</p>	<ul style="list-style-type: none"> • Check for glue or debris on top surface of ribs (portion of lower base that meets bottom of valve module), clean off glue or debris. • Check for debris lodged between shut-off plate seat and valve poppet. • Check for debris lodged in between floor nozzles and body, depressing nozzle with pole to dislodge debris. • Displaced or ruptured piston assembly.
<p>CLEANING NOZZLE WILL NOT POP UP Paramount pool and spa systems request that any current problems with the valve module be directed to the home office, or send the valve module directly to paramount for inspection and/or repair. (RMA required for return)</p>	<ul style="list-style-type: none"> • Check for clogged line. • Water valve module not rotating.
<p>CLEANING NOZZLE POPS UP BUT WILL NOT ROTATE</p>	<ul style="list-style-type: none"> • Lightly depress nozzle, with pressure on that nozzle, to dislodge any particles between body and nozzle. • If necessary, remove nozzle assembly and clean inner body and outer nozzle surface.
<p>CLEANING NOZZLES FLOATING</p>	<ul style="list-style-type: none"> • Service the valve module.

PART NUMBER DIAGRAMS

Water Valve

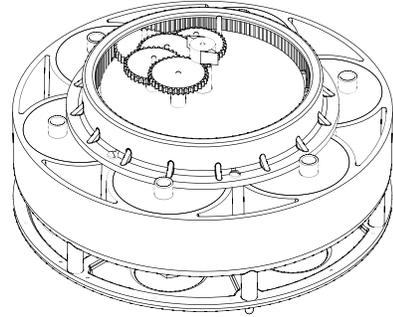


005-302-3590-00
Pressure Gauge

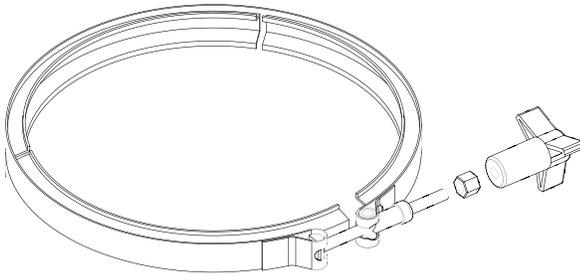
005-302-3502-00
Pause Assembly
Includes: Screw Knob, O-Ring & Pawl



005-302-4300-030
Top Dome Complete
Includes: Top, Gauge & Pause Assembly



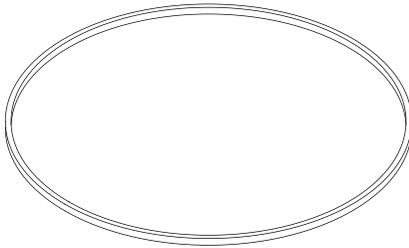
Modules:
004-302-4408-00 6 Port



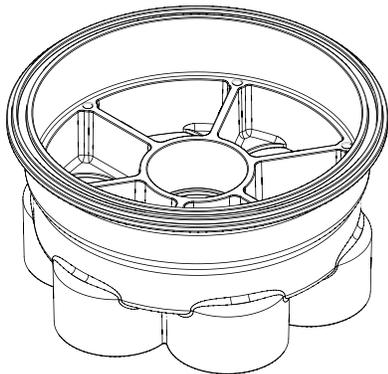
005-302-3570-00
Band Clamp (Complete)
Includes Knob & Nut

005-302-3600-00
Band Clamp Knob

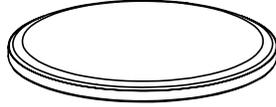
005-302-0640-00
Band Clamp Nut



005-302-0100-00
Base O-Ring

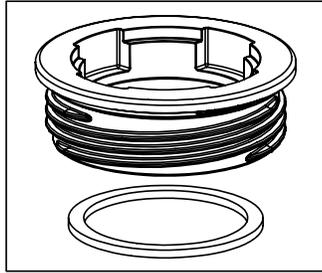


005-302-4032-03
6 Port Base 1 1/2" Black

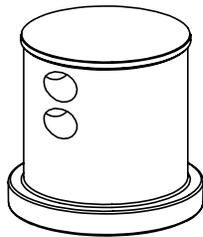


Pool Valet Nozzle

004-502-5010-00
Pool Valet Body Cap 6 pieces



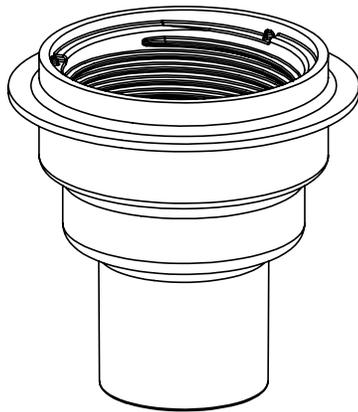
005-502-4810-XX
Pool Valet Retainer Ring



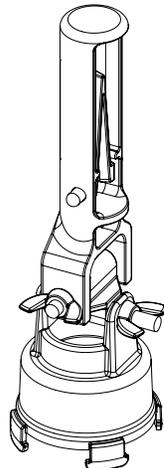
004-502-5010-xx
Pool Valet Blank Nozzle w/Ring

004-502-5012-xx
Pool Valet 1- Hole Nozzle w/Ring

004-502-5014-xx
Pool Valet 2 - Hole Nozzle w/Ring



004-502-4720-xx
Pool Valet Body w/Cap



004-520-5410-00
Nozzle Tool

Please indicate your color choice by placing the appropriate color code in place of the "XX" at the end of the part number.

White-01 Gray-02 Black-03 Taupe-04

