

UD-30A Underwater Demineralizer

Tri Nuclear has developed a compact stand-alone Underwater Demineralizer which is ideal for use on special projects or in confined areas where space is at a premium.

Tri Nuclear's Underwater Demineralizers can be operated for long periods practically unattended without the need for maintenance or resin change out, all while controlling water chemistry and reducing pool water activity.

Because the portable Underwater Demineralizer is submerged, it needs no external shielding, or hoses running in or out of the water that may cause rippling, poor visibility or personnel contamination.

Tri Nuclear's Underwater Demineralizers operate under negative pressure which allows the pump to be gravity seated and does not require any special tooling to install or remove the pump underwater.

Features:

- Rapid system deployment via camlock hose connections, twist lock electrical connections, and Phase Reversing control boxes
- Customer supplied resin for best results via proper selection
- Underwater service requiring no additional shielding
- Remote resin sluice and charge
- Lifting Certified per NUREG0612

Specifications:

- | | |
|---------------------------|------------|
| • System Flow Rate: | 40 GPM |
| • Resin Capacity: | 10 Cu. Ft. |
| • Diameter: | 30 in. |
| • System Height: | 65 in. |
| • Vessel Height: | 47-1/2 in. |
| • Pump Weight: | 50 lbs. |
| • Vessel Empty with Pump: | 250 lbs. |
| • Vessel Full with Pump: | 1,100 lbs. |



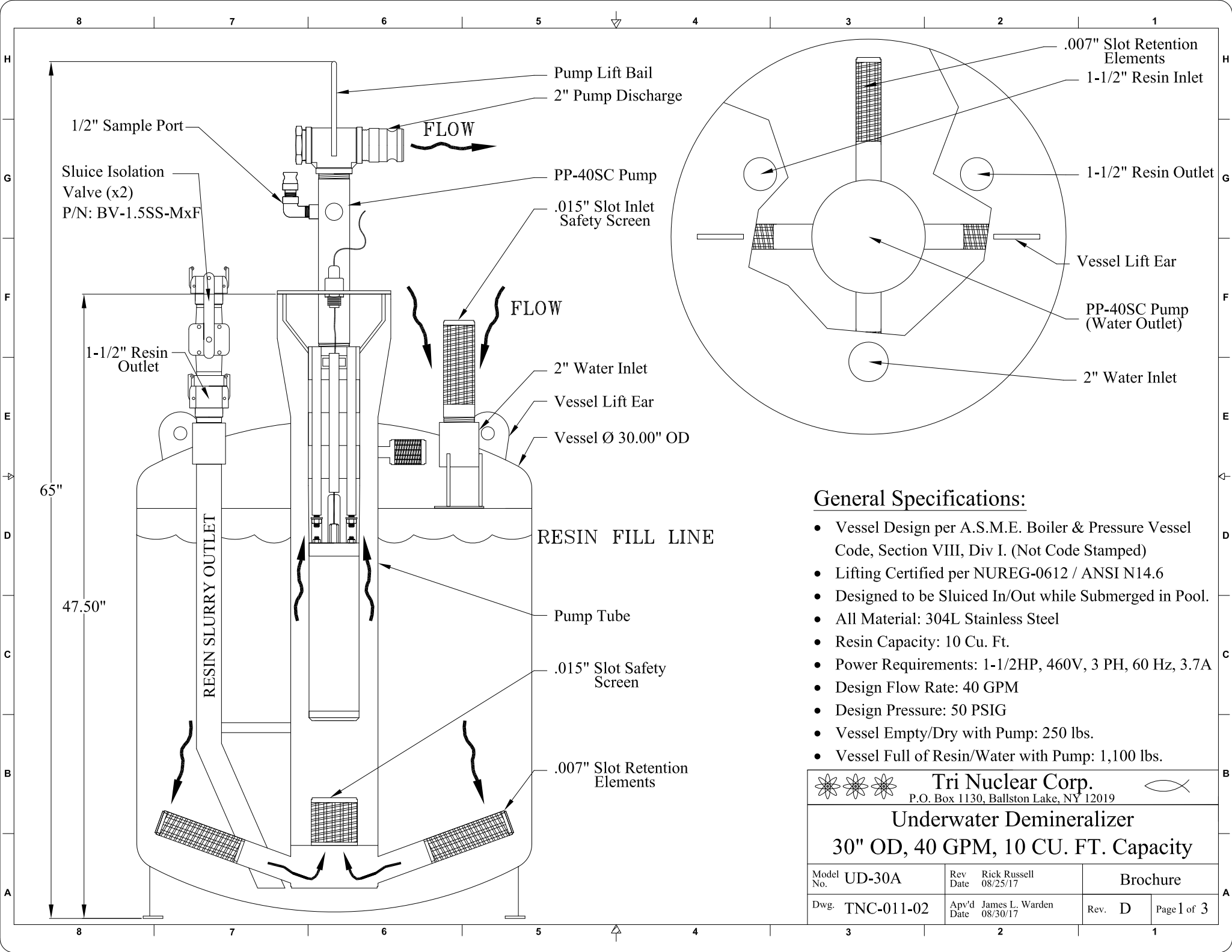
UD-30A Vessel with Pump

Operational Details:

The UD-30A system has two different system configurations identified by the method the system circulates water.



In the discharge hose mode, unfiltered water from the pool enters the top of the vessel travels through the media bed, and is discharged away from the vessel back to the pool via the pump, discharge hose and diffuser.

In the suction hose mode, unfiltered water from the pool enters the suction hose via suction strainer, travels down the length of suction hose toward the vessel, travels through the media bed, and is discharged at the top of the vessel back to the pool via the pump.

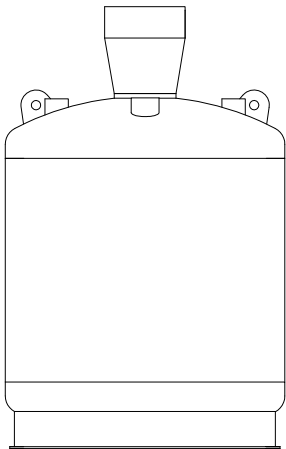
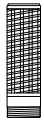


General Specifications:

- Vessel Design per A.S.M.E. Boiler & Pressure Vessel Code, Section VIII, Div I. (Not Code Stamped)
- Lifting Certified per NUREG-0612 / ANSI N14.6
- Designed to be Sluiced In/Out while Submerged in Pool.
- All Material: 304L Stainless Steel
- Resin Capacity: 10 Cu. Ft.
- Power Requirements: 1-1/2HP, 460V, 3 PH, 60 Hz, 3.7A
- Design Flow Rate: 40 GPM
- Design Pressure: 50 PSIG
- Vessel Empty/Dry with Pump: 250 lbs.
- Vessel Full of Resin/Water with Pump: 1,100 lbs.

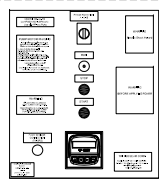
 Tri Nuclear Corp. P.O. Box 1130, Ballston Lake, NY 12019		
Underwater Demineralizer 30" OD, 40 GPM, 10 CU. FT. Capacity		
Model No. UD-30A	Rev Date Rick Russell 08/25/17	Brochure
Dwg. TNC-011-02	Apv'd Date James L. Warden 08/30/17	Rev. D Page 1 of 3

UD-30A-Inlet Inlet Screen

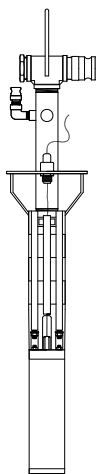


UD-30A-V Vessel

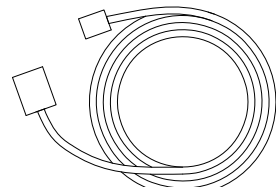
UD-30A-V Vessel



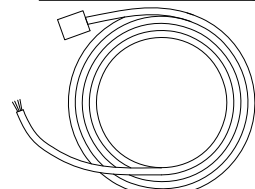
CB-40-FM
Phase Reversing Control Box
with Integral Flow Meter



PP-40SC Pump

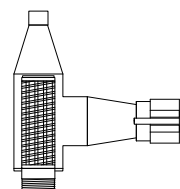


PSC-100P Power Cord
with Twistlock Plug

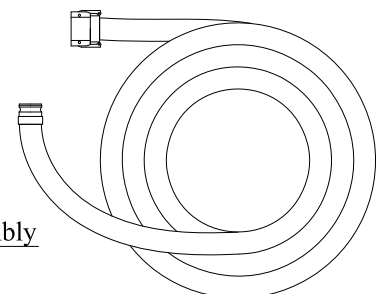


PC-50 Drop Cable
with Twistlock Plug

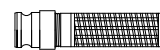
PP-100SC Pump



SHCK-SSVA-2x2
Safety Screen Vent Assembly



PH-2x50 Suction Hose

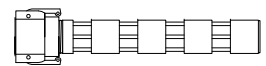


SHCK-JS-2x6
Johnson Screen Strainer

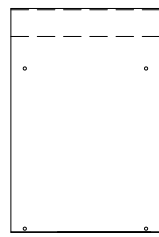
SHCK-UD-30A Suction Hose Conversion Kit



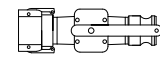
FM-SRD Flow Sensor



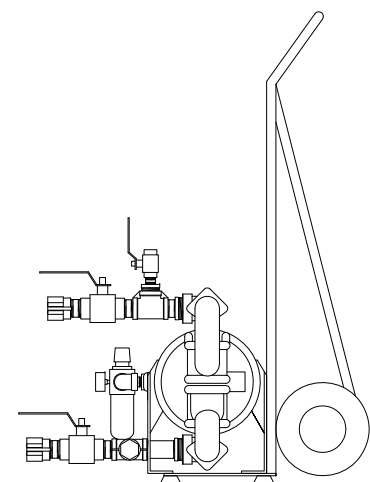
UT-8A 2" Diffuser Pipe



UT-10C Mounting Panel

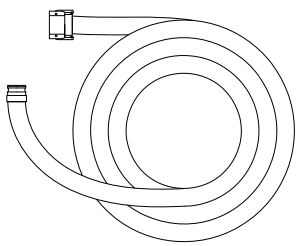


BV-1.5SS-MxF
Sluice Isolation Valve
Qty: 2

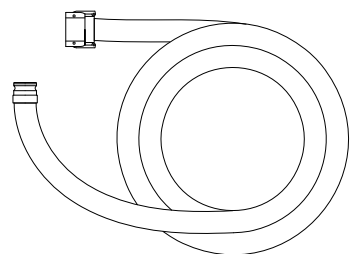


AP-65 Sluice Pump

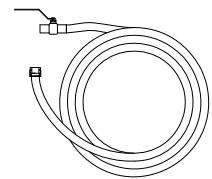
NOTE: Not supplied with system.



FPS-1.5x50 Sluice Hose
Qty: 2



PH-2x25 Discharge Hose



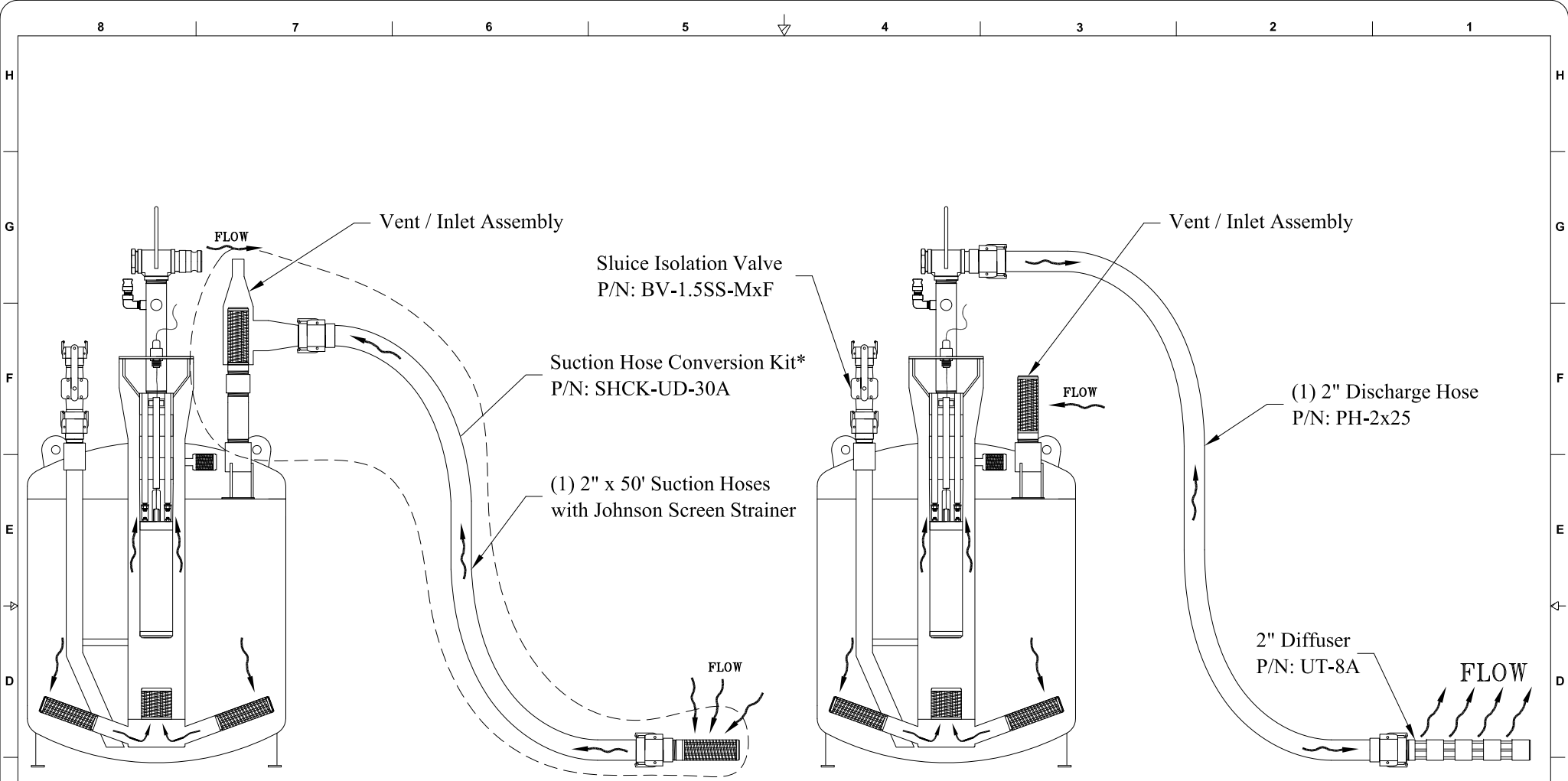
SH-.5x100 Sample Hose

*NOTE:
All Items Shown come with the UD-30A in listed quantity
except as noted.*

 **Tri Nuclear Corp.**
P.O. Box 1130, Ballston Lake, NY 12019 

UD-30A System Modes of Operation

Model No.	UD-30A	Dwg.	TNC-011-02	Rev.	D	Page 2 of 3
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**"OPTIONAL"
SUCTION HOSE OPERATIONS**

Single Suction Hose attached to Vessel Inlet. No Hose attached to discharge of pump.

**"TYPICAL"
DISCHARGE HOSE OPERATIONS**

NOTE: UD-30A to be run with either Suction or Discharge Hoses attached for efficient cross-circulation. This system is not required to run with both Suction & Discharge Hoses.

***SHCK-UD-30A Includes:**

- (1) Safety Screen Vent Assembly, P/N: SHCK-SSVA-2x2
- (1) Suction Hose, P/N: PH-2x50
- (1) Johnson Screen Strainer, P/N: SHCK-JS-2x6

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