PUMPING CATALOG

American-Made Pumps











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Vacuum Pumps & Repair Kits	6	ER Relay Evolution	8	Continuous Hood Lift As
5	The Electrode & Vacuum Dome Evolution	7	Vacuum Domes	32
Amber Vacuum Domes	10	WAVESTART® Upgrade Kits	12	Float Chec
9	WAVESTART®	11	Fighting Flushables	3'
X-PELLER® Non-Clog Impeller	15	Impeller Bolt	18	Anode Tes Corrosion
14	STAR ONE®	17	RAPIDJACK®	4
/ERLAST [™] Baseplate Conversion	22	Impeller Rotation	26	Custom Ser Station F
21	Wafer Check Valves	25	Full Body Spring-Loaded Non-Slamming Check Valves	4
Wanted Budget Pros! VERLAST [™] Baseplate Conversion	29	Easy to Monitor Pump Station	31	Catalog S
28	Compare for Yourself 2-Way vs. 3-Way Solenoid Valve	30	Gaskets & Quad Rings	6
CONTI	Publish 14040 Ph: (91	ght 2024 Smith & Loveless, Inc. reserves catalog, or the catalog in its entirety, may eans, electronics, or otherwise, without extraction from Smith & Loveless, Inc. ned by: After Market Division • Smith & Losanta Fe Trail Drive • Lenexa, KS 66215 13) 888-5201 • Fax: (913) 748-0106 • Toll Option 5.	be reproduced by control written oveless, Inc. • -1234, USA •	

linge & **Bubble Air** Compressor Quick-Ship Control Panel **Vibration Isolators QUICKSMART**TM Valve Flooded Suction Pump Seal Filter **Float Switches** Box & **Mechanical Seals** locker Underground Locking System **QUICKSMART** s Pump Fast & Easy Pumps trofit Easy Rotating Assembly **Cost-Effective Upgrades EVERLAST**™ ın-Up











Save on your power bill annually with Smith & Loveless' energy-efficient Vacuum Pumps. The low horse-power motor vacuum pump saves you money and carbon emissions by only powering on during priming cycles.



DARE to COMPARE

Compare Smith & Loveless' Vacuum Pump to Grainger's







When you replace the Vacuum Pump, Smith & Loveless Customer Service recommends replacing the vibration isolators to keep vibration noise to a minimum. Don't forget to add a set of vibration isolators to your order.

Vacuum Pump Single & Dual Piston

PART#	STATION PIPING SIZE	ТҮРЕ
8L29 8L44	4" 4"	Top End, Single Piston Standard, Single Piston
8L32	6"	Rugged, Dual Piston

8L29 Single Piston Vacuum Pump Repair Kit

8L32 Dual Pis	ston Vacuum Pump Repair Kit
8L29A1	Inlet Filter
8L29AB	Repair Kit
PARI#	DESCRIPTION

PART#	DESCRIPTION
8L32-1	Repair Kit

ORDER LOCALLY FROM YOUR Smith & Loveless Representative

THE ELECTRODE & **VACUUM DOME EVOLUTION**



ORIGINAL 2-Hole Vacuum Dome **Aluminum Electrode**

Obsolete. Original

2-Hole Vacuum Dome with

Aluminum Electrode.

Use PN: **H87A329A**

Conversion Kit.





VERSION 4 1-Hole Vacuum Dome **SONIC START® Probe**



Obsolete. Only Certain Components Still Available. 1-Hole Vacuum Dome with **Hollow Stainless Steel** Electrode. Convert to Solid Stainless Steel Electrode With PN: 87B309B & 87B309C.



Move to WAVESTART® Still Supported in Parts. 1-Hole Vacuum Dome with Solid Stainless Steel Electrode. PN: 87B309B -5-1/4" Long Electrode and PN: 87B309C -6" Long Electrode.



Obsolete. 1-Hole Vacuum Dome with No Electrode. Use **SONIC START®** Probe. PN: 87B452A (Dome Assembly).

VERSION 5

SONIC START® STREAMLINE™ 1-Hole Vacuum Dome, **SONIC START® Probe and 2-Way Solenoid Valve**



Obsolete. 1-Hole Vacuum Dome with No Electrode. Uses **SONIC START®** Probe and Relocates Larger Ported 5/16" Diameter Orifice 2-Way Solenoid Valve to Above Vacuum Dome. PN: 87B728

(Vacuum Dome Assembly with Solenoid Valve)

NEWEST VERSION 6 - WAVESTART® 1-Hole Vacuum Dome, WAVESTART® Probe and 2-Way Solenoid Valve



Current Version for all Vacuum Primed Pump Station New Equipment. 1-Hole Vacuum Dome With No Electrode. Uses **WAVESTART®** Probe. PN: 87B728

(Vacuum Dome Assembly With Solenoid Valve).

ER RELAY EVOLUTION















PN: 4L408

PN: 4L408H No longer available No longer available

PN: 4L408J

PN: 4L408Q

PN: 4L264S







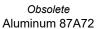






ELECTRODE PROBE EVOLUTION







Obsolete Hollow 87A229A and B



Solid 87A285 5-1/4" Long and 87A285A 6" Long Move to WAVESTART®



Obsolete 200 Millisecond **SONIC START®** Probe 4L628N Move to WAVESTART®

Newest Components!



4L264E WAVESTART® Relay and 4L406B Delay Timer

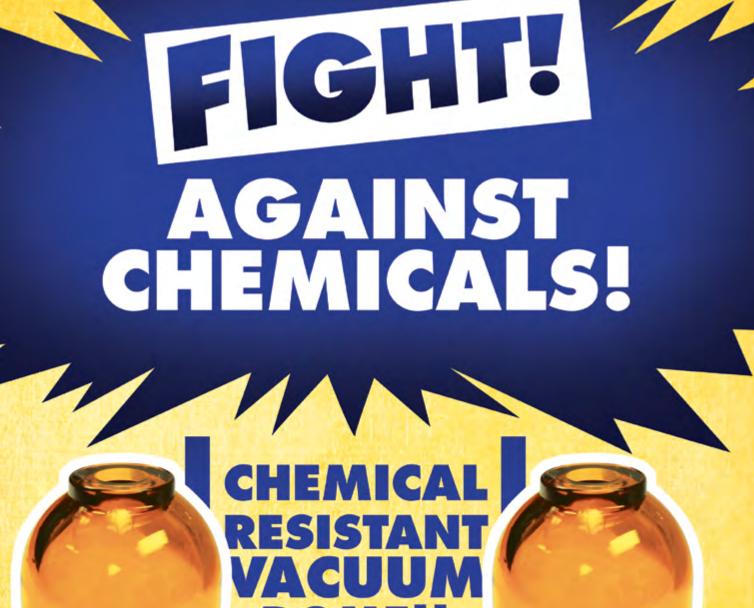






Never doubt if your pump station is priming again with the Vacuum Dome! A simple window into your pump provides you with a portal for watching the wastewater pumping in real time.





-DOME!!-

Today record levels of chemicals are dumped into our wastewater systems. In high enough concentrations, the chemicals can attack the clear PVC vacuum dome.

Smith & Loveless now offers a new chemical resistant vacuum dome for pump stations that are under attack from chemicals in the wastewater. You'll know if your dome is under attack if the dome creates fissures or hairline cracks.

The amber vacuum dome has a very high tolerance to chemicals.

Fight back against chemical attacks. Order the chemical resistant vacuum dome today.

PN: 87B133C

1-800-922-9048

GOODBYE Flushables Freedom



The new patent pending **WAVESTART®** priming system by Smith & Loveless says "Hello" to freedom. The WAVESTART® was specifically designed to incorporate a new sensing technology that brings fast and effective pump priming in an environment containing flushables and debris. Rags, strings, wipes or other flushable debris do not prevent WAVESTART® from sensing the pump's prime status, making it the best prime

The secret behind **WAVESTART®** is a custom and proprietary

design that incorporates **MULTI-VARIABLE SENSING**[™] to define the unique profile of wastewater when determining the pump's prime status. Reaction time is decreased to provide

better system response and the probe has a smaller profile.

sensing technology on the market today.

The result to you? Freedom from flushables.







UPGRADE FROM SONIC START®







UPGRADE FROM

ELECTRODE

H87A391S (1 pump kit)

H87A391T (2 pump kit)

H87A391U

The "S" and "T" kits include everything you need to upgrade your station from the **SONIC START®** system to the new and improved **WAVESTART®** Priming System. Try the S-Kit on one pump for your own sideby-side performance test. The S-Kit includes everything required for one pump while the T-Kit includes everything for two pumps.

The "U" kit includes everything you need to upgrade your station from the electrode to the new and improved **WAVESTART®** Priming System for one pump.



Test **WAVESTART**[®] at your pump station for 60 days, and experience less false primes or return it.

60-day money back **WAVESTART**® offer: **Buyers have 60 days from date of shipment** to try the **WAVESTART®**. If you're not satisfied with its performance, return all of the parts and Smith & Loveless will refund the purchase price minus shipping. We know you're going to love it.

SEE HOW EASY IT IS TO INSTALL!

Order today! 1-800-922-9048



Don't forget! The more you buy, the deeper your discount!

Test WAVESTART® at your pump station for 60 days, and experience less clogs or return it.

60-day Money Back WAVESTART® Offer:

Buyers have 60 days from shipment date to return all of the parts in the WAVESTART® kit, if not satisfied with its performance.*

*Smith & Loveless will refund the purchase price and the buyer will only be responsible for shipping and handling costs.



TO ORDER, CALL 1-800-922-9048









With the ever-increasing number of flushables field operators face, Smith & Loveless developed the best non-clog, mono-ported pump on the market today with the **X-PELLER**® Impeller. Flushables are so overwhelming that customers can be forced to pull their pumps three and four times a week to unclog them. With the **X-PELLER**® Impeller, customers now go six months to years without having to pull a pump due to flushables. Fighting Flushables additionally include the **RAPIDJACK**® Wafer Check Valve that allows operators to pull the check valve, remove

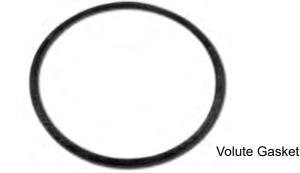
the rags and reinstall it in 15 minutes or less. The WAVESTART® is the newest product in Smith & Loveless' Fighting Flushables product line. Now, the WAVESTART® Priming System incorporates MULTI-VARIABLE SENSING™ to determine whether the pump is primed even when rags, strings or film build-up are present. You have the triple threat to fight back against flushables.

Vacuum Priming Pump Volute Gaskets

PART#	PUMP SIZE
60A26	4B2B, 4B2C, 4B2D, 4C2B,
	4C2D, 4B2X and 4C2X
60A28	4B3B, 4C3B, 4D3B, 6B3B, 6C3B and 6D3B

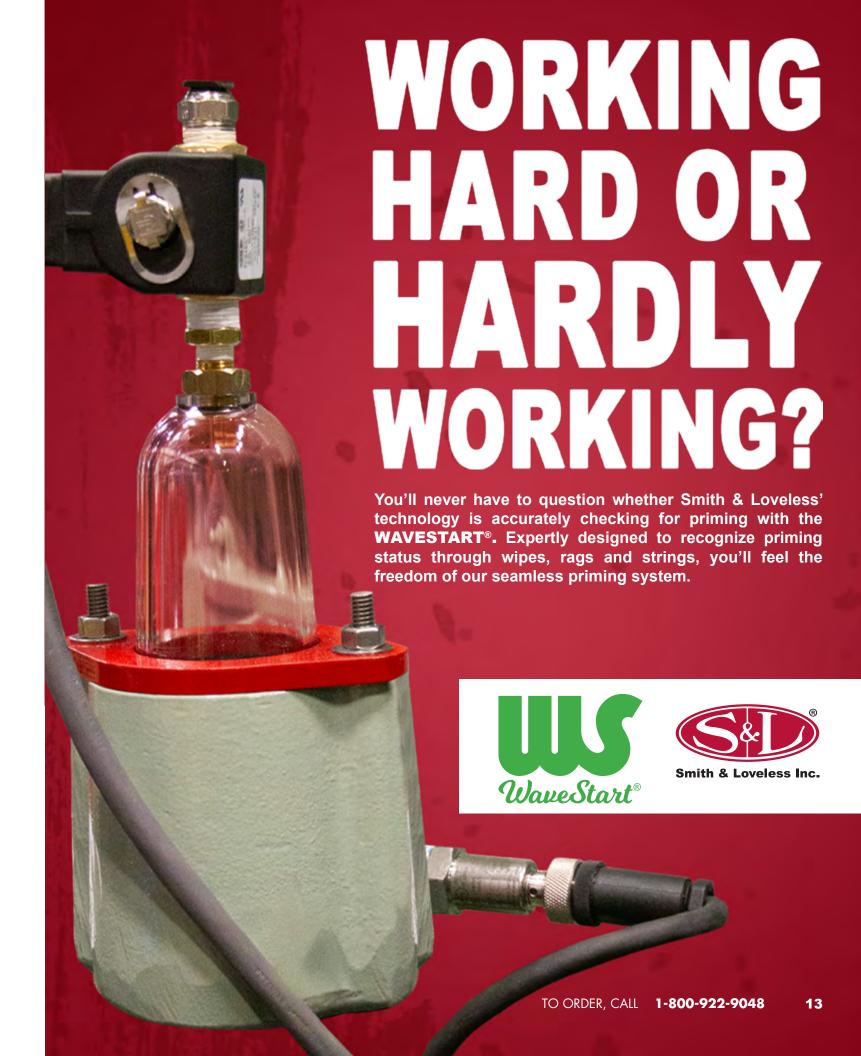
Vacuum Priming Pump Volute Gaskets

PART#	PUMP SIZE	
60A88 60A106B	8C4D and 8D4D 4D4B	



VOLUTE GASKETS

Each time the rotating assembly is taken apart, install a new volute gasket to increase the life span of your pump.



CLEAR CLOGS, NOT YOUR OPERATIONS BUDGET! Simith & Loveless Inc.



Rid yourself of time-consuming maintenance with Smith & Loveless' **X-PELLER**®. Our latest technology virtually eliminates clogs from flushables, even in high volume applications, with more wipes and rags than wastewater. Get back to 24/7 pumping with the **X-PELLER**®.

60-day money back **X-PELLER**[®] offer: Buyers have 60 days from shipment date to return the **X-PELLER**[®] if not satisfied with its performance.*

*Smith & Loveless will refund the purchase price and the buyer will only be responsible for shipping and handling costs.

STAR ONE





Introducing the STAR ONE®! Our new STAR ONE® Impeller is the power behind the improved efficiencies of these new and improved pumps that require less horespower for even better results.

We offer various sizes to accurately fit your pumping needs. Upgrade to **STAR ONE**® with a complete new pump, rotating assembly or impeller. Call today for more information on the **STAR ONE**®.



MEASURE TWICE, TRIN ONCE!



Smith & Loveless Inc.

Our Standard Impellers are especially trimmed to fit your unique, pumping applications! Upgrade to our new STAR-ONE™ impeller, making your pump even more efficient. While you're at it, order a spare to ensure your pump station never has any down time.

IMPELLER BOLT

Smith & Loveless' Impeller Bolts feature embedded Nylok. Each time you remove the impeller, replace the Impeller Bolt. Remember to torque impeller bolts to 105 ft-lbs. See below for the part numbers for the Impeller Bolt.





PART#	SHAFT SIZE
60A12	B-Shaft: 1-7/8"
60A12	C-Shaft: 2-1/8"
60A87	D-Shaft: 3"

LOCK WASHER

Each time you remove the impeller, replace the lock washer as it provides a new level of redundant protection to assure the impeller is held in place on the motor shaft. The recommended torque of the impeller bolt remains at 105 ft-lbs.

PART#	SHAFT SIZE
6L 391D	B. C or D-Shaft Locking Washer

IMPELLER WASHER

PART#

60A20	B or C-Shaft Impeller Washe
60A86	D-Shaft Impeller Washer

SHAFT SIZE



We want you to join our group of elite customers! Once you sign up, you'll be granted access to all things S&L, including:

- Full Versions of Catalogs
- Member-Only Troubleshooting Videos
- Mailed, Printed Catalogs
- And More!

Sign up today when you visit smithandloveless.com/user/register.





THE THE PERSON NAMED IN STREET Rapidlack

Wafer check valve headaches from flushables? We'll have your check valve back in operation within 15 minutes or less with the unique design of **RAPIDJACK**[®], where the valve body stays in the piping. With only four bolts and one spring to remove, clogs are no feat for you!

FOUR RAPIDJACK® BUYING OPTIONS

OPTION 1: PART

The **RAPIDJACK**® can be purchased as a stand-alone part that inserts into new piping layouts or can replace valves measuring five-inch lay length.

Requirement: Must have space for a five-inch lay length.

OPTION 2: PIPING SKID

Many Smith & Loveless pump stations require a new piping skid to insert the **RAPIDJACK**® because the lay length of the **RAPIDJACK**® is larger than a standard wafer check valve. Smith & Loveless can review each pump station's piping layout and determine what piping modifications are required.







SPEDY SOLUTIONS

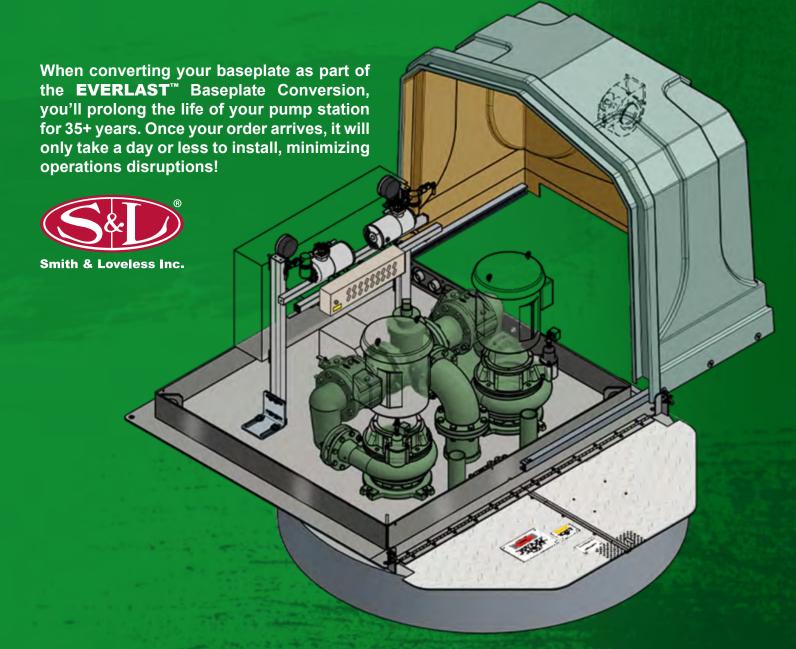
OPTION 3: SST BASEPLATE/PIPING UPGRADE

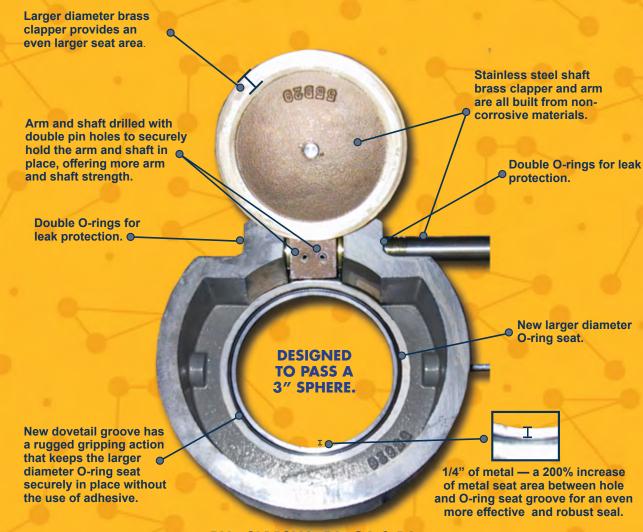
Many Smith & Loveless pump stations have been in service for more than 25 years, presenting signs of wear. By upgrading to the SST Baseplate/Piping option that features the RAPIDJACK® check valve, cities can reuse rotating assemblies, control panels and have an upgraded pump station with the latest features for a cost-effective price. This option features the SST DURO-LAST® baseplate with a 25-year warranty. Additionally, this is available in the EVERLAST™ one-piece and two-piece hood designs, with additional features that include the pump failure alarm, hood lift assist (if the one piece hood is selected), wet well cord manager, two new vacuum pumps on raised shelf, two-piece manway to the wet well entrance and RAPIDJACK®.

OPTION 4: EVERLAST™ PUMP STATION WITH RAPIDJACK®

The premier option is a new EVERLAST™ Pump Station with the RAPIDJACK®. Engineered for flexibility, every EVERLAST™ pump station's piping arrangement has the room to add the RAPIDJACK® when originally purchased or purchased at a later date.









Now engineered for even tougher operation, Smith & Loveless' 4" and 6" Wafer Check Valves now feature a new seat design which gives them one of the most robust seat arrangements on the market today! The 4" and 6" Wafer Check Valves are found on all of Smith & Loveless' vacuum primed pump stations.

PART#	DESCRIPTION	REPLACES
2L153NA	4" Left-Hand Wafer Check Valve	2L153N, 2L153E and 2L153A
2L153PA	4" Right-Hand Wafer Check Valve	2L153P, 2L153F and 2L153B
2L153QA	6" Left-Hand Wafer Check Valve	2L153Q, 2L153L 2L153G and 2L153C
2L153RA	6" Right-Hand Wafer Check Valve	2L153R, 2L153M 2L153H and 2L153D



WAFER CHECK VALVES



Extended Body Check Valves for FORMULA X® stations

2L153SA 4" Left-Hand Extended Body Check Valve

2L153TA 4" Right-Hand Extended Body Check Valve

Extended Body Check Valves for EVERLAST™ stations

6" Right-Hand Extended Body Check Valve

56B20BA 4" Right-Hand Extended Body Check Valve

56B21AA 6" Left-Hand Extended Body Check Valve

56B20AA 4" Left-Hand Extended Body Check Valve



7 0		
	PART#	SHAFT SIZE
	2L161E-300	8" Left-Hand Wafer Check Valve
	2L161F-300	8" Right-Hand Wafer Check Valve
	2L161G-300	10" Left-Hand Wafer Check Valve
	2L161H-300	10" Right-Hand Wafer Check Valve
	2L161J-300	12" Left-Hand Wafer Check Valve
	2L161K-300	12" Right-Hand Wafer Check Valve



56B21BA

H56A37A	4" Left-Hand	RAPIDJACK®	Check Valve

H56A37B 4" Right-Hand RAPIDJACK® Check Valve
H56A37C 6" Left-Hand RAPIDJACK® Check Valve

H56A37D 6" Right-Hand RAPIDJACK® Check Valve



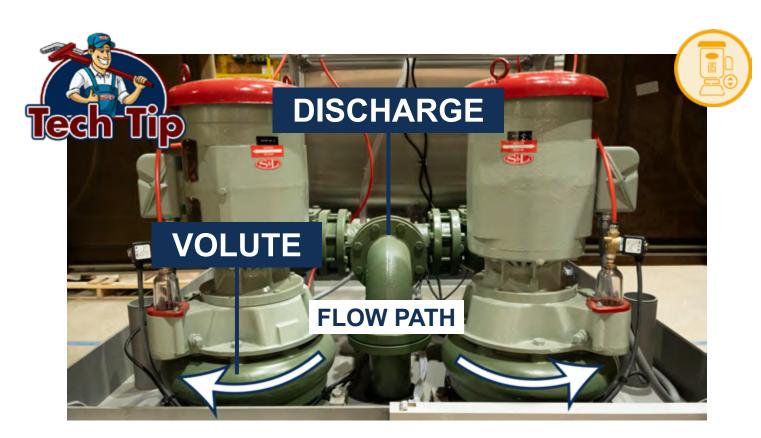


PEDAL TO THE STALL



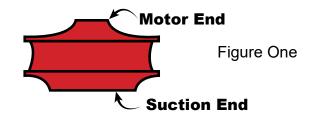
Worry less with our noncorrosive Wafer Check Valve! The metal valve's incomparable strength works to keep the Wafer Check Valve from corroding in harsh pumping applications.



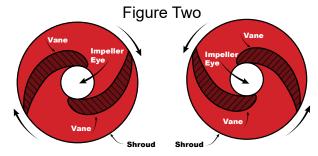


IMPELLER ROTATION

Determining impeller rotation is one of the most common questions customers ask. If you have the impeller already removed, the first thing is to make sure the "motor end" with keyway is up and the larger opening "suction end" is down.



Then looking down on the impeller with the "motor end" up, determine which way the vanes curve. The first drawing shows a clockwise rotation (CW). The second drawing shows a counterclockwise rotation (CCW).



Clockwise (CW) Rotation

Counterclockwise (CCW)
Rotation

If you haven't removed the pump yet, you can still determine the rotation of the pump and impeller by looking at the equipment and how the wastewater flows through the pump.

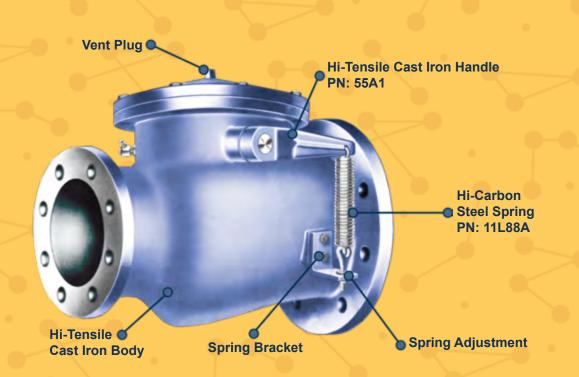
On all Smith & Loveless Duplex Wet Well Mounted Pump Stations, there is a CW and CCW pump. The pump draws the wastewater up from the wet well and into the volute that houses the impeller. The pump then discharges the wastewater out of the volute. This can be seen in figure two by following the arrows. By looking at the directional flow of the wastewater through the pump, the rotation can be determined.

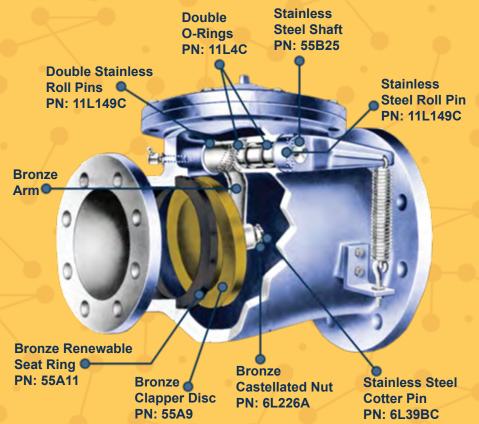
In the diagram, the flow is pulled into the pump from the wet well that is located directly under the pump. The pump on the left in this diagram is the CW rotation. The pump on the right in this diagram is the CCW rotation. The flow always circulates around the volute first and then out through the volute discharge. Whatever rotation this flow path is will determine whether the impeller and pump are CW or CCW in rotation.

If you'd like to watch a video on determining impeller rotation, scan the QR code.









FULL BODY SPRING-LOADED NON-SLAMMING **CHECK VALVES**

These two 3-D drawings of the Smith & Loveless Spring-Loaded Non-Slamming Check Valves highlight some of their key features of PN: 2L34A/AA and 2L35A/AA.

FULL BODY SPRING-LOADED NON-SLAMMING CHECK VALVES DIMENSION CHART

PART#	Size of Valve	RH Vs. LH	A	B ₁	B ₂	C ₁	C ₂	D ₁	D ₂	E,	E ₂	F	G	Н	I	Wt. In Lbs.
2L34A 2L34AA	4" x 4" 4" x 4"	RH LH	13- ⁵ / ₁₆ 13- ⁵ / ₁₆	15/ 16 15/ 16	15/ ₁₆ 15/ ₁₆	9 9	9 9	7-1/ ₂ 7-1/ ₂	7-1/ ₂ 7-1/ ₂	5/ ₈ 5/ ₈	⁵ / ₈	10 10	10 10	6- ¹ / ₄ 6- ¹ / ₄	7-3/ ₁₆ 7-3/ ₁₆	125 125
2L35A 2L35AA	4" x 6" 4" x 6"	RH LH	13- ⁵ / ₁₆ 13- ⁵ / ₁₆	15/ 16 15/	15/ 16 15/ 16	9 9	11 11	7-1/ ₂ 7-1/ ₂	9-1/ ₂ 9-1/ ₂	5/ ₈ 5/ ₈	3/ ₄ 3/ ₄	10 10	13- ¹ / ₂ 13- ¹ / ₂	6- ¹ / ₄ 6- ¹ / ₄	7- ³ / ₁₆ 7- ³ / ₁₆	130 130
2L35B 2L35BB	4" x 8" 4" x 8"	RH LH	18- ¹ / ₄ 18- ¹ / ₄	15/ 16 15/ 16	1- ¹ / ₈ 1- ¹ / ₈	9 9	13- ¹ / ₂ 13- ¹ / ₂	7-1/ ₂ 7-1/ ₂	11- ³ / ₄ 11- ³ / ₄	5/ ₈ 5/ ₈	3/ ₄ 3/ ₄	13- ¹ / ₂ 13- ¹ / ₂	13- ¹ / ₂ 13- ¹ / ₂	8- ³ / ₄ 8- ³ / ₄	9- ¹ / ₂ 9- ¹ / ₂	225 225
2L35C 2L35CC	5" x 8" 5" x 8"	RH LH	18- ¹ / ₄ 18- ¹ / ₄	15/ 16 15/	1- ¹ / ₈ 1- ¹ / ₈	10 10	13- ¹ / ₂ 13- ¹ / ₂	8- ¹ / ₂ 8- ¹ / ₂	11- ³ / ₄ 11- ³ / ₄	3/ ₄ 3/ ₄	³ / ₄ ³ / ₄	13- ¹ / ₂ 13- ¹ / ₂	13- ¹ / ₂ 13- ¹ / ₂	8- ³ / ₄ 8- ³ / ₄	9-1/ ₂ 9-1/ ₂	235 235
2L35D 2L35DD	6" x 8" 6" x 8"	RH LH	18- ¹ / ₄ 18- ¹ / ₄	1	1-1/ ₈ 1-1/ ₈	11 11	13- ¹ / ₂ 13- ¹ / ₂	9-1/ ₂ 9-1/ ₂	11- ³ / ₄ 11- ³ / ₄	3/ ₄ 3/ ₄	3/ ₄ 3/ ₄	13- ¹ / ₂ 13- ¹ / ₂	13- ¹ / ₂ 13- ¹ / ₂	8- ³ / ₄ 8- ³ / ₄	9-1/ ₂ 9-1/ ₂	240 240

Dimension Drawing Keys BOLTS-

ORDER LOCALLY FROM YOUR Smith & Loveless Representative

KEY ADVANTAGES

- Eliminates the need for increasing fittings saving space, materials and labor cost.
- · Spring-loaded gate and non-slamming design.
- · Highest quality construction with cast iron body, bronze and stainless steel fittings.
- · Lubricated dual O-ring shaft seals for easy opening and longer service life.
- · Shaft extension allows right or left-hand mounting of lever and spring assembly.
- Simple design and operation all parts accessible through cover.







(Obsolete) 3/32" Orifice PN: 1L406E Replaced by PN: 1L406K Old Style 3-Way Solenoid Valve 5/16" Orifice PN: 1L545A or PN: 1L545B New Style 2-Way Solenoid Valve



The 5/16" orifice 2-way solenoid valve reduces routine maintenance and can reduce priming time by up to 40% compared to the 3-way solenoid valve.

We encourage you to upgrade to either the 5/16" dome mounted or control panel conduit mounted solenoid valve. Check out the options below.

2-Way Solenoid Valve

PART# DESCRIPTION

1L545A 2-Way Solenoid Valve for Bracket Mounting

87A481-STK Din Connection Cable for the PN: 1L545A - Connects Via Cable Solenoid Valve to Control Panel.

1L545B
 1L9D
 5L181A
 2-Way Solenoid Valve Thru Backpan Mounting
 Nipple, Required for PN: 1L545B Solenoid Valve
 Conduit Fitting Hub for PN: 1L545B Solenoid Valve



PN: 1L545A and PN: 1L545A-2







PN: 5L181A PN: 1L9D



EASY TO MONITOR PUMP STATION

With a quick glance at the Combination PSI Air/Vacuum Gauge, monitoring your Smith & Loveless vacuum priming system is simple. The gauge indicates whether the pump station is working in normal operating conditions. If not, you will know whether it is a vacuum leak, vacuum plug, suction plug or discharge plug with a glance at the gauge.

These glycerin filled gauges come with a diaphragm already builtin. If you have the old style gauge, no major changes are necessary to convert to the new style gauge. All you need to do is take off the existing diaphragm and thread the new gauge into place.

Save yourself time. Make sure you have a gauge installed on each of your pumps for fast feedback. Order your gauge today.

1L780A-F Combo Air/Vac Gauge with 3 1/2" Diameter Gauge Face.

(Measures Inches of Mercury and PSI)











30





GASKET & QUAD RING

Each time the mechanical seal is replaced, Smith & Loveless recommends the seal housing gasket or quad ring also be replaced.

Seal Housing Gasket

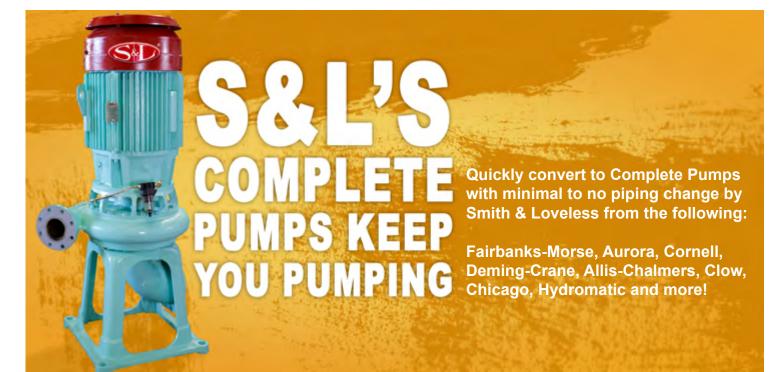


PARTS TIP: The older seal housing has a flat surface and uses the flat gasket. The newer seal housing has a groove and it can use either the flat gasket or the guad ring.

Quad Rina

GASKET QUAD RING PART# PART# **SHAFT SIZE** B-Shaft 1-7/8" 60A11 60A110 C-Shaft 2-1/8" 60A17 60A111 60A84 60A146 D-Shaft 3" (single seal) 60A84 60A112 D-Shaft 3" (double seal)











ORIGINAL PARTS



VIBRATION ISOLATORS

CONTINUOUS HINGE

If your hinges are starting to tear loose or have already torn loose from the lip of the fiberglass hood, you can now fix it without having to buy an entirely new hood. The new Continuous Hinge/Backing Bar Kit installs right over the old holes - dramatically extending the life of your hood.

Continuous Hinge/Backing Bar

49" W x 64" L

62" W x 64" L or 62" W x 70" L



HOOD LIFT ASSIST KIT

Opening your classic pump station hood just got easier with the new Hood Lift Assist by Smith & Loveless, specially designed for the insulated and non-insulated single piece Smith & Loveless above grade pump station hood.

The Hood Lift Assist Kit features two gas shocks and two patent-pending gas shock pivot assemblies that extend the hood opening to an astonishing 85 degrees* in most installations.

All you need to know are the hood, side plate dimensions and weight of your station hood. Order your hood lift assist kit today!

You may also want to upgrade the hinge kit of your classic hood.

*In a limited number of installations, the bracket will prevent the hood from opening the full 85 degrees.

Gas Cylinder, Ball Stud & Safety Clip

PART#	DESCRIPTION
11L241AA	13MM Ball Stud
11241BB	10MM Ball Stud
11L241CC	Safety Clip



GAS SHOCK REPLACEMENT

PART#	DESCRIPTION
11L241H	Locking Replacement Gas Shock - 49" W x 64" L Hood Sizes
11L241K	Non-Locking Replacement Gas Shock - 49" W x 64" L Hood Sizes
11L241M	Non-Lock Replacement Gas Shock- 62" W x 64" or 70" L Hood Sizes
11L241N	Locking Replacement Gas Shock - 62" W x 64" or 70" L Hood Sizes

MULTI-STRUT SHELF

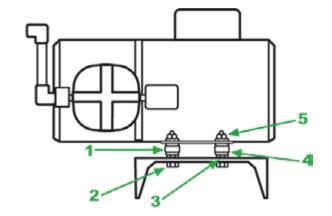
Vacuum Pump Vibration Isolator Parts

ITEM#	QTY	PART#	DESCRIPTION
1	6	6L104D	Nylok Hex Nut
2	6	6L232DG	Grade B Carriage Bolt
3	20	6L61F	Washer
4	4	6L63DF	Carriage Bolt
5	4	87A291	Vibration Isolator
6	4	6L60F	Hex Nut
7	4	6L32D	Lock Nut

CHANNEL SHELF ON FLOOR

Vacuum Pump Vibration Isolator Parts

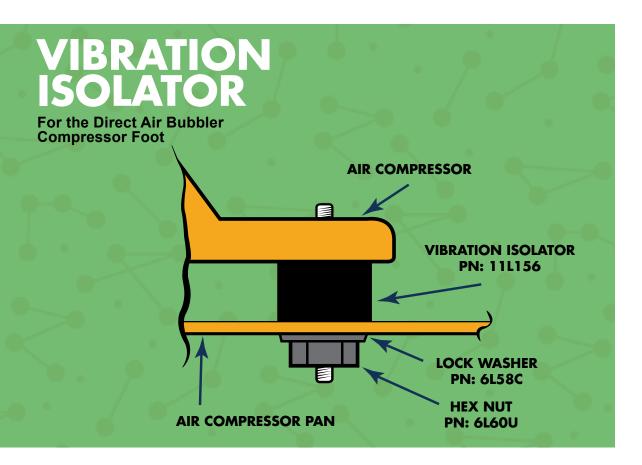
	-		
ITEM#	QTY	PART#	DESCRIPTION
1	4	87A291	Vibration Isolator
2	4	6L20AD	Capscrew
3	4	6L60E	Hex Nut
4	12	6L61E	Washer
5	4	6L32A	Lock Nut



Over time, the vibration isolator located between the bottom foot of the vacuum pump and the vacuum pump shelf or floor of the wet well becomes worn and requires replacement. Updating keeps noise from vibration while the vacuum pumps works to a minimum.









UNDERGROUND PUMP STATION HUMIDISTAT & DEHUMIDIFIER

Humidity can quickly create problems if it is not controlled. As part of your equipment review, make sure the Smith & Loveless Humidistat, PN: 4L215, and Dehumidifier, PN: 11L150C, are functioning correctly. You easily set the level of desired humidity with the convenient dial switch and the Humidistat will operate the dehumidifier. It handles relative humidity 0 to 70%.

Humidistat & Dehumidifier

Includes: One Humidistat and/or one Dehumidifier

PART#	DESCRIPTION
4L215	Humidistat
11L150C	Dehumidifier



BUBBLER AIR COMPRESSORS



Used on all Smith & Loveless Underground Pump Stations are the bubbler air compressors. We sell two replacement bubbler air compressors, the 9L25C and the 9L25, with the C version being smaller, yet functioning at full capacity.

Bubbler Air Compressors

Includes: One bubbler air compressor.





PART#	DESCRIPTION
9L25C	Bubbler Air Compressor
9L25	Bubbler Air Compressor



- Avoid having to redrill the mounting holes. The 9L25C has three mounting feet and the 9L25 has four mounting feet. Check to see which style you already have installed.
- When you replace the bubbler air compressor, Smith & Loveless customer service recommends replacing the vibration isolators to keep vibration noise to a minimum. Don't forget to add a set to the order.



YOUNEED IT BY YESTERDAY!



Order the Quick-Ship Control Panel today for your vacuum-primed Pump Station and receive it as quickly as 2 to 4 weeks! You never know when a car, flood or lightning strike will take out your pump station controls. This standard 2-pump control panel will arrive to you equipped with the latest S&L technology.







COMPLETE FLOAT CHECK VALVE ASSEMBLY

1L443H Float Check Valve Assembly

The new PN: 1L443H Smith & Loveless float check valve diameter and length were completely changed in 1999 to the new design PN: 1L443H for better overall float check valve assembly performance. The float check valve is used on all Smith & Loveless vacuum primed pumps.

1L443H SPARE PARTS

Smith & Loveless carries a full line of spare parts for the PN: 1L443H float check valve, put into use in 1999.

1L443H FLOAT CHECK VALVE SPARE PARTS

1L443HD	Body
1L443HA	Ball Seat
1L443B	1-1/2" Diameter Float Ball
1L443HB	O-Ring
1L443HC	Bowl Assembly
1L333	Check Valve (Install With Arrow Pointing Down)

1L443G SPARE PARTS

Even though this float check valve assembly was used only from 1997 to 1999, Smith & Loveless still carries a full line of spare parts for it.

1L443 Float Check Valve Spare Parts

PAKI#	DESCRIPTION
1L443A	Ball Seat
1L443B	1-1/2" Diameter Float Ball
1L443E	O-Ring (Goes around inside Lip of the Bowl)
1L443F	Bowl Assembly
1L333	Check Valve (Install with Arrow Pointing Down)

1L443 SPARE PARTS

Used from 1995 to 1997, Smith & Loveless Float Check Valve

PN: 1L443 still has some spare parts available for purchase.

1L443 Float Check Valve Spare Parts

PART#	DESCRIPTION
1L443B 1L443C 1L333	1-1/2" Diameter Float BallO-Ring (Goes Around Inside Lip of the Bowl)Check Valve (Install with Arrow Pointing Down)



TO ORDER, CALL 1-800-922-9048

ORIGINAL PARTS

















1L443HB 1L443C

87A76 SPARE PARTS

Used from 1970 to 1995. Smith & Loveless Float Check Valve PN: 87A76 still has some spare parts available for purchase.

87A76 Float Check Valve Spare Parts

PART#	DESCRIPTION
1L443B	1-1/2" Diameter Float Ball
1L410C	O-Ring (Goes Around Inside Lip of the Bowl)
1L410D	Bowl (Not Shown)
1L410H	Bowl Insert
1L333	Check Valve (Install with Arrow Pointing Down)

NORMALLY OPEN FLOAT SWITCH

Are your floats measuring the level in your wet well consistently or is it time to replace your floats? Made of polyethylene materials, the blue normally open float switch, PN: 4L291A, is the most common float sold by S&L. It is typically used for high water alarms and non-alarm conditions in the wet well that signal your S&L pump to start or stop pumping.

Includes: One normally-open float switch



Normally Open Float Switch

PART# DESCRIPTION

Normally-Open Float Switch 4L291A



Non-Mercury Float Switch

PART# DESCRIPTION

Non-Mercury Float Switch

NORMALLY CLOSED FLOAT SWITCH

Made of polyethylene materials, the red normally closed float switch, PN: 4L291B, is typically used for low water alarms.

Includes: One normally closed float switch



Normally Closed Float Switch

PART# DESCRIPTION

4L291B Normally Closed Float Switch





FLOODED SUCTION PUMP SEAL FILTER





The pump seal filter is the first line of defense in protecting your pump's double mechanical seal. It filters out unwanted particles to help keep your mechanical seal lubricated. Smith & Loveless' customer service recommends keeping a backup filter or two on the shelf for quick change outs. Doing this allows for specific parts to be reordered like the element, baffle and drain that wear over time so that you can rebuild the unit in the convenience of your shop.

All of Smith & Loveless' flooded suction pumps use the pump seal filter. This includes its underground pumps and its remote mounted **PISTA®** Grit Pumps. No piping changes are required to convert your pump from one of the original seal filters to the most current PN:1L485 unit.

Don't let this critical part go unnoticed because if it is gets too dirty, you'll be shortening the life of your pump's mechanical seal. Those take much longer to replace than a quick seal filter swap out. Check out your pump seal filter today. Is it ready for cleaning?

Complete Flooded Suction Pump Seal Filter Assembly

PART#	DESCRIPTION
1L485	Seal Filter Assembly



1L485, 1L371 & 1L89 PARTS

Smith & Loveless carries a full line of repair kits for the PN: 1L485. For the older styles, PN: 1L371 and PN: 1L89, Smith & Loveless still carries some of the element components. The PN: 1L485 is a direct replacement to both the PN: 1L371 and PN: 1L89, so it can be put in place easily.

1L485, 1L371 and 1L89 Repair Kits and Spare Parts

PART#	DESCRIPTION	PART#	DESCRIPTION
1L485A	Filter Element Kit: Includes Bowl O-ring and Filter Element	1L371C	O-ring
1L485B	Bowl Kit: Includes Bowl, Bowl O-ring and Drain Kit	1L371E	Element
1L485C	Drain Kit: Includes Twist Drain and Drain O-ring	1L89E	Element
1L485D	Baffle Kit: Includes Baffle, Deflector and Bowl O-ring		

THE ANODE TEST BOX



The Smith & Loveless Anode Test Box was designed to monitor the current flow in each sacrificial anode surrounding the buried pump station. The amount of current flowing in the anodes depends on the condition of the anode. The flow of current is also effected by the electrical ground at the service pole.

The S&L Anode Test Box provides a single measuring point to monitor the current flow and subsequent amount of anode migration. S&L's Anode Test Box works well with not only Smith & Loveless equipment, but also on all underground steel structures such as water booster pump stations, valve vaults and pump stations. See the sizing information below.

<u>Circular Steel Structures:</u> Recessed Wet Well Mounted Pump Stations, Custom Series and **DUO-DUCT**® Pump Stations.

PUMP STATION SIZE	#OF ANODES	CONDUIT SIZE
7' - 0" Diameter	2	3/4"
8' - 0" Diameter	2	3/4"
8' - 6" Diameter	2	3/4"
9' - 9" Diameter	3	3/4"
10' - 6" Diameter	3	1"
11' - 6" Diameter	3	1"



Fully Buried Steel Structures: CAPSULAR® Pump Stations

PUMP STATION SIZE	#OF ANODES	CONDUIT SIZE
9' - 9" Width X 21'-0" Length	4	1-1/4"
9' - 9" Width X 23'-0" Length	5	1-1/4"
9' - 9" Width X 27'-0" Length	6	1-1/4"
9' - 9" Width X 31'-0" Length	7	1-1/4"
9' - 9" Width X 34'-0" Length	8	1-1/4"

CORROSION BLOCKER: SACRIFICIAL ANODE PACK

Stop corrosion in its tracks with the Smith & Loveless Sacrificial Anode Pack. This magnesium-type 17-pound pack includes a 30-foot copper lead wire that attaches to an anti-corrosion structure.

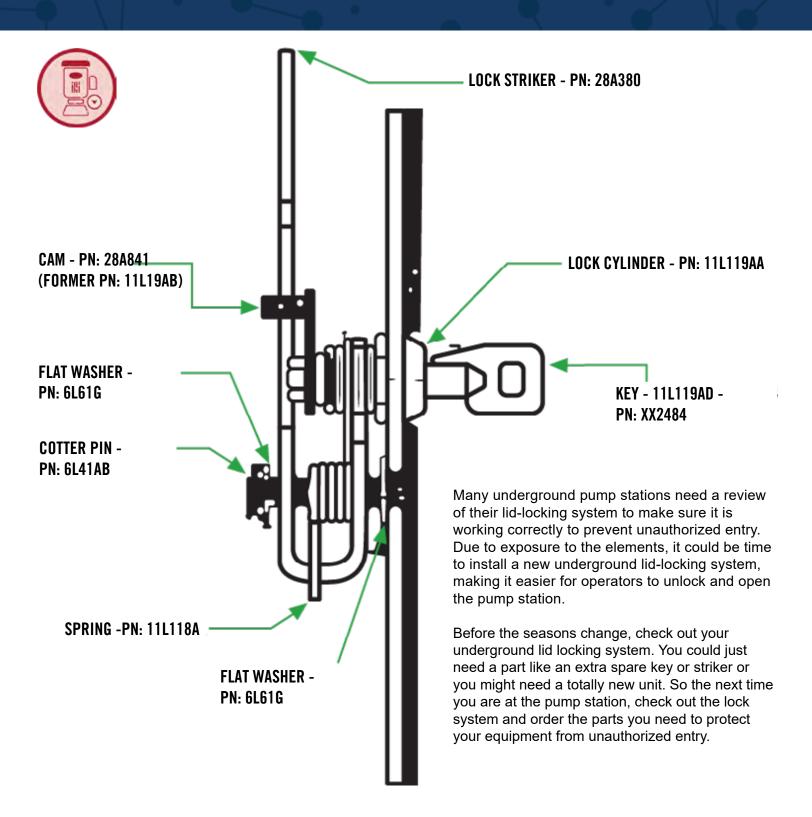
This sacrificial anode pack is used for corrosion protection on all buried pump stations and recessed wet well mounted pump stations, along with any wastewater treatment plant or water treatment plant buried in the ground. The sacrificial anode significantly extends the life of the exposed metal by slowing the corrosion process.

The PN:12L8 Sacrificial Anode Pack can be tied directly into your Smith & Loveless Anode Test Box to monitor anode migration.



PART#	DESCRIPTION
12L8	Sacrificial Anode Pack

PROTECTION FROM UNAUTHORIZED ENTRY: UNDERGROUND LID LOCKING SYSTEM





Smith & Loveless' uniquely designed Mechanical Seals are especially formulated for harsh sewage pumping environments with our undoubted excellence since 1948. S&L's formulated mechanical seal was created specifically for pumping wastewater.







SINGLE MECHANICAL SEAL PARTS KIT PLUS

SINGLE MECHANICAL SEAL

REPLACEMENT PARTS KIT

life of any in the industry. Used on all Smith & Loveless Classics, FORMULA X®, Recessed WWMP and EVERLAST™, it comes in three sizes, depending upon the shaft size.

The single Mechanical Seal was designed to have the longest seal

Single Mechanical Seal Parts Kit

Includes: One carbon, one ceramic, one spring, one O-ring and one quad ring. Does not include seal housing gasket and quad ring, impeller bolt, locking washer, impeller washer, volute gasket or bolts for the bronze seal housing.

PART#	SHAFT SIZE
H87A28	B-Shaft: 1-7/8"
H87A97	C-Shaft: 2-1/8"
H87A534	D-Shaft: 3"

By securing lower supply chain prices for our customers, Smith & Loveless is fighting back against inflation with its Mechanical Seal OEM **Spare Parts line.**

The Smith & Loveless Mechanical Seal was designed to average seven years of normal sewage pumping operation.

Unfortunately, customers tell us how their purchasing department ordered "knock-off" seals and these seals fail quickly. Then they have to tear apart the entire pump to replace the "knock-off" seal. Each component in the Smith & Loveless Mechanical Seal was specially designed and formulated for harsh sewage environments. S&L are pros in sewage and mechanical seals. S&L has been pumping sewage for more than 75 years.

Just because someone sells a mechanical seal, it doesn't mean it was formulated for sewage. Order your Smith & Loveless OEM mechanical seal today. You'll be glad you did.

Ask for our new pricing.

Includes: One carbon, one ceramic, one spring, one O-ring and one quad ring, one Nylok impeller bolt, one locking washer and one impeller washer. *Does not include volute gasket or bolts for the bronze seal housing.











MECHANICAL SEAL	QUAD RING	GASKET	IMPELLER BOLT	LOCKING WASHER	IMPELLER WASHER	SHAFT SIZE
H87A28	60A110	60A11	60A12	6L391D	60A20	B-Shaft: 1-7/8"
H87A97	60A111	60A17	60A12	6L391D	60A20	C-Shaft: 2-1/8"
H87A534	60A146	60A84	60A87	6L391D	60A86	D-Shaft: 3"

BRONZE SEAL HOUSING

Includes: One bronze seal housing. *Existing bolts not included. Reuse existing bolts or order six new bolts.

HOUSING PART#	BOLT PART#	SHAFT SIZE
87B2	6L59BC	B-Shaft: 1-7/8"
87B19	6L59BC	C-Shaft: 2-1/8"
87B73	6L59EC	D-Shaft: 3"









MECHANICAL SEALS

ASK FOR OUR NEW PRICING AT

PARTS@SMITHANDLOVELESS.COM

DOUBLE MECHANICAL SEAL PARTS KIT

The double mechanical seal was designed to have the longest seal life of any in the industry. Used on all Smith & Loveless flooded suction pumps found on Custom Series and CAPSULAR® Underground Pump Stations, it comes in three sizes, which is dependent upon the shaft size.

Includes: Two carbons, two ceramics, one spring, two O-rings and two quad rings. Does not include seal housing gaskets and quad rings, impeller bolt, locking washer, impeller washer, volute gasket or bolts for the bronze seal housing.



PART#	SHAFT SIZE
H60A119	B-Shaft: 1-7/8"
H60A120	C-Shaft: 2-1/8"
H60A121	D-Shaft: 3"

BRONZE SEAL HOUSING

Includes: One upper bronze seal housing and/or one lower bronze seal housing. Does not include bolts. Reuse or order six new bolts for reassembly.



•	B-SHAFT	C-SHAFT	D-SHAFT
	1-7/8″	2-1/8"	3″
Upper Bronze Seal Housing	60C92	60C94	60C96
Lower Bronze Seal Housing	60C93	60C95	60C97
Single Bolt (Six Required)	6L59BE	6L59BE	6L59BE



COMPLETE BRONZE SEAL HOUSING ASSEMBLY

Keep a complete bronze seal housing on the shelf for quick changeouts that allow you to rebuild the assembly in the convenience of your maintenance or parts room.

Includes fully assembled: one upper bronze seal housing, one lower bronze seal housing, two carbons, two ceramics, one spring, two O-rings, two quad rings and three bolts. Does not include volute gasket, impeller bolt, locking washer, impeller washer, seal housing, quad ring, O-ring and remaining three bolts. Reuse existing three bolts or order three additional bolts for 100% new bolts.

	B-SHAFT	C-SHAFT	D-SHAFT
	1-7/8"	2-1/8"	3"
Complete Seal & Housing Assembly	60C98	60C99	60C100

DOUBLE MECHANICAL SEAL PARTS KIT PLUS

Have all the parts you need to rebuild your double mechanical seal. Don't forget to order your volute gaskets.

Includes: two carbons, two ceramics, one spring, two O-rings, two quad rings, one seal housing quad ring, one seal housing gasket, one Nylok impeller bolt, one locking washer, one impeller washer. Does not include volute gasket, bronze seal housing or bronze seal housing bolts.

















		-	-			
MECHANICAL SEAL	QUAD RING	GASKET	IMPELLER BOLT	LOCKING WASHER	IMPELLER WASHER	SHAFT SIZE
H60A119	60A110	60A11	60A12	6L391D	60A20	B-Shaft: 1-7/8"
H60A120	60A111	60A17	60A12	6L391D	60A20	C-Shaft: 2-1/8"
H60A121	60A112	60A84	60A87	6L391D	60A86	D-Shaft: 3"



GASKET & QUAD RING

Each time the mechanical seal is replaced, Smith & Loveless recommends the seal housing gasket or quad ring also be replaced.

PARTS TIP: The older seal housing has a flat surface and uses the flat gasket. The newer seal housing has a groove and it can use either the flat gasket or the quad ring.

Vacuum Primina Pump Volute Gaskets

vaccom riming romp voice cusices					
PART#	PUMP SIZE				
60A26	4B2B, 4B2C, 4B2D, 4C2B,				
	4C2D, 4B2X and 4C2X				
60A28	4B3B, 4C3B, 4D3B, 6B3B, 6C3B and 6D3B				
	PART# 60A26				

Vacuum Priming Pump Volute Gaskets

PART#	PUMP SIZE	
60A88 60A106B	8C4D and 8D4D 4D4B	



VOLUTE GASKETS

Each time the rotating assembly is taken apart, install a new volute gasket to increase the life span of your pump.



TO ORDER, CALL 1-800-922-9048

CONTROL FROM ABOVE WITH QUICKSMART



Watch how your underground pump station is working above ground! With the simple-to-use HMI equipped with QUICKSMART™ technology, you can quickly check out pump operation, run times and alternation, wet well level, power monitoring, and so much more all from above ground or via SCADA. You'll leave going down into the underground pump station for maintenance and repairs.



CUSTOM SERIES PUMP STATION RETROFIT

GET MORE FROM YOUR STATION

The Smith & Loveless Custom Series is the original underground pump station made built to last. This classic established the quality features and benefits that you've come to expect from Smith & Loveless pump stations, designed for long lasting service and continuous human use. Double the life of your station by retrofitting modern equipment in a proven design.

UPGRADE YOUR STATION TODAY!

Improve Operator Safety – Move the control panel to grade level, minimizing the operator from having to enter the dry well for daily maintenance.

Cost Effective – Upgrade and replace components as needed. Need just the valves or all new replacement components? We have you covered.

Changing Flow Conditions - Flow conditions change in 40+ years. There is never a better time to upgrade your pumps to meet demand.

IN PROGRESS



Eliminate Ragging – Upgrade to the X-PELLER®, which effectively expels high volumes of consumer flushables, including wipes, rags and other stringy material. The X-PELLER® significantly reduces the need to dismantle the pump to unbind the impeller.

Get Smart with QUICKSMART™ – Smith & Loveless offers a state-of-the art touch screen PLC that delivers an unparalleled ability to monitor and adjust all of your pump station functions.









THE COMPLETE RETROFIT PACKAGE

- 1. Directly replace existing piping and valves with easy installation and improved factory performance.
- 2. Upgrade and replace the environmental equipment, including ventilation blower with 30 air changes per hour, dehumidifier and sump pump and lighting. This allows for continuous human use and provides a dry, comfortable climate in which to work.
- 3. Directly replace the complete S&L non-clog pump with premium efficient inverter-ready motor that has a service life of decades. If needed, S&L can change flow conditions to meet your demand.
- 4. Directly replace or install a new **QUICKSMART**[™] station control panel at the top of the station to improve operator safety and convenience. S&L can provide a local junction box in the station to make wiring a breeze and preserve local HOA controls. VFD and soft start options are available.
- 5. Replace the existing high strength fiberglass entrance cover, ladder extension and safety prop bar for maximum operator safety. Contact S&L for maintenance lift options.
- 6. Sand and re-coat the walls of the dry well with new, color matched **VERSAPOX®** epoxy coating provided by S&L to prevent rust and maximize the life of the station.
- 7. Replace or retrofit the sacrificial anode to prevent rust and maximize the life of the station.



YPELLER

Mono-port impeller for heavy flushables. Available for 4"- 8" (100 mm - 200 mm) and 8" (200 mm) pumps!

S&L NON-CLOG PUMP

FEATURES

- Double Mechanical Seal
- Heavy Duty Stainless Steel Shaft
- Premium Efficient Motor
- Class F Insulation
- Explosion Proof and TEFC Options Available
- Inverter Ready



TIRED OF ROTATING, TEMPORARY

SOLUTIONS?

Do you have rotating assemblies by others? No problem! Our upgrades are fully compatible with select Allis Chalmers, Aurora and Fairbanks-Morse Vertical Mounted Sewage Pumps with minimal

interruption when switching to S&L.

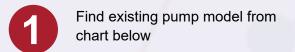


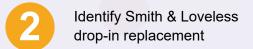


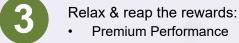


BOLT-ON TOP PERFORMANCE BY UPGRADING TO SMITH & LOVELESS ROTATING ASSEMBLIES.

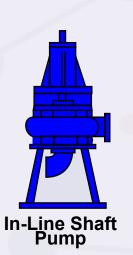
IT'S AS EASY AS 1, 2, 3

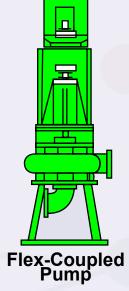






- Low Maintenance
- Less Energy Usage
- Reduced Operating Costs







REPLACEMENT ROTATI	ING ASSEM	MBLIES AVAILAI		S&L ROTATING SSEMBLIES:
Allis-Chalmers	4x4x14	Type NSWV	Model 200, 300 and 400	4D4
Allis-Chalmers	8x6x17	Type NSWV	Model 200, 300 and 400	6D5
Aurora Pump Co.	8Ex10	Type KU	Series	8D5
Aurora Pump Co.	10Ex10	Type KU	Series	10D5
Aurora Pump Co.	12Ex10	Type KU	Series	12D5
Fairbanks-Morse	4"	Fig.	5412, 5432 and 5442	4B2
Fairbanks-Morse	4"	Fig.	5413, 5433 and 5443	4B3
Fairbanks-Morse	5"	Fig.	5413, 5433 and 5443	6B3

TECHNICALLY ADVANCED FOR PRACTICAL PERFORMANCE.

Smith & Loveless pumps have many outstanding features which make them work for you, not against you.

- The oversized shaft minimizes shaft deflection, resulting in an extended seal and lengthening life.
- The bronze mechanical seal housing provides the best possible heat dissipation, preventing the formation of abrasive rust particles in the seal.
- The non-clog impeller with a streamlined eye will pass three inch solids.
- Custom-trimmed impeller vanes are designed for maximum efficiency. The back shroud is full diameter to prevent stringy material from winding around the shaft and the front shroud is also full diameter to prevent recirculation of pumped liquid and improve efficiency.
- Smith & Loveless' compact design minimizes pump height, thus reducing vibration and extending seal and increasing life.



Replacement Pumps Available:

- Fairbanks-Morse
- Aurora
- Cornell
- Deming-Crane
- Allis-Chalmers
- Clow
- Chicago
- Hydromatic

Tired of excessive maintenance costs and down-time due to limited seal life, bearing and shaft failure and frequent clogging? A simple, economic way to give new life to your wastewater pumping system is to install high-performance, energy-efficient Smith & Loveless pumps or drop-in rotating assemblies.

Upgrading to Smith & Loveless quality is fast and easy, whether you presently have close-coupled, flex-coupled or in-line shaft driven pumps. The S&L rotating assembly bolts right into the existing volute casing while the Smith & Loveless complete pump bolts onto the base - no cutting, welding or piping changes! The installation takes minutes, with a few simple tools and factory-supplied parts. Just bolt on, connect the motor leads and keep on pumping.

FAST AND SIMPLE: BOLT ON, TURN ON.

Call: 1-800-922-9048 smithandloveless.com





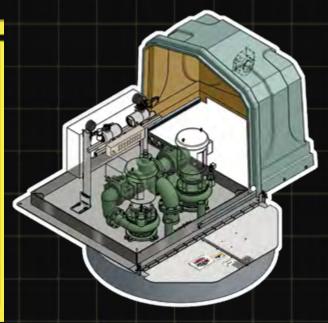
EVERLAST

COST-EFFECTIVE UPGRADES. EVERLAST

Save money when you order the **EVERLAST™** Baseplate conversion by reusing rotating assemblies and controls. If you have several pump stations to upgrade, it can be a real money saver.

The EVERLAST™ Baseplate Conversion comes standard with the features found on a complete EVERLAST™ Pump station – except the rotating assemblies and controls. The entire swap out from the existing pump station to the new EVERLAST™ Baseplate Conversion takes about one day.

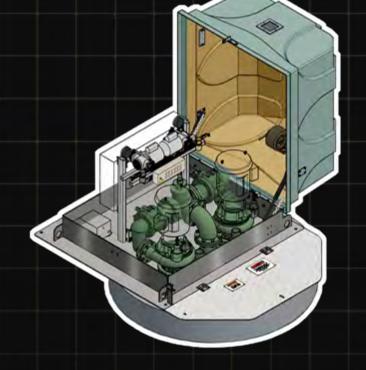
The conversion is pretty easy and provides you with the 25-year **DURO-LAST**[®] warranty on the baseplate.











Smith & Loveless, Inc.

14040 Santa Fe Trail Drive Lenexa, KS 66215

ARE YOU SIGNED UP FOR ALL OF OUR CATALOGS?



JOIN NOW!

Shr.

Sign up today at SmithandLoveless.com to gain access to all of our catalogs and the latest industry updates.

Phone: 1-800-922-9048

Email: parts@smithandloveless.com

answers@smithandloveless.com retrofit@smithandloveless.com













S&L'S ROTATING ASSEMBLIES ARE HERE TO STAY!

Our Rotating Assemblies are the powerhouse of your pump station with unmatched durability and rugged materials! Furnished with a motor, adapter, seal and impeller, our Rotating Assemblies can easily fit into your existing volute casting with no welding or cutting required!