

IT IS UNSAFE TO START USING THIS DEVICE
WITHOUT FIRST READING AND UNDERSTANDING
THIS MANUAL IN ITS ENTIRETY

INSTALLATION AND OPERATOR MANUAL

FOR

ACIDIFIED DISTRIBUTION SYSTEM FOR HEMODIALYSIS APDS01 with Purge Pump

IMPORTANT DOCUMENT
PLEASE SAFEGUARD

May 11, 2018

ACIDIFIED PRESSURIZED DISTRIBUTION SYSTEM (APDS)

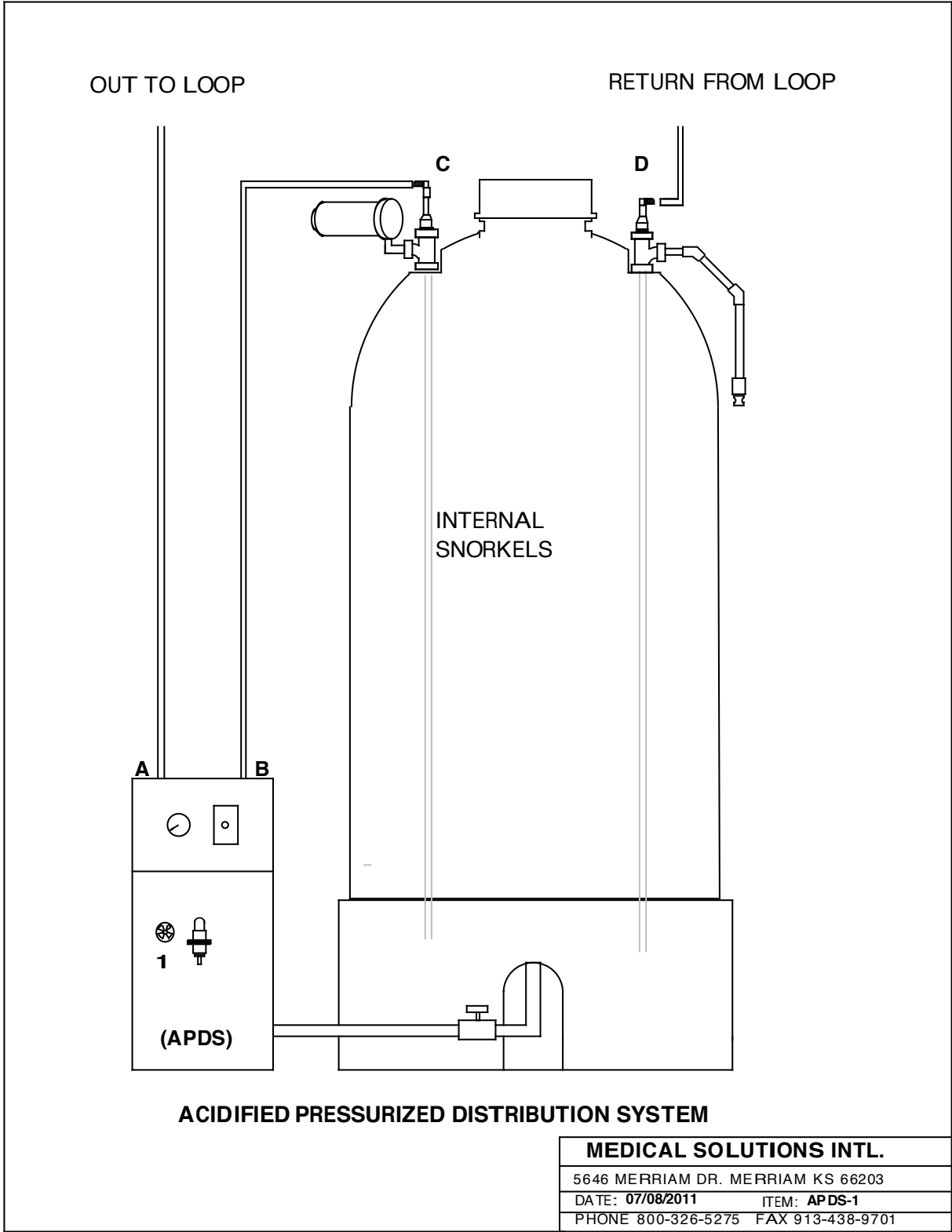
INSTALLATION INSTRUCTIONS

1. Place Acidified Storage Tank in position, place the Acidified Pressurized Distribution System (APDS) in position. Remove the back of the APDS cabinet and make sure all fittings are tight and secure. Make sure the internal pumps are plugged into the back of the controller. Re-attach the back of the controller.
2. Plumb from the storage tank to the true union on the face of the loop pump (back of APDS podium). This connection can be accomplished using Schedule 80 PVC pipe 1/2" or greater, 3/4" is recommended, or the 3/4" PVC braided vinyl hose (provided). The Kit contains the necessary plumbing assembly to connect to the bottom of the tank and out to a ball valve at the base of the tank. The second ball valve on the assembly is for tank drainage.
3. Plumb to the loop: from the out port (A.) above the pressure gauge on the APDS plumb directly to the loop. This connection can be accomplished using Schedule 80 PVC pipe 1/2" is recommended, or PVC hose, braided vinyl hose or polyethylene tubing. It is usual and typical that the loops are installed with 1/2" or 5/8" colored polyethylene tubing either red, yellow or orange. The color designated will be used on all connections on this specific system.
4. Plumb the loop return to the custom stack-assembly on the top of the tank (D.) The custom connects to a internal snorkel plumbed into the depth of the tank.
(THE SYSTEM WILL NOT WORK WITH OUT THIS SNORKEL)
This connection can be accomplished using Schedule 80 PVC pipe 1/2" is recommended, or PVC hose, braided vinyl hose or polyethylene tubing. It is usual and typical that the loops are installed with 1/2" or 5/8" colored polyethylene tubing either red, yellow or orange. The color designated will be used on all connections on this specific system.
5. Plumb to the tank: from the out port (B.) on the APDS plumb directly to the custom stack-assembly on the top of the tank.(C.).
This connection can be accomplished using Schedule 80 PVC pipe 1/2" is recommended, or PVC hose, braided vinyl hose or polyethylene tubing. It is usual and typical that the loops are installed with 1/2" or 5/8" colored polyethylene tubing either red, yellow or orange. The color designated will be used on all connections on this specific system. Optional fittings are provided for 1/2" and 5/8" tubing.
6. Insure switch's are off. Plug APDS unit in to any 120 vt. 15 amp socket.
7. Filter changes for the air filters are to be accomplished on a annual basis.

ACIDIFIED PRESSURIZED DISTRIBUTION SYSTEM (APDS)

OPERATING INSTRUCTIONS:

1. Insure the tank has a sufficient quantity of acidified solution to prime and maintain the loop.
Make sure all valves on the treatment floor are closed.
NOTE: Never use water to test this system or loop!!
2. Open pump feed valve coming out of the storage tank.
Open valve jug fill valve on the front and allow a jug to partially fill to displace the air in the pump, close.
3. On the APDS, open valve #1 counter clockwise (to feed the loop).
4. On the APDS, Activate the Distribution pump on/off switch, to ON position. .
5. Activate the Purge Loop on/off switch to the ON position
The pumps will come on the acidified solution will be directed from the tank to and around the loop.
You should see bubbles of air being expunged in to the storage tank from the bottom of the snorkel. If you do not see bubble then either there is a valve closed in the loop, a kink in the plumbing or your pump is air locked.
6. After the loop has re-circulated for at lease 1/2 hour to expunge all air form the loop,
Begin at the first wall station on the loop and allow to clear any air into a cup or bucket until
The acidified fluid is running clear. Open each valve on each wall station, if a open valve does not result in
a flow of acidified solution, check the connections and check the valve beside for a cross connection and
then check the valve to see if it is functioning properly.
Correct any obvious kink or cross connection or defective valve.
7. After all wall station valves are checked. Then proceed back to the APDS, Turn off the Purge Loop Switch.
Evaluate the loop pressure as indicated on the gauge.
8. Our goal is to apply the absolute minimum pressure to the loop, start adjusting valve #1 until you are
showing approximately 5 psi on the gauge.
9. With the pressure set at 5 psi on the gauge proceed to the treatment floor and test at the first wall station
on the loop. The goal at this port is 3 psi. Return and adjust valve #1 on the APDS system until that level is
acquired.
10. Once set it is rare that it will have to be adjusted again and there is no need to ever turn the system
off. Because we are discharging a large quantity back into the storage tank the pump will not over
heat and will last a long time in continuous duty.
11. There is no exact predictable set point for the loop pressure, loops come in all types of materials and
sizes and length, they go over ceilings and under floors. That is why you check the loop pressure at the
wall-stations and adjust the pressure on the APDS unit until you are satisfied.
12. If you are using pressure regulators at each station open Valve #1 and allow to flow at maximum
pressure possible to give you enough pressure to crack and adjust each regulator.
13. Filter changes for the air filters are to be accomplished on a annual basis.



ACIDIFIED PRESSURIZED DISTRIBUTION SYSTEM (APDS)

APDS installation Date: _____

APDS Serial Number: _____

CLINIC NAME _____

Installation Test Procedure

Initial

- | | | |
|----|--|-------|
| 1. | All connections to APDS are checked for leaks: | _____ |
| 2. | All connections to tank are checked for leaks: | _____ |
| 3. | Electrical connection to APDS is complete: | _____ |
| 4. | Wall stations are check for leaks: | _____ |
| 5. | Wall stations are checked for cross connections: | _____ |
| 6. | Pressure is checked at each wall station: | _____ |

If APDS test procedure fails , note corrective action taken.

Testing Technician Signature and date. _____ / _____

IF PERFORMANCE VERIFICATION IS ACCOMPLISHED BY IN DEALER OR CLINIC PERSONNEL, PLEASE RETURN THIS FORM IN THE ENCLOSED ENVELOPE TO ACTIVATE PRODUCT WARRANTEE.



Medical Solutions

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