Gas Chlorination Systems
Series E2000
Instruction Manual

All ENCHLOR Chlorination systems are carefully designed and tested for years of safe, accurate field service. All ENCHLOR Chlorination systems are chlorine tested, at customer specified conditions, prior to shipment. All ENCHLOR products are made of the finest materials. To insure best operation, read these instructions carefully and completely and store them where all maintenance personnel will have access to them.

Each E2000 Series gas chlorination system consists of the following:

1. The vacuum regulator(s) which mount on the chlorine cylinders.
2. A wall mounted flow meter with manual control valve.
3. The ejector, with nozzle and diffuser, mounts directly to the pipe line, tank, wet well, or to a solution line.
4. Standard accessories:
   a. Appropriate polyethylene tubing for vacuum lines.
   b. Ten lead gaskets for each vacuum regulator.
5. Additional parts available from any plumbing supply, or can be ordered through Enchlor.
   a. Pressure gauge.
   b. Water shut off valve.
   c. Y-type strainer.

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Series E2000
Operation & Maintenance Manual

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SECTION I: SAFETY INFORMATION

TAKE CARE WITH CHLORINE!

1. Always keep chlorine cylinders in an upright position with the valve cap screwed on tight before moving full or empty cylinders. Cylinders should be moved with care.
2. A safety chain must be placed around the cylinder and secured to a wall. Spare full cylinders should also be secured carefully.
3. For best operation and safety, the vacuum regulator and cylinders should be protected from the elements including direct sunlight.
4. Never place heaters or heat lamps directly on a cylinder.
5. Ammonia gas should NOT be stored or fed in the same room with chlorine. Contact of the gases may result in an explosive mixture.

IMPORTANT NOTE:
Take extreme caution when using chlorine gas manifolds. Manifolds contain pressurized chlorine gas there- by increasing the risk of a pressurized chlorine leak. Enchlor vacuum regulators are designed to mount directly onto the valve of chlorine and sulfur dioxide cylinders. Direct cylinder mounting is the easiest and safest configuration to operate and maintain. With this configuration, the chlorine gas flows under vacuum everywhere beyond the one pressure point at the chlorine cylinder valve.

SECTION II: DESIGN AND INSTALLATION NOTES

1. The “all vacuum” system means that system will shut off at the cylinder valve, should the vacuum line be broken, if water is stopped for any reason, or if the chlorination equipment is physically damaged.
2. Choosing the right feed rate capacity:

VACUUM REGULATOR SHOULD BE ON MAXIMUM POSSIBLE FLOW.
Imperial Units:

GPM x 0.012 x (PPM) Dosage = PPD
Gallons Per Minute Parts Per Million Pounds Per Day (Cl 2)

Example: 600 GPM x 0.012 x 3 PPM = 21.6 PPD
In this example a 50 PPD system would be appropriate.

Metric Units:

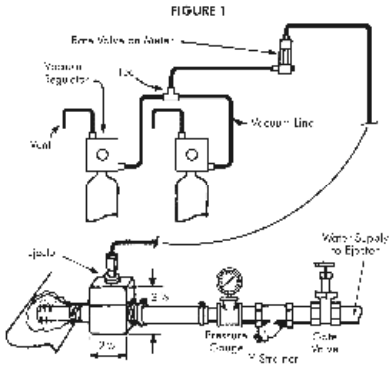
LPM x 0.0599 x (PPM) Dosage = GPH
Liters Per Minute Parts Per Million Grams Per Hour (Cl 2)

3. TOTAL BACK PRESSURE is the pressure in the pipeline to be chlorinated plus the friction losses in the solution line between the ejector and the point of injection at the pipeline. Ejectors capable of operating with backpressures up to 140 Psig are standard. For higher backpressure consult factory.

4. It is preferable to locate the ejector at the point of solution injection in order to eliminate the need for solution lines. Friction losses in the solution line will increase the ejector backpressure. To reduce the friction losses, increase the solution line internal diameter and limit the number of flow restrictions and turns. Also be sure that the solution line material is resistant to the highly concentrated chlorine

mixture. Avoid solution lines wherever possible.

5. The chlorine gas is carried from the vacuum regulator to the ejector through the specified black polyethylene tubing. Up to 100 feet of polyethylene tubing between vacuum regulator and ejector is standard. For longer distances consult factory.



A typical installation injecting chlorine into a pipe line using city water.

(I) INSTALLATION OF EJECTOR (Refer to Figures 1 and 2)

1. Installation of EJECTOR:

a. Remove the diffuser from the ejector assembly and place 2 wraps of Teflon tape on diffuser threads.

b. Do Not install diffuser into pipe line when assembled with ejector.

c. Turn diffuser by hand into NPT threads of pipe line (3/4" or 1 1/4" NPT). Place wrench on diffuser and tighten one half turn maximum.

d. Reconnect diffuser to ejector making sure appropriate O-rings are on each side of nozzle and diffuser.

2. Testing of ejector. (Note: The vacuum regulator should still be in the shipping case.)

i. Piping hook up to ejector (Refer to Figures 1 and 2 and Servicing Section in this Manual).

a. Ejector should be installed down stream at a sufficient distance so that chlorinated water is not re-circulated through the booster pump. (See Figure 2.)

b. On the water inlet side to the ejector nozzle the following should be installed: a gate valve, Y-strainer, and a pressure gauge.

ii. Testing for sufficient pump pressure to operate ejector. Also checking that booster pump (if applicable) operating in the proper direction. Refer to ejector performance charts and tables at end of this manual.

Note 1: Ejector must have some back pressure to prevent jetting. (Jetting causes loss of vacuum)

Note 2: When chlorinating into a contact chamber a tee should be installed on the solution line with a vacuum breaker to prevent siphoning.

a. If operating with city water pressure (no booster pump), open the water inlet valve to the ejector and feel for suction (with your finger) at the fitting on the top of the ejector.

b. If pump is operating in proper direction there should be a strong vacuum at the fitting on the top of the ejector. Feel for suction (with your finger) at the fitting on the top of the ejector.

c. If the ejector has tested satisfactorily continue on to the next step (Mounting the Vacuum Regulator).

SECTION III: SYSTEM INSTALLATION

(II) INSTALLATION OF VACUUM REGULATOR
NOTE: The chlorine cylinder valve is CLOSED. Do not open until instructed to do so.
1. See that safety chain is secured around chlorine cylinder.
2. Remove the cylinder protection cap from the chlorine cylinder.
3. Examine the vacuum regulator for obvious damage.
4. Remove masking tape used for shipping purposes.
5. Place lead gasket over vacuum regulator inlet assembly.
6. While placing lead gasket on vacuum regulator see that the filter has not fallen out of inlet assembly. (This filter is necessary to remove particles that will cause venting.) The filter should be inspected each time the cylinder is changed.
7. Mount vacuum regulator on cylinder valve being sure the yoke screw is backed out far enough for sufficient clearance. While tightening the yoke screw be certain that the lead gasket stays in place. Excessive tightening can damage gasket and/or yoke screw. DO NOT USE EXCESSIVE FORCE. See torque specifications below.

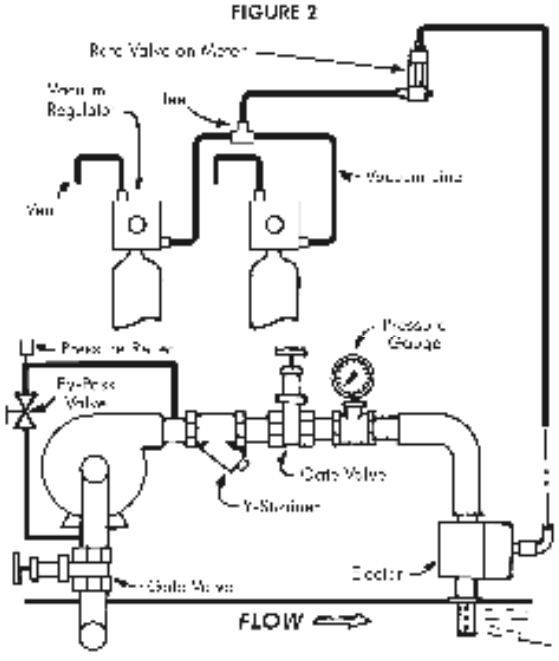
(III) CONNECTING VACUUM LINES BETWEEN VACUUM REGULATOR AND EJECTOR AND VACUUM REGULATOR VENT TO OUTSIDE (Refer to Figures 1 and 2)
1. The side connector of vacuum regulator is for vacuum line tubing to ejector. (Allow enough vacuum tubing for changing cylinders.)
2. Connect vent tubing to second connector on the vacuum regulator and vent to safe area outside of building. (Place bug screen outside on end of vent tubing.)

NOTE: Do Not connect vent lines from two vacuum regulators to one common vent. You must run separate vent lines to the outside, when using multiple vacuum regulators.

(IV) REMOTE METERS (Refer to Figure 2)
1. Remote Meters: (Gas flow is from bottom to top through the tube)
a. Connect the line in to the bottom tube connector.
b. Connect the line out to the ejector to the top connector.

A Switchover System injecting chlorine into a pipeline using a turbine positive displacement pump.
Pressure relief valve must discharge to a drain or outside of building. Note the by-pass piping from pump discharge through by-pass valve back to suction side of pump.
NOTE: By-pass valve must never be completely closed.
NOTE: Pump suction and ejector must be from the side of the pipeline, not from the top of the line.

FIGURE 2



SECTION IV: CHLORINATION SYSTEM VACUUM TEST

1. Do Not open chlorine cylinder valve until vacuum test is satisfactorily completed.

a. Vacuum Test

With the chlorine cylinder still closed, start the ejector booster pump and the meter tube ball should drop to the bottom within about ten seconds. If the ball continues to bounce there is either a leak at the lead gasket or a loose connection at the vacuum tube fittings or meter tube. (The tube fittings should be hand tight. It is not necessary to use pliers or a wrench on these fittings. If meter tube needs tightening, use a quarter and finger tighten inlet plug.) At this time the rate valve on the vacuum regulator should be open two or three turns.

b. If the ejector is operating properly (pulling sufficient vacuum) then the front bolts should be depressed on both vacuum regulators.

c. Turn off water supply to ejector.

d. Wait 5 to 10 minutes with water supply off. The ball should remain still at the bottom of the meter tube.

e. If the system is vacuum tight proceed to the next step.

f. Disconnect vacuum tubing at the vacuum regulator to allow air to enter the system. Reconnect tubing.

g. Place one of the vacuum regulators in standby by turning the front knob two turns counter-clockwise and then returning it two turns clockwise. The front bolt should remain protuding per the diagram on the vacuum regulator.

SECTION V: START UP OF CHLORINATION

Material necessary: A small plastic squeeze bottle, 1/3 full of household ammonia, for detecting chlorine leaks. When ammonia fumes contact chlorine gas a visible smoky vapor is produced. (Wipe up any splashed liquid ammonia.)

1. Open chlorine cylinder valve 1/4 turn and close immediately.
2. Squeeze ammonia bottle at gasket and yoke assembly area: if no vapor appears the seals are tight and it is OK to proceed to the next step.
3. Open chlorine cylinder valve 1/4 turn, leave open, and recheck for chlorine leaks. (1/4 turn open of the cylinder valve is all that's required. The reason we specify 1/4 turn is that the valve can be closed with only 1/4 turn. In an emergency you can shut it off quickly and safely. The wrench stays on the cylinder valve while cylinder is open.)
4. Place one vacuum regulator in standby. This is done by turning the reset knob two turns counter-clockwise and then returning it two turns clockwise. The front bolt should remain protruding per the diagram on the vacuum regulator.
5. Turn on water supply or booster pump to ejector and set rate valve to desired flow rate. Read flow rate at center of ball on meter tube scale.
6. Rate valve is not a shut off valve: it is a flow rate control only. To shut off chlorine feed close the chlorine cylinder valve.

SECTION VI: SHUT DOWN PROCEDURE

1. Close both chlorine cylinder valves while pump is still running.
2. Wait for ball to rest at bottom of meter tube and the front bolt to be below the surface.
3. Break vacuum by removing the tubing at one of the vacuum regulators and reattach. (Repeat at least 2 times for more complete removal of gas from the system.)
4. Shut down the water supply to the ejector.

This procedure of shut down must be followed before a vacuum regulator is removed from a cylinder. NOTE: After installing the vacuum regulator with a new lead gasket on a new cylinder, the vacuum tubing should be removed to allow air to enter the system and break the vacuum. Not releasing vacuum and turning on cylinder will slam the diaphragm forward and could cause damage to the diaphragm assembly. You can also accomplish breaking
the vacuum by turning the rate valve out of the bonnet. Either way is acceptable.

SECTION VII: CHANGING CYLINDERS

When one cylinder is empty and the system has switched to feed from the other cylinder then the empty cylinder must be replaced and that vacuum regulator must be placed in standby mode.

1. Tightly close the valve of the empty chlorine cylinder. Follow all applicable guidelines in changing chlorine cylinders.
2. After replacing the empty with a full cylinder, inspect the vacuum regulator, the vacuum regulator filter and (using a new lead gasket) mount the vacuum regulator on the full cylinder.
3. Turn the front knob two turns counter-clockwise and then return two turns clockwise to place the vacuum regulator in standby. The front bolt should remain protruding per the diagram on the vacuum regulator.

SECTION VIII: RATE VALVE OPERATION

Turn the rate valve counter-clockwise to open it completely. Further turns will completely remove the rate valve from the flow meter tube, which will cause a loss of Cl
2 feed. (See Appendix for servicing instructions.)
The O-ring seals for the rate valve are locked in place under the valve bonnet and do not come out when the rate valve is pulled out of the bonnet.
PREVENTATIVE MAINTENANCE NOTE: Rate valves which are not exercised frequently may experience a build up of a white powdery substance which precipitates out of the chlorine gas. In order to avoid this build up, which can cause the rate valve to become stuck in place, it is recommended that the rate valve be periodically exercised. See Appendix
for rate valve maintenance instructions.

SECTION IX: TROUBLESHOOTING

(I) PRESSURIZED LEAKS

1. Pressurized chlorine leaks are a safety hazard to life and equipment and should be corrected immediately. When searching for this type of leak there are basic safety rules to follow.

a. Air breathing pack should be readily available and personnel should know how to use it properly.
b. Exhaust fan switch should be located near outside entrance with alternate outside switch

c. Chlorine cylinder wrench should remain on the cylinder whenever cylinder is open.
d. Plastic squeeze bottle 1/3 full of household ammonia.
e. Buddy system used (two people capable of operating system).
2. If a leak is detected the following should be checked first:
a. The lead gasket between the chlorine cylinder valve and the vacuum regulator inlet assembly.
i. Tighten the half dog screw on the vacuum regulator yoke assembly which is used to secure the inlet assembly to the chlorine cylinder valve.
ii. Always use a new lead gasket.
b. Chlorine cylinder valve packing.
i. Tighten the cylinder valve with care, not excessively! Close the valve if problem persists and notify your chlorine supplier.
ii. If valve is the problem try to move cylinder with a high degree of safety to an outside location.
c. Chlorine leaking out the vent due to the inlet safety shut off valve having dirt on the valve seat.
i. Close the chlorine cylinder valves.
ii. Wait until the metering ball drops to zero on the flow tube.
iii. Turn off water supply to ejector.
iv. Now remove the leaking vacuum regulator from the cylinder valve.
v. See Appendix for inlet safety shut off valve servicing instructions.
vi. After servicing and remounting chlorinator with a new lead gasket, pull a vacuum test before you open the chlorine cylinder valve. See Section IV: "Chlorination System Vacuum Test".

(II) NO CHLORINE FEED
Possible causes:
1. No vacuum being produced by ejector.
a. Remove poly tubing from ejector fitting and place your finger on it; you should feel a strong suction.
b. If you feel no suction (vacuum) check in this order:
i. Nozzle (See Appendix): Turn off water supply and remove nozzle from ejector.
(1) It may be clogged or damaged by a stone or other foreign matter. Flush out or run pipe cleaner through carefully.
(2) If there is a build-up of rust, iron, or manganese, place the nozzle in a Muriatic acid for five minutes and rinse with water. If you see a black syrup substance you may find it necessary to clean the nozzle on a preventative maintenance schedule.
ii. Inlet Water Supply. Check that it is sufficient. Refer to nozzle curves in back of manual.
iii. Reduced city water pressure.
iv. Y strainer needs cleaning.
v. Booster pump cavitating (lost its prime).
vi. Booster pump insufficient boost due to wear or single phasing due to loss of one leg of power.
vii. Booster pump may have flooded suction.
2. Chlorine flow blocked at vacuum regulator inlet assembly.
a. The Inlet filter could be clogged.
3. Out of Chlorine.
a. The scale would read 150 lbs. lighter than when cylinder was new.
b. Meter tube ball would be at zero.

APPENDIX A – SERVICING THE SYSTEM
SECTION A-1: VACUUM REGULATOR

(I) CLEANING THE RATE VALVE

1. Unscrew the rate valve knob and stem (by hand) completely out of the rate valve bonnet.

NOTE: Be careful not to let the meter tube drop in the next step. It will come loose.

2. Unscrew the rate valve bonnet using pliers (carefully and using a cloth to protect the part). The rate valve sleeve should also be removed.
3. Replace the ORE-VIT-008 O-Rings on the rate valve stem by separating the valve bonnet and sleeve.
4. Lubricate the new O-Rings lightly with Flourolube grease before replacing the sleeve, bonnet and rate valve.

(II) CLEANING THE METER TUBE

1. Remember to be careful not to lose the stops or ball in the following steps.
2. Remove the white stops at either end of the tube (you could use a paper clip).
3. Soak the tube in warm water with a cleaner like lime away or Muriatic Acid. Also, brush the inside of the tube with a pipe cleaner.

NOTE: Always follow safety precautions with Muriatic Acid and other chemicals.

4. Dry the meter tube and reinstall the ball and stops.
5. It is recommended that new meter tube gaskets be used when reinstalling the meter tube.
6. Reinstall the meter gaskets and meter tube, making sure to center the tube on the top and bottom meter gaskets.
7. Tighten the rate valve bonnet with reasonable force to make a seal. Do not use excessive force.

NOTE: All other vacuum regulator repairs should be done by the factory or authorized repair personnel.

WARNING: If the vacuum regulator leaks gas out the vent or any other place on the body the problem is most likely caused inside the yoke assembly. It is not recommended that the yoke assembly be disassembled because if it is not done properly dangerous leakage of pressurized gas could result.

SECTION A-2: INLET ASSEMBLY

WARNING: If the vacuum regulator leaks gas out the vent or any other place on the body the problem is most likely caused inside the yoke assembly. It is recommended that the yoke assembly be disassembled by a person experienced in Chlorine Vacuum Regulator maintenance because if it is not done properly dangerous leakage of pressurized gas could result.

1. Remove the inlet assembly from the yoke plate by slipping off the PVC retainer clip (VRE-142-500) that holds it to the yoke.
2. Remove the inlet filter material from the inlet capsule (VRE-141-501).
3. Disassemble the inlet assembly using a small flat-head screwdriver to hold the inlet valve (VRE-112-500) and a pair of pliers (and a protective cloth) to grip the vent plug (VRE-111-500) to unscrew these two parts. Take care as this assembly is under spring tension and small parts may be difficult to find if dropped.
4. Unscrew the seal plug (VRE-182-500) from the inlet capsule.
5. Remove the valve seat (VRE-110-500) from the inlet capsule by simply pushing the exposed threaded portion up through the inlet capsule. Note that the O-ring ORE-VIT-011 is attached to this

seat.
6. Clean the inlet capsule, inlet spring (SPE-104-100) and inlet valve using a soft cloth or plastic cleaning pad. Do not use steel wool or other metal cleaning sponges on the inlet valve.
7. Using all new O-rings and new parts as needed, reassemble in reverse order.

SECTION A-3: REMOTE METER

(I) CLEANING THE RATE VALVE
1. Unscrew the rate valve knob and stem (by hand) completely out of the top meter block.
2. In low capacity systems (10 PPD or below) check to see if the point of the valve stem is broken or bent. If it is damaged it must be replaced.
3. Replace O-Rings on the rate valve stem.
4. Lubricate the new O-Rings lightly with Flourolube grease before replacing the rate valve and knob into the top meter block.
(II) CLEANING THE METER TUBE
1. While holding the glass meter tube (to prevent it from falling) unscrew the inlet plug at the base of the bottom meter block, until the meter tube can be removed.
2. Remember to be careful not to lose the stops or ball in the following steps.
3. Remove the white stops at either end of the tube (you could use a paper clip).
4. Soak the tube in warm water with a cleaner like lime away or Muriatic Acid. Also, brush the inside of the tube with a pipe cleaner.
NOTE: Always follow safety precautions with Muriatic Acid and other chemicals.
5. Dry the meter tube and reinstall the ball and stops.
6. It is recommended that new meter tube gaskets be used when reinstalling the meter tube.
7. Remove the inlet plug completely and inspect the O-Rings. If it has been more than 12 months since they were changed or if there is any noticeable damage, the O-Rings should be replaced.
8. Reinstall the inlet plug, meter gaskets and meter tube, making sure to center the tube on the top and bottom meter gaskets.
9. Tighten the inlet plug with reasonable force to make a seal. Do not use excessive force.

SECTION A-4: EJECTOR/CHECK VALVE ASSEMBLY

(I) LOSS OF VACUUM AT THE EJECTOR: If vacuum is lost at the ejector and water supply is sufficient, then the nozzle is most likely clogged, broken or loose. Before working on the ejector it must first be isolated so that water will not leak when the ejector is removed.
1. First detach the intake side (nozzle) of the ejector from the pipe line.
2. For 3/4" line size ejectors rotate the complete ejector body counter clockwise. This loosens the threaded portion of the nozzle from the diffuser. It also eliminates the need for pliers on the nozzle which could damage the plastic. For 11/4" line size ejectors remove the two flanges to remove the ejector.
3. Inspect the nozzle for:
    Pipe scale, stones, dirt, etc...
    Build-up of iron, manganese, calcium, etc...
4. The nozzle should be soaked and brushed with warm water mixed with a cleaner like Muriatic Acid.
NOTE: TAKE CARE NOT TO SCRATCH OR ATTEMPT TO MODIFY THE ORIFICE IN ANY WAY.

5. Using two new ORE-BUN-121 O-rings the ejector can now be reassembled.
When reassembling 3/4" line size ejectors the nozzle and diffuser should be screwed together hand

tight leaving the ejector body 90 degrees to the left of its final position. Once the nozzle and diffuser are hand tight, the ejector can then be turned the final 90 degrees.
WARNING: Do not use excessive force in tightening the nozzle, diffuser and ejector assembly. The ejector is con- structed of PVC and excessive force can break the parts.
(II) SERVICING THE EJECTOR CHECK VALVE ASSEMBLY: If water leaks back into the system, this means that the ejector check valve has failed. This could be caused by incorrect assembly, a failed gasket, O-Ring or diaphragm, or foreign material lodged in the check valve.
1. Remove the four bolts holding the ejector body together.
2. Inside you will find a diaphragm assembly and a spring.
3. The diaphragm assembly can usually be unscrewed by hand. If it is too tight, carefully try large jaw pliers or a vice. Note that a plastic support diaphragm is on the top side of the rubber diaphragm. The purpose is to protect the softer rubber diaphragm in installations with high pressure.
4. Inspect the rubber diaphragm for holes or weak points.
5. Inspect the ORE-CEM-210 O-Ring. Replace if damaged.
6. Reassemble the diaphragm assembly, preferably with a new rubber diaphragm, DIE-104-500.
7. Install the assembly in the recess between the ejector body halves being careful to install the spring properly below the assembly.

SECTION A-5: SWITCHOVER MODULE

(I) OPERATION OF THE MODULE
GENERAL: This device requires no outside setting or adjustment. The switchover module allows gas to flow from one of the two intake ports at a time, keeping the other sealed. It will continue to feed from first side until the vacuum level rises sufficiently (in the event of an empty cylinder or closing of the cylinder valve), at which time an internal spring loaded mechanism automatically switches to open the second intake port and to close the first intake port.
NOTE: In low capacity systems where the feed rate is less than 10 PPD or the time between switching is more than two weeks, it is recommended that the module be “exercised” weekly. If the module is left in one position for long periods of time, it may have a tendency to stick in one position. To exercise the module it can be disconnected from both vacuum regulators with the ejector still connected and operating. Use a finger or thumb to close the open intake port of the module until it switches to feed from the other port. Repeat this process 5 to 10 times.
(II) SERVICING THE MODULE
GENERAL: If the module does not operate correctly first try exercising it as described in the last paragraph. If this does not work the unit must be disassembled.
1. Remove the four screws that secure the top cap onto the main body.
2. Remove the four screws that secure each of the side caps onto the main body.
3. Remove the diaphragm assemblies and the toggle mechanism noting their orientations for reassembly.
4. Inspect the guide pin to ensure that it is free of dirt or burrs. If not clean and polish it with alcohol until it is able to slide freely.
5. Inspect the O-Ring seats on the diaphragm assemblies. Ensure that they are free of any residue and should be cleaned with alcohol being careful not to scratch them.
6. Replace the O-Rings unless they are less than 12 months old or are in perfect condition.
7. Inspect the diaphragms to ensure that they are free of tears or holes. If they are not in good condition, they should be replaced.
8. Reassemble the module in reverse order.

Nozzle Tables

10 PPD (200 gr/hr)

Nozzle >	16		13	
Ejector Backpressure	Standard PSI @	GPM	PSI @	GPM
0	18	1.5	12	2.5
10	33	1.9	22	3.0
20	48	2.1	35	3.2
30	60	2.3	50	3.5
40	75	2.5	62	3.8
50	90	2.8	76	4.0
60	103	2.9	90	4.3
70	116	3.1	103	4.5
80	130	3.2	120	4.8
90	145	3.4	140	5.1
100	156	3.5	157	5.3
110	171	3.7	170	5.6
120	185	3.8	185	5.8
130	198	3.9	198	6.0
140	213	4.1	213	6.2
150	227	4.3	227	6.4
160	240	4.5	240	6.6

25 PPD (500 gr/hr)

Nozzle >	13		16	
Ejector Backpressure	Standard PSI @	GPM	PSI @	GPM
0	25	3.0	40	1.9
10	35	3.2	60	2.2
20	47	3.4	80	2.5
30	60	3.7	100	2.9
40	73	4.0	120	3.2
50	90	4.3	140	3.4
60	100	4.5	160	3.6
70	115	4.7	180	3.8
80	130	4.9	200	4.0
90	143	5.2	220	4.2
100	155	5.3	240	4.4
110	170	5.5	260	4.6
120	185	5.7	280	4.8
130	198	5.9	300	5.1
140	212	6.1	-	-
150	226	6.3	-	-
160	240	6.5	-	-

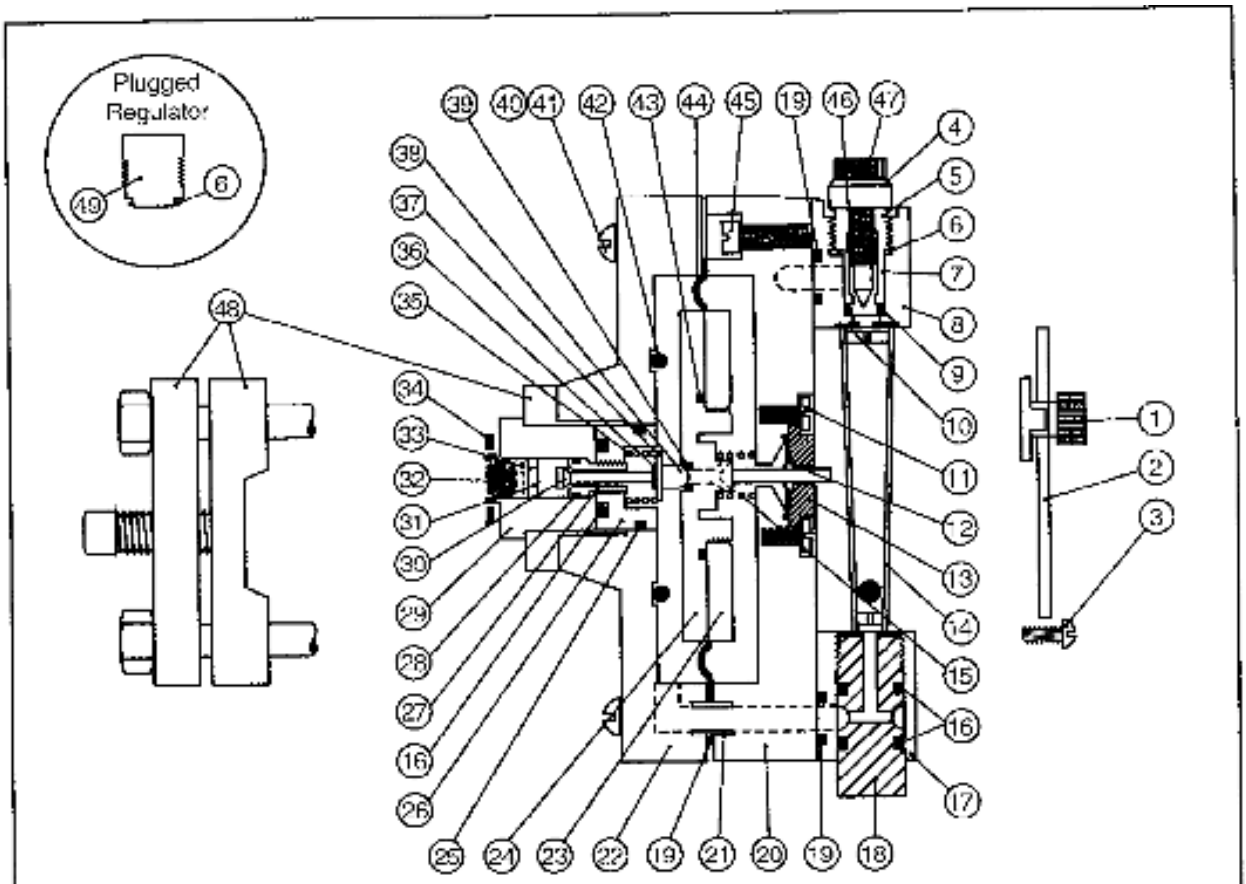
Nozzle Tables

50 PPD (1 Kg/hr)

Nozzle >	15		12		13	
Ejector Backpressure	Standard PSI @	GPM	PSI @	GPM	PSI @	GPM
0	25	4.0	16	4.0	30	3.2
10	35	4.5	25	5.0	55	3.7
20	50	5.1	35	5.8	75	4.0
30	60	5.4	45	6.3	95	4.4
40	75	6.0	57	7.1	120	4.8
50	95	6.6	75	8.0	141	5.1
60	100	6.8	90	8.6	162	5.4
70	120	7.2	103	9.1	183	5.7
80	134	7.6	114	9.6	205	6.1
90	147	7.8	126	10.0	226	6.3
100	160	8.1	138	10.4	247	6.6
110	173	8.4	150	10.8	268	6.9
120	188	8.7	165	11.3	290	7.3
130	200	9.0	176	11.8	-	-
140	213	9.2	187	12.2	-	-
150	226	9.5	198	12.7	-	-
160	240	9.8	211	13.3	-	-

100 PPD (2 Kg/hr)

Nozzle >	12		15	
Ejector Backpressure	Standard PSI @	GPM	PSI @	GPM
0	25	5.0	50	5.1
10	50	6.7	60	5.4
20	65	7.3	80	6.1
30	75	8.0	95	6.5
40	89	8.6	110	7.0
50	100	9.0	120	7.2
60	110	9.3	132	7.4
70	125	9.9	150	7.9
80	142	10.5	165	8.3
90	155	11.0	185	8.7
100	170	11.5	200	9.0
110	180	11.9	213	9.3
120	194	12.7	228	9.5
130	208	13.2	244	9.9
140	222	13.7	260	10.2
150	235	14.2	275	10.4
160	250	14.5	291	10.8

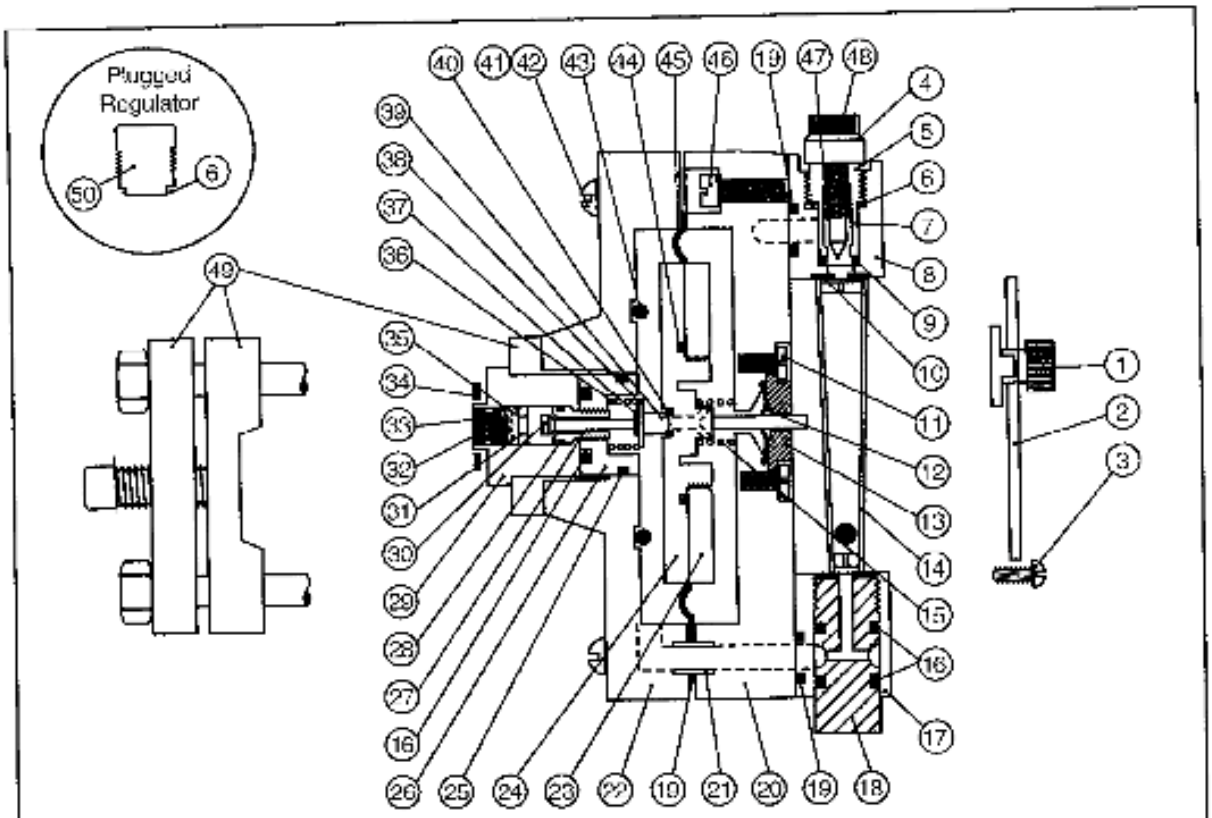


Item No.	Description	Part No.
1	Flag Assembly	VR –446-500
2	Front Plate	VR –441-200
3	6-32 x ⅜" Screw (2)	BT –STA-127
4	Rate Valve Plug	RV –659-003
5	Rate Valve Bonnet	RV –124-200
6	O-Ring	OR-VIT-110
7	Rate Valve Sleeve	RV –125-003
8	Top Meter Block	MB –117-200
9	O-Ring	OR-VIT-010
10	Meter Gasket	GA –VIT-104
11	10-24 x ⅝" Bolt	BT –STA-128
12	Sealing Diaphragm	DI –102-500
13	Seal Cover	VR –137-500
14	Meter Tube	MT –108-250
15	Spring	SP –100-000
16	O-Ring	OR-VIT-112
17	Bottom Meter Block	MB –116-200
18	Meter Inlet	MI –140-200
19	O-Ring	OR-VIT-012
20	Front Body	VR –107-200
21	Flow Tube	VR –162-500
22	Back Body	VR –160-200
23	Diaphragm Front Plate	VR –268-500
24	Diaphragm Back Plate	VR –363-500
25	O-Ring	OR-VIT-212
26	Seal Plug	VR –182-500
27	Valve Seat	VR –110-500
28	O-Ring	OR-VIT-011

Item No.	Description	Part No.
29	Inlet Capsule	VR –141-501
30	Inlet Valve	VR –112-500
31	Filter Stop	VR –184-500
32	Filter Floss	VR –455-500
33	Inlet Screen	VR –101-500
34	Lead Gasket	GA –LED-111
35	Inlet Spring	SP –104-000
36	Spring Holder	VR –119-500
37	Spring Retainer	VR –183-500
38	Vent Plug	VR –111-500
39	O-Ring	OR-VIT-009
40	¼ - 20 x 2¾" Bolt	BT –STA-125
41	¼ - 20 x 1¾" Bolt	BT –STA-124
42	O-Ring	OR-VIT-332
43	O-Ring	OR-VIT-028
44	Diaphragm	DI –106-500
45	10-24 x 1" Bolt	BT –STA-126
46	O-Ring	OR-VIT-006
47	Rate Valve Assembly	RV –118-003
48	Yoke Assembly	VR –346-500
49	Bonnet Plug, 250 ppd	PL –175-250
50	⅛" Tubing Connector (not shown)	TC – 106-200
51	¼" Tubing Connector (not shown)	TC – 100-100

VACUUM REGULATOR: 250ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale,PA 18962
215-453-2533
OEM parts for the treatment industry



Item No.	Description	Part No.
1	Flag Assembly	VR—445-500
2	Front Plate	VR—441-200
3	6-32 x 1/4" Screw (2)	BT—STA-127
4	Rate Valve Plug, 10 ppd	RV—659-002
4	Rate Valve Plug, 100 ppd	RV—659-003
5	Rate Valve Bonnet, 250 ppd	RV—124-200
6	O-Ring	OR-VIT-110
7	Rate Valve Sleeve, 10 ppd	RV—125-002
7	Rate Valve Sleeve, 100 ppd	RV—125-003
8	Top Meter Block	MB—110-100
9	O-Ring	OR-VIT-010
10	Meter Gasket, 10 ppd	GA—VIT-101
10	Meter Gasket, 25 ppd	GA—VIT-102
10	Meter Gasket, 100 ppd	GA—VIT-103
11	10-24 x 3/16" Bolt	BT—STA-128
12	Sealing Diaphragm	DI—102-500
13	Seal Cover	VR—137-500
14	Meter Tube, 4 ppd	MT—108-004
14	Meter Tube, 10 ppd	MT—108-010
14	Meter Tube, 25 ppd	MT—108-025
14	Meter Tube, 50 ppd	MT—108-050
14	Meter Tube, 100 ppd	MT—108-100
15	Spring	SP—100-000
16	O-Ring	OR-VIT-112
17	Bottom Meter Block	MB—109-100
18	Meter Inlet, 10 ppd	MI—219-010
18	Meter Inlet, 250 ppd	MI—140-200
19	O-Ring	OR-VIT-012
20	Front Body	VR—107-200
21	Flow Tube	VR—162-500
22	Back Body	VR—160-200
23	Diaphragm Front Plate	VR—269-500
24	Diaphragm Back Plate	VR—863-500

Item No.	Description	Part No.
25	O-Ring	OR-VIT-212
26	Seal Plug	VR—182-500
27	Valve Seat	VR—110-500
28	O-Ring	OR-VIT-011
29	Inlet Capsule	VR—141-501
30	Inlet Valve	VR—112-500
31	Filter Stop	VR—184-500
32	Filter Floss	VR—456-500
33	Teflon Filter Plug (100 PPD max.)	VR—456-100
34	Lead Gasket	GA—LED-111
35	Inlet Screen	VR—101-500
36	Inlet Spring	SP—104-000
37	Spring Holder	VR—113-500
38	Spring Retainer	VR—183-500
39	Vent Plug	VR—111-500
40	O-Ring	OR-VIT-009
41	1/4 - 20 x 2 3/4" Bolt	BT—STA-125
42	1/4 - 20 x 1 3/4" Bolt	BT—STA-124
43	O-Ring	OR-VIT-332
44	O-Ring	OR-VIT-028
45	Diaphragm	DI—105-500
46	10-24 x 1" Bolt	BT—STA-126
47	O-Ring	OR-VIT-006
48	Rate Valve Assembly, 10 ppd	RV—118-002
48	Rate Valve Assembly, 250 ppd	RV—118-003
49	Yoke Assembly	VR—346-500
50	Bonnet Plug, 250 ppd	PL—175-250
51	3/8" Tubing Connector (not shown)	TC—[illegible]

VACUUM REGULATOR: 100ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
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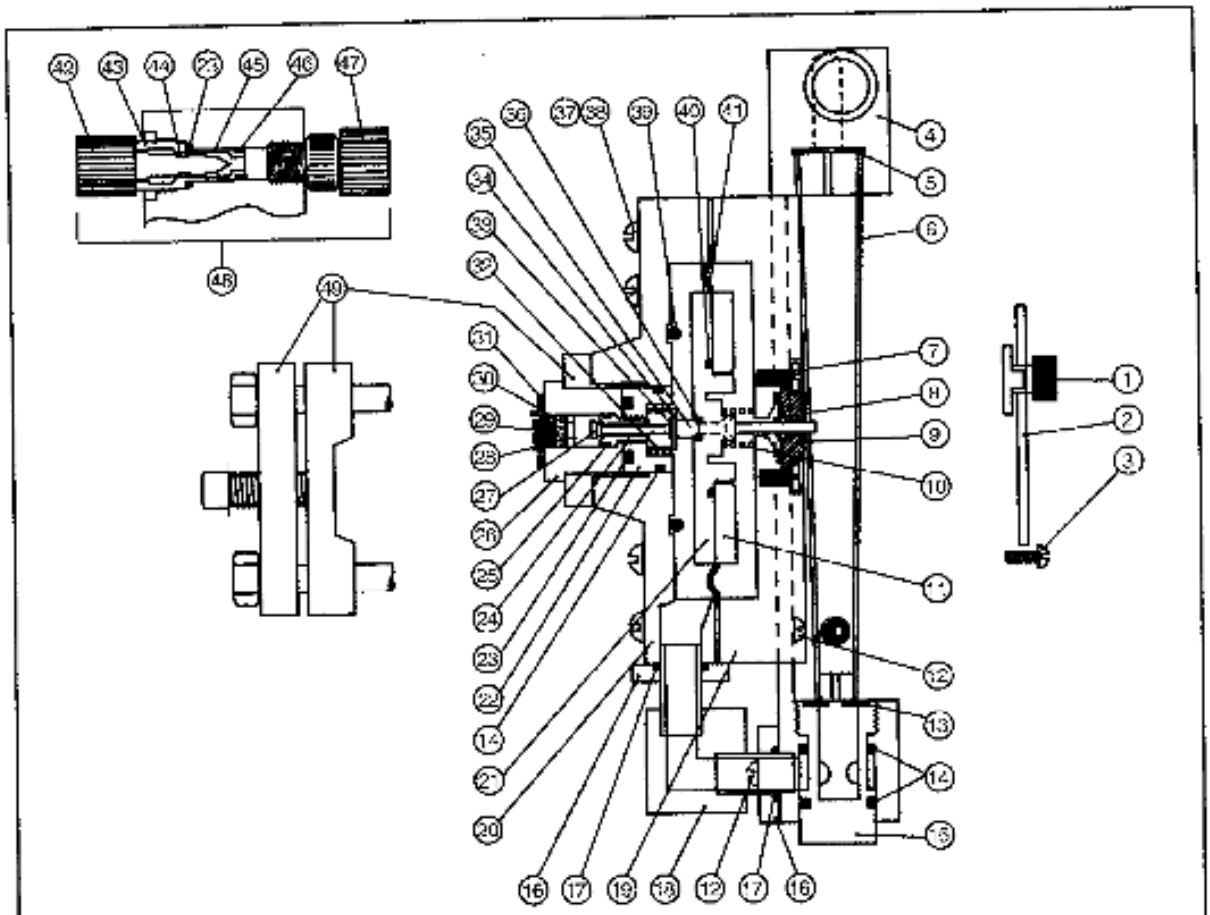
215-453-2553
OEM parts for the treatment industry



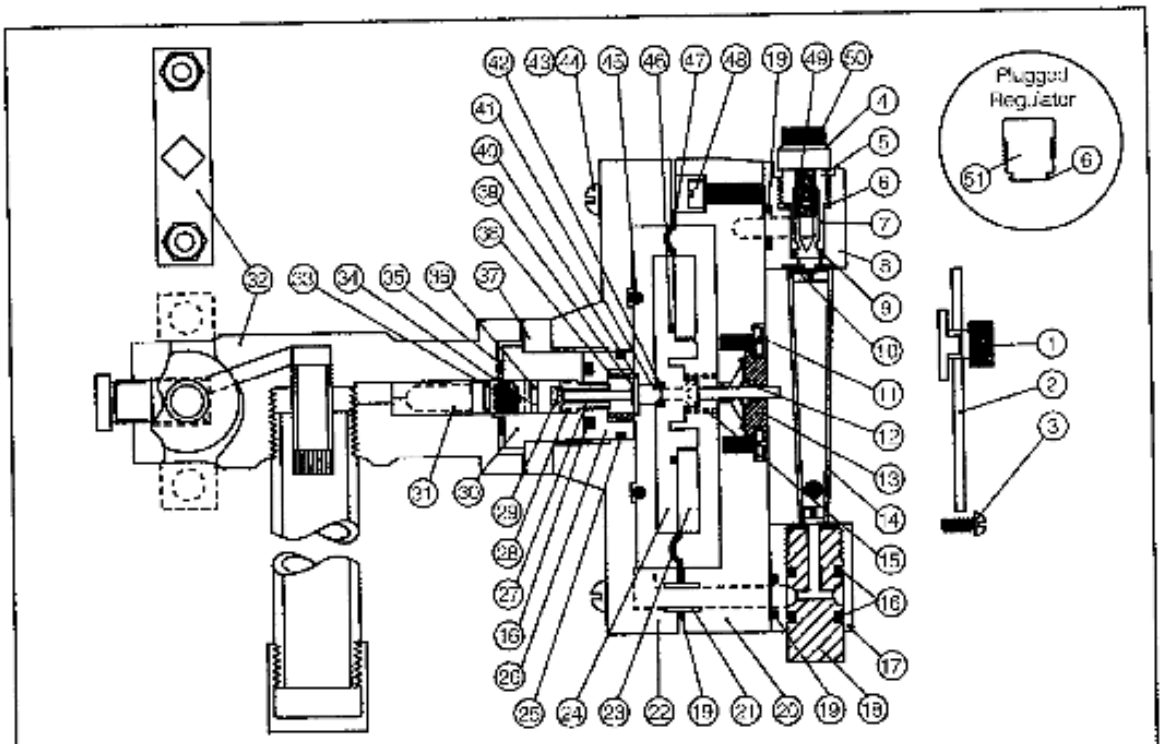
Item No.	Description	Part No.
1	Flag Assembly	VR—445-500
2	Front Plate	VR—441-500
3	6-32 x 1/4" Screw (2)	BT—STA-127
4	Meter Block	VR—122-500
5	Top Meter Gasket	GA—VIT-116
6	Meter Tube, 500 PPD	MT—129-500
7	10-24 x 3/8" Bolt	BT—STA-128
8	Sealing Diaphragm	DI—102-500
9	Seal Cover	VR—137-500
10	Spring	SP—100-000
11	Diaphragm Front Plate	VR—269-500
12	10-24 x 1/2" Bolt	BT—STA-136
13	Bottom Meter Gasket	GA—VIT-115
14	O-Ring	OR-VIT-212
15	Meter Inlet, 500 PPD	MI—232-500
16	Clamp	VR—235-500
17	O-Ring	OR-VIT-114
18	Flow Tube Assembly	VR—321-500
19	Front Body	VR—256-500
20	Back Body	VR—234-500
21	Diaphragm Back Plate	VR—363-500
22	Seal Plug	VR—182-500
23	O-Ring	OR-VIT-112
24	Valve Seat	VR—110-500
25	O-Ring	OR-VIT-011
26	Inlet Capsule	VR—141-501
27	Inlet Valve	VR—112-500
28	Filter Stop	VR—184-500

Item No.	Description	Part No.
29	Filter Floss	VR—455-500
30	Inlet Screen	VR—101-500
31	Lead Gasket	GA—LED-111
32	Inlet Spring	SP—104-000
33	Spring Holder	VR—113-500
34	Spring Retainer	VR—183-500
35	Vent Plug	VR—111-500
36	O-Ring	OR-VIT-009
37	1/4 - 20 x 2 3/4" Bolt	BT—STA-125
38	1/4 - 20 x 1 3/4" Bolt	BT—STA-124
39	O-Ring	OR-VIT-932
40	O-Ring	OR-VIT-028
41	Diaphragm	DI—106-500
42	Rate Valve Plug	RV—651-500
43	Rate Valve Bonnet	RV—224-500
44	O-Ring	OR-VIT-010
45	Rate Valve Sleeve	RV—116-500
46	O-Ring	OR-VIT-012
47	5/8" Tubing Connector	TC—[illegible]
48	Rate Valve Assembly	RV—118-500
49	Yoke Assembly	VR—946-500
50	3/8" Tubing Connector (not shown)	TC—[illegible]

VACUUM REGULATOR: 500ppd

Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 2011

ENCHLOR INC
130 W. Main St, Slaverdale,PA 18962
215-453-2533
OEM parts for the treatment industry

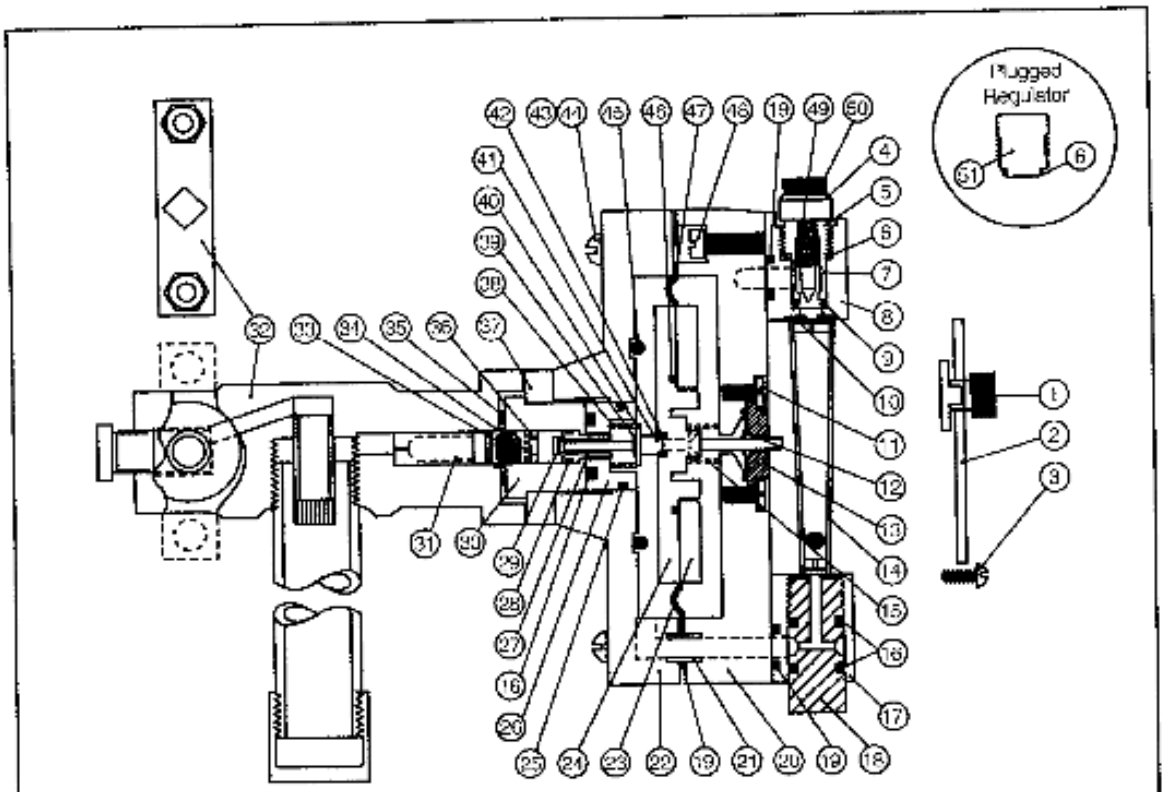


Item No.	Description	Part No.
1	Rag Assembly	VR—445-500
2	Front Plate	VR—441-200
3	6-32 x 1/4" Screw (2)	BT—STA-127
4	Rate Valve Plug, 10 ppd	RV—659-002
4	Rate Valve Plug, 100 ppd	RV—659-003
5	Rate Valve Bonnet, 250 ppd	RV—124-200
6	O-Ring	OR-VIT-110
7	Rate Valve Sleeve, 10 ppd	RV—125-002
7	Rate Valve Sleeve, 100 ppd	RV—125-003
8	Top Meter Block	MB—110-100
9	O-Ring	OR-VIT-010
10	Meter Gasket, 10 ppd	GA—VIT-101
10	Meter Gasket, 25 ppd	GA—VIT-102
10	Meter Gasket, 100 ppd	GA—VIT-103
11	10-24 x 3/8" Bolt	BT—STA-128
12	Sealing Diaphragm	DI—102-500
13	Seal Cover	VR—137-500
14	Meter Tube, 4 ppd	MT—108-004
14	Meter Tube, 10 ppd	MT—108-010
14	Meter Tube, 25 ppd	MT—108-025
14	Meter Tube, 50 ppd	MT—108-050
14	Meter Tube, 100 ppd	MT—108-100
15	Spring	SP—100-000
16	O-Ring	OR-VIT-112
17	Bottom Meter Block	MB—109-100
18	Meter Inlet, 10 ppd	MI—219-010
18	Meter Inlet, 250 ppd	MI—140-200
19	O-Ring	OR-VIT-012
20	Front Body	VR—107-200
21	Flow Tube	VR—162-500
22	Back Body	VR—160-200
23	Diaphragm Front Plate	VR—269-500
24	Diaphragm Back Plate	VR—363-500
25	O-Ring	OR-VIT-212

Item No.	Description	Part No.
26	Seal Plug	VR—182-500
27	Valve Seat	VR—110-500
28	O-Ring	OR-VIT-011
29	Inlet Valve	VR—112-500
30	Inlet Capsule	VR—141-501
31	Filter	VR—126-500
32	Ion Inlet Assembly with Yoke and Bolts	VR—798-500
33	Filter Discs	VR—455-500
34	Inlet Screen	VR—101-500
35	Lead Gasket (Ion)	GA—LED-11T
36	Filter Stop	VR—184-500
37	Ion Yoke Plate	VR—726-500
38	Inlet Spring	SP—104-000
39	Spring Holder	VR—113-500
40	Spring Retainer	VR—183-500
41	Vent Plug	VR—111-500
42	O-Ring	OR-VIT-009
43	1/4 - 20 x 2 3/4" Bolt	BT—STA-125
44	1/4 - 20 x 1 3/4" Bolt	BT—STA-124
45	O-Ring	OR-VIT-332
46	O-Ring	OR-VIT-028
47	Diaphragm	DI—106-500
48	10-24 x 1" Bolt	BT—STA-126
49	O-Ring	OR-VIT-008
50	Rate Valve Assembly, 10 ppd	RV—118-002
50	Rate Valve Assembly, 250 ppd	RV—118-003
51	Bonnet Plug, 250 ppd	PL—175-250
52	3/8" Tubing Connector (not shown)	TC—100-300
53	Heater and Clamp (not shown)	HT—111-500

TON VACUUM REGULATOR: 100ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale,PA 18962
215 453-2533
OEM parts for the treatment industry



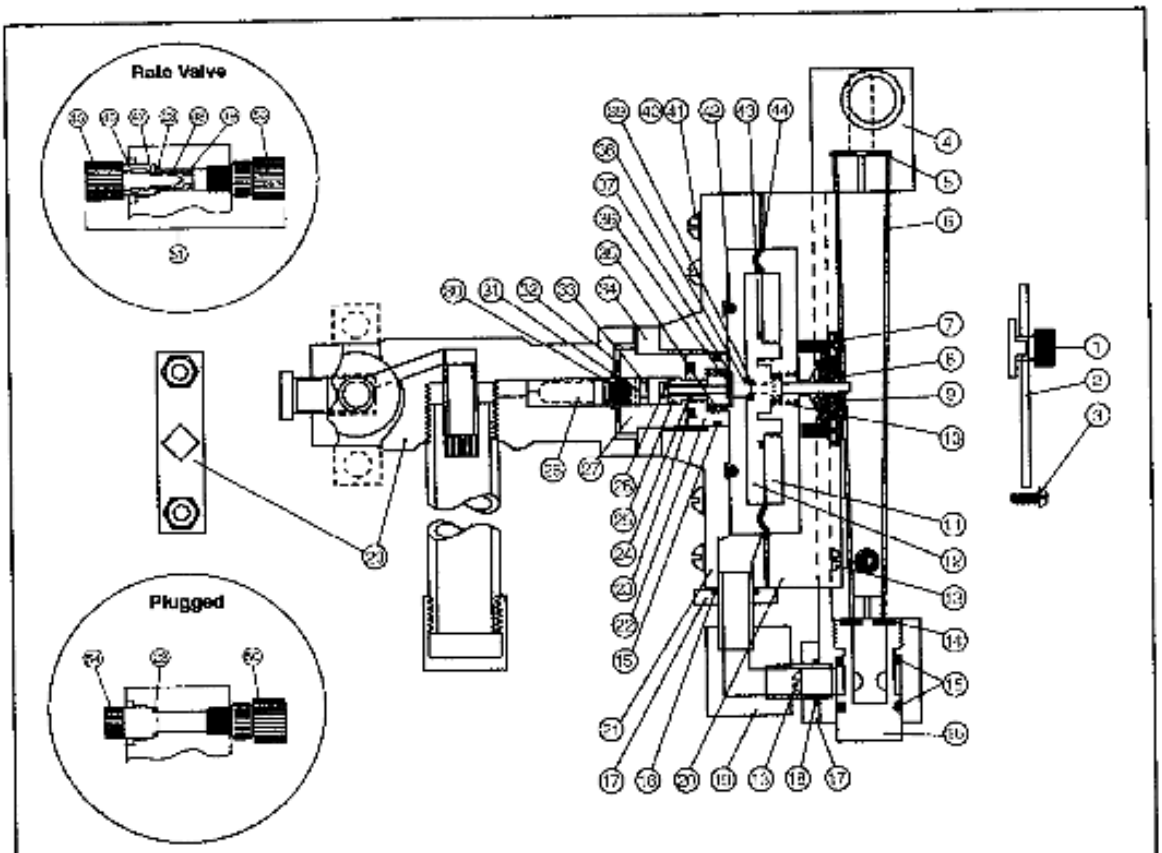
Item No.	Description	Part No.
1	Flag Assembly	VR—445-500
2	Front Plate	VR—441-200
3	6-32 x 1/4" Screw (2)	BT—STA-127
4	Rate Valve Plug	RV—859-003
5	Rate Valve Bonnet	RV—124-200
6	O-Ring	OR-VIT-110
7	Rate Valve Sleeve	RV—125-003
8	Trip Meter Block	MB—117-200
9	O-Ring	OR-VIT-010
10	Meter Gasket	GA—VIT-104
11	10-24 x 3/16" Bolt	BT—STA-128
12	Sealing Diaphragm	DI—102-500
13	Seal Cover	VR—137-500
14	Meter Tube	MT—108-250
15	Spring	SP—100-000
16	O-Ring	OR-VIT-112
17	Bottom Meter Block	MB—116-200
18	Meter Inlet	MI—140-200
19	O-Ring	OR-VIT-012
20	Front Body	VR—107-200
21	Flow Tube	VR—162-500
22	Back Body	VR—160-200
23	Diaphragm Front Plate	VR—209-500
24	Diaphragm Back Plate	VR—383-500
25	O-Ring	OR-VIT-212
26	Seal Plug	VR—182-500
27	Valve Seat	VR—110-500
28	O-Ring	OR-VIT-011
29	Inlet Valve	VR—112-500
30	Inlet Capsule	VR—141-501

Item No.	Description	Part No.
31	Filter	VR—126-500
32	Ton Inlet Assembly with Yoke and Bolts	VR—738-500
33	Filter Floss	VR—455-500
34	Inlet Screen	VR—101-500
35	Lead Gasket (Ton)	GA—LED-11T
36	Filter Stop	VR—184-500
37	Ton Yoke Plate	VR—739-500
38	Inlet Spring	SP—104-000
39	Spring Holder	VR—113-500
40	Spring Retainer	VR—183-500
41	Vent Plug	VR—111-500
42	O-Ring	OR-VIT-009
43	1/4 - 20 x 2 3/4" Bolt	BT—STA-125
44	1/4 - 20 x 1 3/4" Bolt	BT—STA-124
45	O-Ring	OR-VIT-332
46	O-Ring	OR-VIT-028
47	Diaphragm	DI—105-500
48	10-24 x 1" Bolt	BT—STA-126
49	O-Ring	OR-VIT-006
50	Rate Valve Assembly	RV—118-003
51	Bonnet Plug, 250 ppd	PL—175-250
52	1/4" Tubing Connector (not shown)	TC—[illegible]
53	3/8" Tubing Connector (not shown)	TC—[illegible]
54	Heater and Clamp (not shown)	HT—111-500

TON VACUUM REGULATOR, 250ppd

Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale, PA 18962
215-453-2550
O+M parts for the treatment industry



Item No.	Description	Part No.
1	Flag Assembly	VR—445-500
2	Front Plate	VR—441-500
3	6-32 x 1/4" Screw (2)	BT—STA-127
4	Meter Block	VR—122-500
5	Top Meter Gasket	GA—VIT-116
6	Meter Tube, 500 PPD	MT—129-500
7	10-24 x 3/16" Bolt	BT—STA-128
8	Sealing Diaphragm	DI—102-500
9	Seal Cover	VR—137-500
10	Spring	SP—100-000
11	Diaphragm Front Plate	VR—269-500
12	Diaphragm Back Plate	VR—369-500
13	10-24 x 1/2" Bolt	BT—STA-136
14	Bottom Meter Gasket	GA—VIT-115
15	O-Ring	OR-VIT-212
16	Meter Inlet, 500 PPD	MI—232-500
17	Clamp	VR—235-500
18	O-Ring	OR-VIT-114
19	Flow Tube Assembly	VR—321-500
20	Front Body	VR—256-500
21	Back Body	VR—234-500
22	Seal Plug	VR—182-500
23	O-Ring	OR-VIT-112
24	Valve Seat	VR—110-500
25	O-Ring	OR-VIT-011
26	Inlet Valve	VR—112-500
27	Inlet Capsule	VR—141-501
28	Filter	VR—126-500
29	Ton Inlet Assembly with Yoke and Bolts	VR—738-500

Item No.	Description	Part No.
30	Filter Floss	VR—455-500
31	Inlet Screen	VR—101-500
32	Lead Gasket (Ton)	GA—LED-11T
33	Filter Stop	VR—184-500
34	Ton Yoke Plate	VR—739-500
35	Inlet Spring	SP—104-000
36	Spring Holder	VR—113-500
37	Spring Retainer	VR—163-500
38	Vent Plug	VR—111-500
39	O-Ring	OR-VIT-009
40	1/4 - 20 x 2 3/4" Bolt	BT—STA-125
41	1/4 - 20 x 1 3/4" Bolt	BT—STA-124
42	O-Ring	OR-VIT-332
43	O-Ring	OR-VIT-028
44	Diaphragm	DI—106-500
45	Rate Valve Plug	RV—451-500
46	Rate Valve Bonnet	RV—224-500
47	O-Ring	OR-VIT-010
48	Rate Valve Sleeve	RV—116-500
49	O-Ring	OR-VIT-012
50	5/8" Tubing Connector	TC-110-500
51	Rate Valve Assembly	RV—118-500
52	3/4" Tubing Connector (not shown)	TC-100-100
53	Heater and Clamp (not shown)	HT—111-500
54	Plug, 500 PPD	VR—436-500

TON VACUUM REGULATOR: 600ppd

Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale, PA 18962
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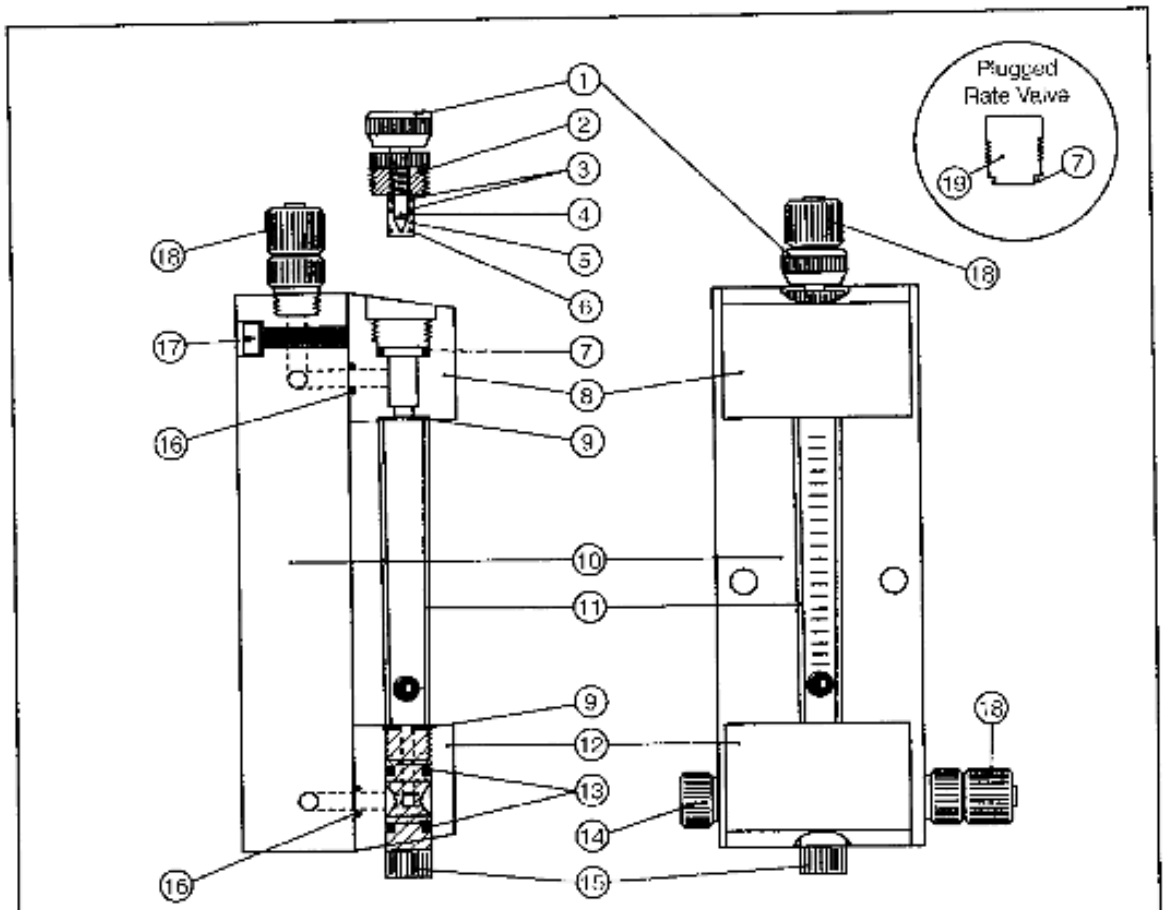
OEM parts for the treatment industry

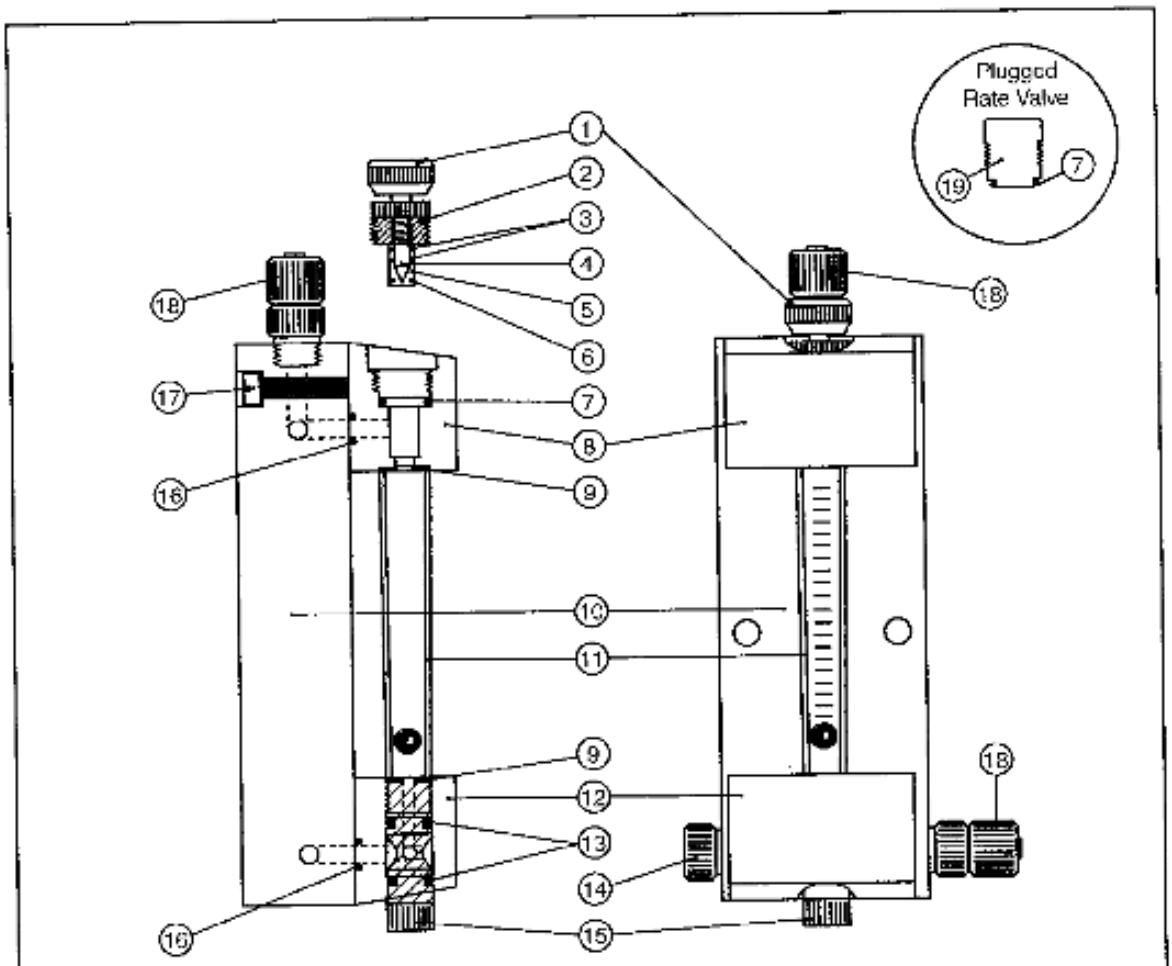


Item No.	Description	Part No.
1	Rate Valve Assembly, 10 ppd max.	RV—118-002
1	Rate Valve Assembly, 100 ppd max.	RV—118-003
2	Rate Valve Bonnet, 250 ppd max.	RV—124-200
3	O-Ring	OR-VIT-006
4	Rate Valve Plug, 10 ppd max.	RV —659-002
4	Rate Valve Plug, 100 ppd max.	RV—659-003
5	Rate Valve Sleeve, 10 ppd max.	RV—125-002
5	Rate Valve Sleeve, 100 ppd max.	RV—125-003
6	O-Ring	OR-VIT-010
7	O-Ring	OR-VIT-110
8	Top Meter Block	MB—110-100
9	Meter Gasket, 10 ppd max.	GA—VIT-101
9	Meter Gasket, 25 ppd max.	GA—VIT-102
9	Meter Gasket, 100 ppd max.	GA—VIT-103
10	Meter Panel Body	MP—248-200

Item No.	Description	Part No.
11	Meter Tube, 4 ppd max.	MT—108-004
11	Meter Tube, 10 ppd max.	MT—108-010
11	Meter Tube, 25 ppd max.	MT—108-025
11	Meter Tube, 50 ppd max.	MT—108-050
11	Meter Tube, 100 ppd max.	MT—108-100
12	Bottom Meter Block	MP—109-100
13	O-Ring	OR-VIT-112
14	¾" NPT Plug	PL—108-200
15	Meter Inlet, 10 ppd max.	MI—219-010
15	Meter Inlet, 250 ppd max.	MI—140-200
16	O-Ring	OR-VIT-012
17	10-24 x 1" Bolt	BT—STA-126
18	⅜" Tubing Connector	TC—400—100
19	Bonnet Plug, 250 ppd	PL—175-250

REMOTE METER PANEL: 100ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale,PA 18962
215-453-2500
OEM parts for the treatment industry

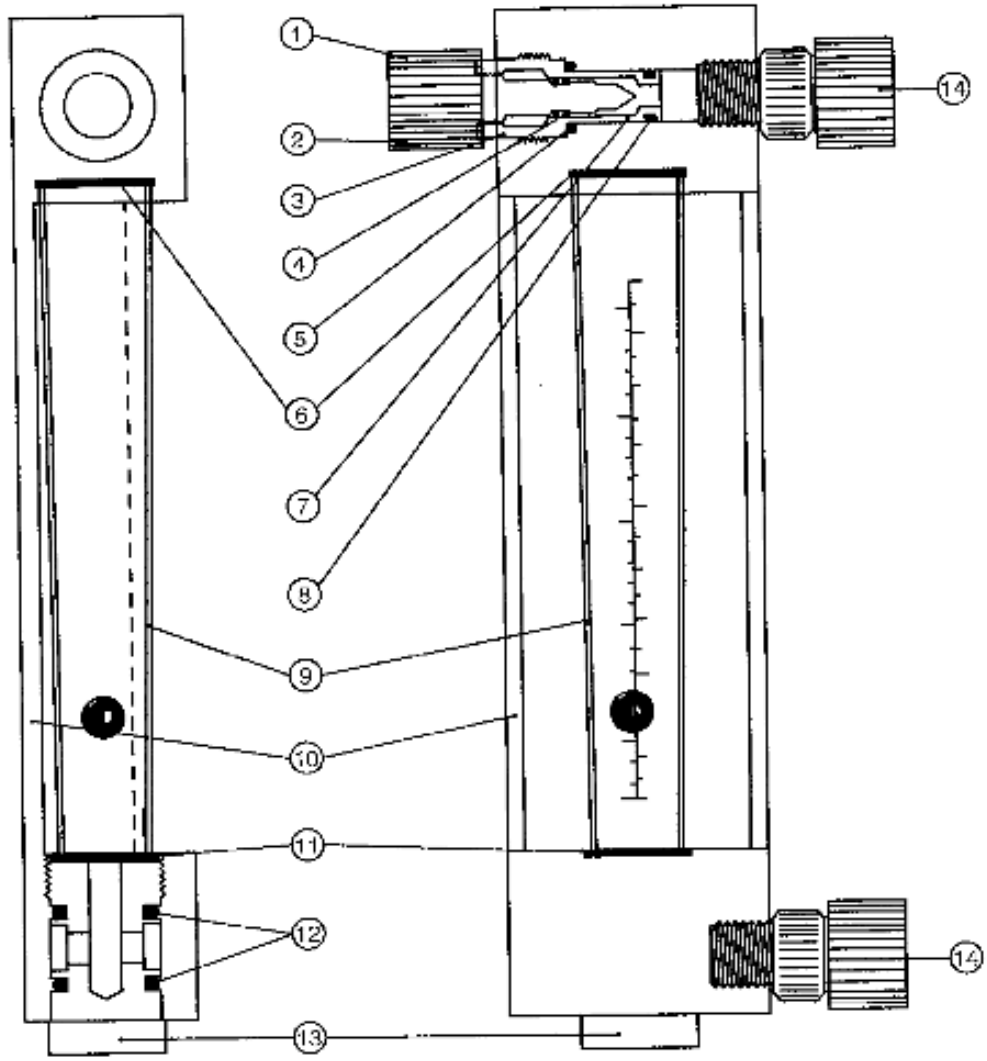


Item No.	Description	Part No.
1	Rate Valve Assembly, 250 ppd max.	RV—118-003
2	Rate Valve Bonnet, 250 ppd max.	RV—124-200
3	O-Ring	OR-VIT-006
4	Rate Valve Plug, 250 ppd max.	RV—659-003
5	Rate Valve Sleeve, 250 ppd max.	RV—125-003
6	O-Ring	OR-VIT-010
7	O-Ring	OR-VIT-110
8	Top Meter Block	MB—117-200
9	Meter Gasket, 250 ppd max.	GA—VIT-104
10	Meter Panel Body	MP—248-200

Item No.	Description	Part No.
11	Meter Tube, 250 ppd max.	MT—108-250
12	Bottom Meter Block	MB—116-200
13	O-Ring	OR-VIT-112
14	¼" NPT Plug	PL—108-000
15	Meter Inlet, 250 ppd max.	MI—140-200
16	O-Ring	OR-VIT-012
17	10-24 x 1" Bolt	BT—STA-126
18	⅛" Tubing Connector	TC-106-2DC
19	Bonnet Plug, 250 ppd	PL—175-250

REMOTE METER PANEL: 250ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC.
130 W. Main St, Silverdale,PA 18962
215 453-2530
OEM parts for the treatment industry



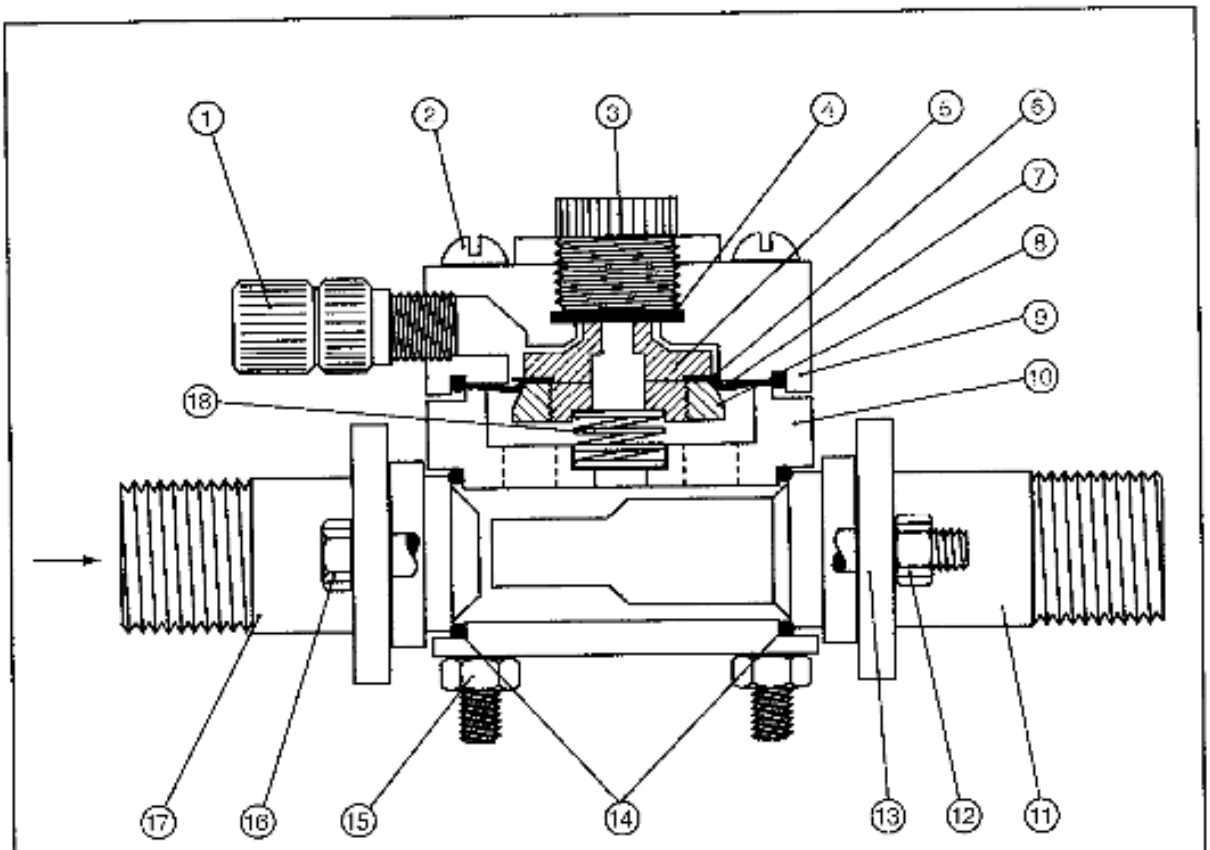
Item No.	Description	Part No.
1	Rate Valve Assembly, 500 ppd	RV—118-500
2	Rate Valve Plug, 500 ppd	RV—651-500
3	Rate Valve Bonnet, 500 ppd	RV—224-500
4	O-Ring	OR-VIT-010
5	O-Ring	OR-VIT-112
6	Top Meter Gasket	GA—VIT-116
7	Rate Valve Sleeve, 500 ppd	RV—116-500

Item No.	Description	Part No.
8	O-Ring	OR-VIT-012
9	Meter Tube, 500 ppd	MT—129-500
10	Meter Panel Body	MP—259-500
11	Bottom Meter Gasket	GA—VIT-115
12	O-Ring	OR-VIT-212
13	Meter Inlet	MI—232-500
14	⅜" Tubing Connector	TC-110-500

REMOTE METER PANEL: 500ppd

Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

ENCHLOR INC
130 W. Main St, Silverdale,PA 18962
215-453-2533
OEM parts for the treatment industry



Item No.	Description	Part No.
1	1/2" Tubing Connector	TC—10b-200
2	5/16 - 18 x 3 1/2" Bolt	BT—STA-135
3	Seat Plug	EJ—311-200
4	Valve Seat	GA—VIT-122
5	Diaphragm Bolt	EJ—206-200
6	Support Diaphragm	DI—105-500
7	Diaphragm	DI—104-500
8	Diaphragm Nut	EJ—146-500
9	Top Body	EJ—208-200
10	Bottom Body	EJ—153-500
11	Throat	TT—189-386
12	3/8 - 16 Nut	NT—STA-106
13	Flange	EJ—136-500
14	O-Ring	OR-BUN-121
15	5/16 - 18 Nut	NT—STA-104
16	3/8 - 16 x 4 1/2" Bolt	BT—STA-145
17	Nozzle	TN—187-300
18	Spring	SP—106-000

EJECTOR: 250ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

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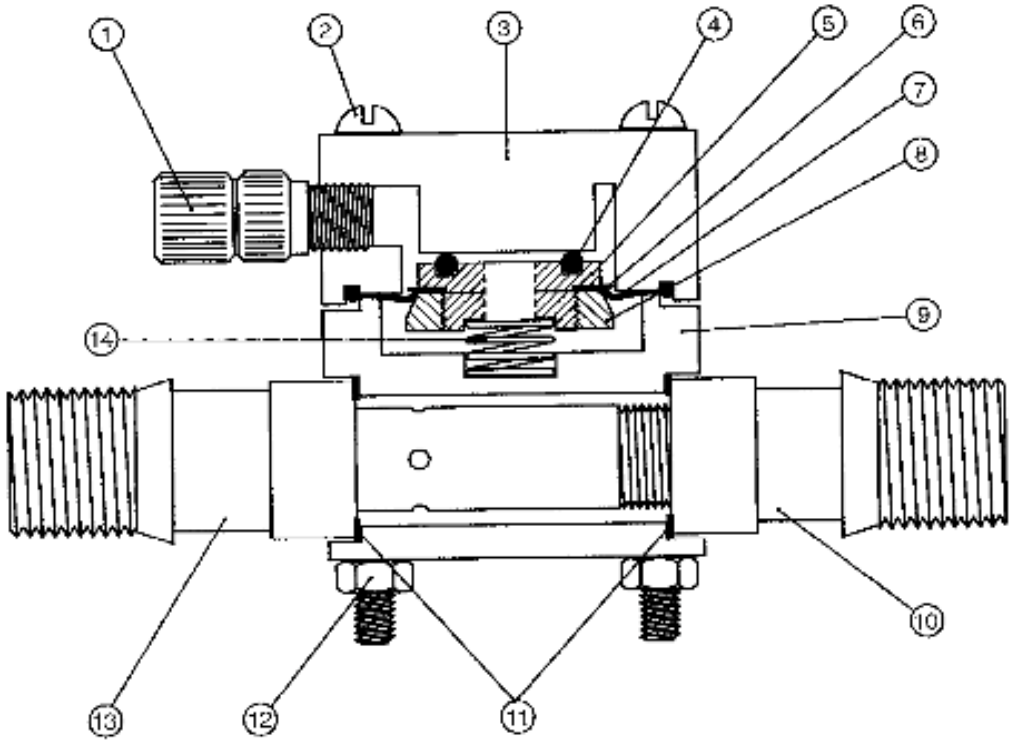

Item No.	Description	Part No.
1	3/8" Tubing Connector	TC - 100 - 100
2	5/16 - 18 x 4" Bolt	BT --STA-136
3	Top Body	EJ --237-250
4	O-Ring	OR-CEM-210
5	Diaphragm Bolt	EJ --236-500
6	Support Diaphragm	DI --105-500
7	Diaphragm	DI --104-500
8	Diaphragm Nut	EJ --146-500
9	Bottom Body	EJ --153-500
10	Multi Purpose Diffuser	EJ --962-100
11	O-Ring	OR-BUN-121
12	5/16 - 18 Nut	NT --STA-104
13	Nozzle	* See Note
14	Spring	SP --106-000

***Note:** Available Nozzles:
CN --016-106 (10 ppd max.)
CN --013-128 (25 ppd max.)
CN --015-156 (50 ppd max.)
CN --012-191 (100 ppd max.)

EJECTOR: O-Ring 100ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

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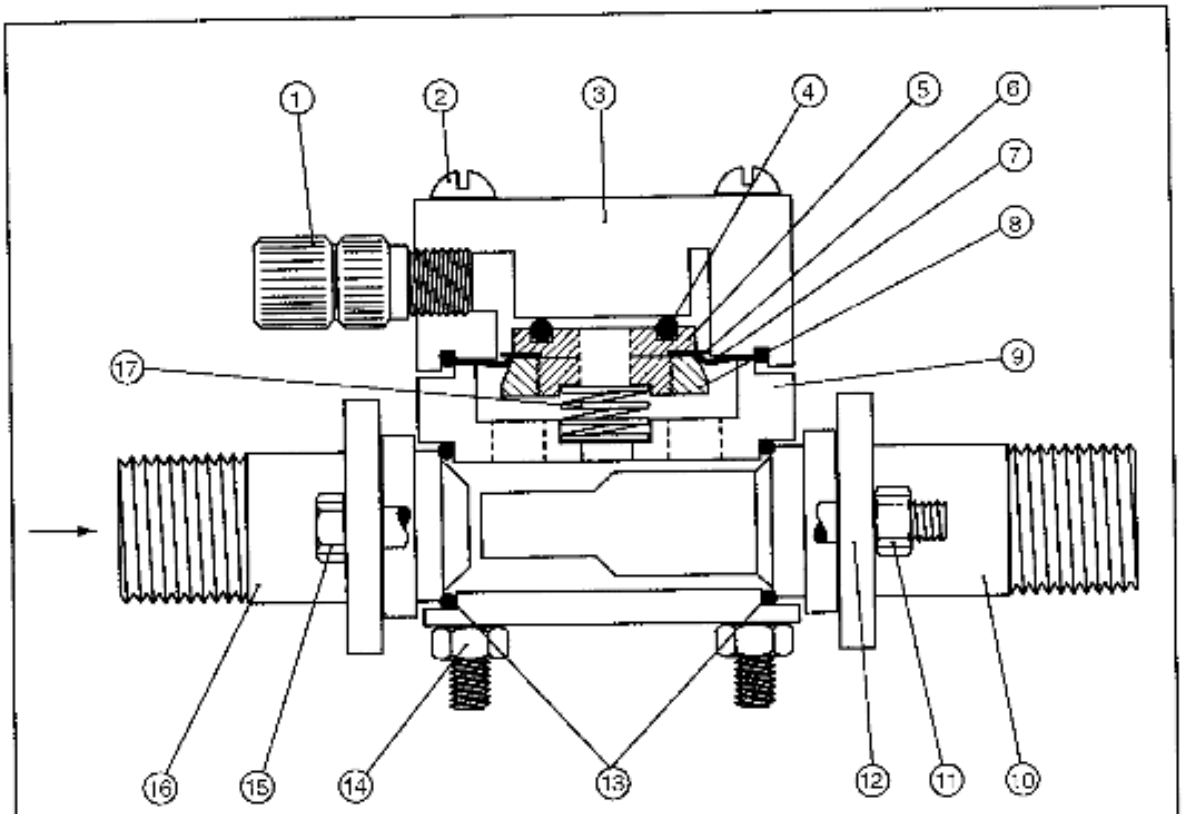

Item No.	Description	Part No.
1	½" Tubing Connector	TC—106-250
2	5/16 - 18 x 4" Bolt	BT—STA-136
3	Top Body	EJ—237-250
4	O-Ring	OR-CEM-210
5	Diaphragm Bolt	EJ—236-500
6	Support Diaphragm	DI—105-500
7	Diaphragm	DI—104-500
8	Diaphragm Nut	EJ—146-500
9	Bottom Body	EJ—153-500
10	Throat	* TT—189-386
11	3/8 - 16 Nut	NT—STA-106
12	Flange	EJ—136-500
13	O-Ring	OR-BUN-121
14	5/16 - 18 Nut	NT—STA-104
15	3/8 - 16 x 4½" Bolt	BT—STA-145
16	Nozzle	* TN—187-300
17	Spring	SP—106-000

*Note: Many different nozzle/throat combinations are available to work within given hydraulic conditions. The above sizes are supplied as standard equipment. Refer to nozzle sizing charts for correct sizing.

EJECTOR: O-Ring 250ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 2000
Hydro	Series 300
Capital Controls	Series 200

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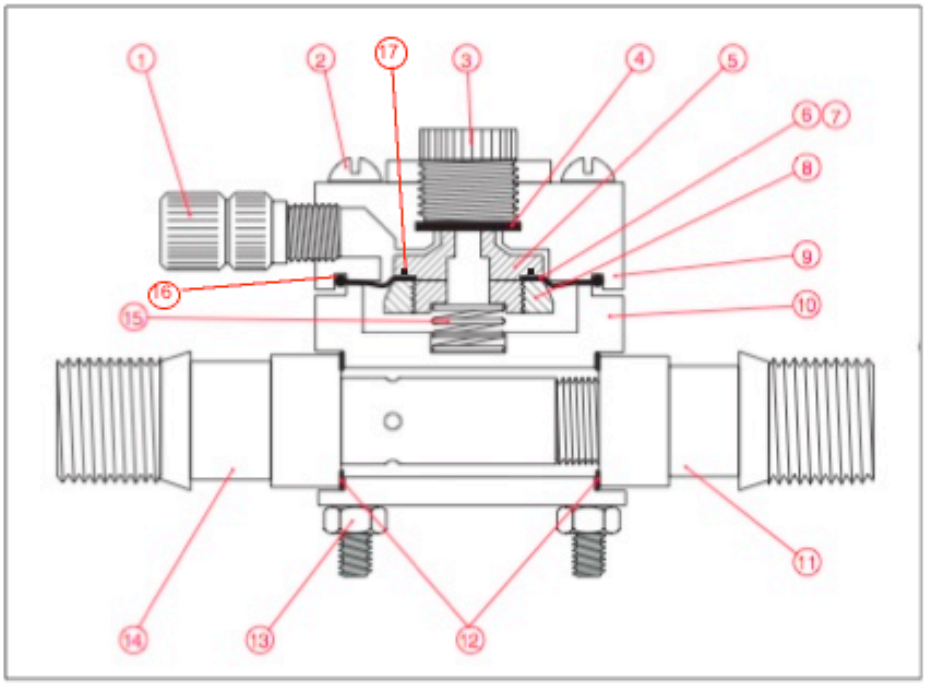


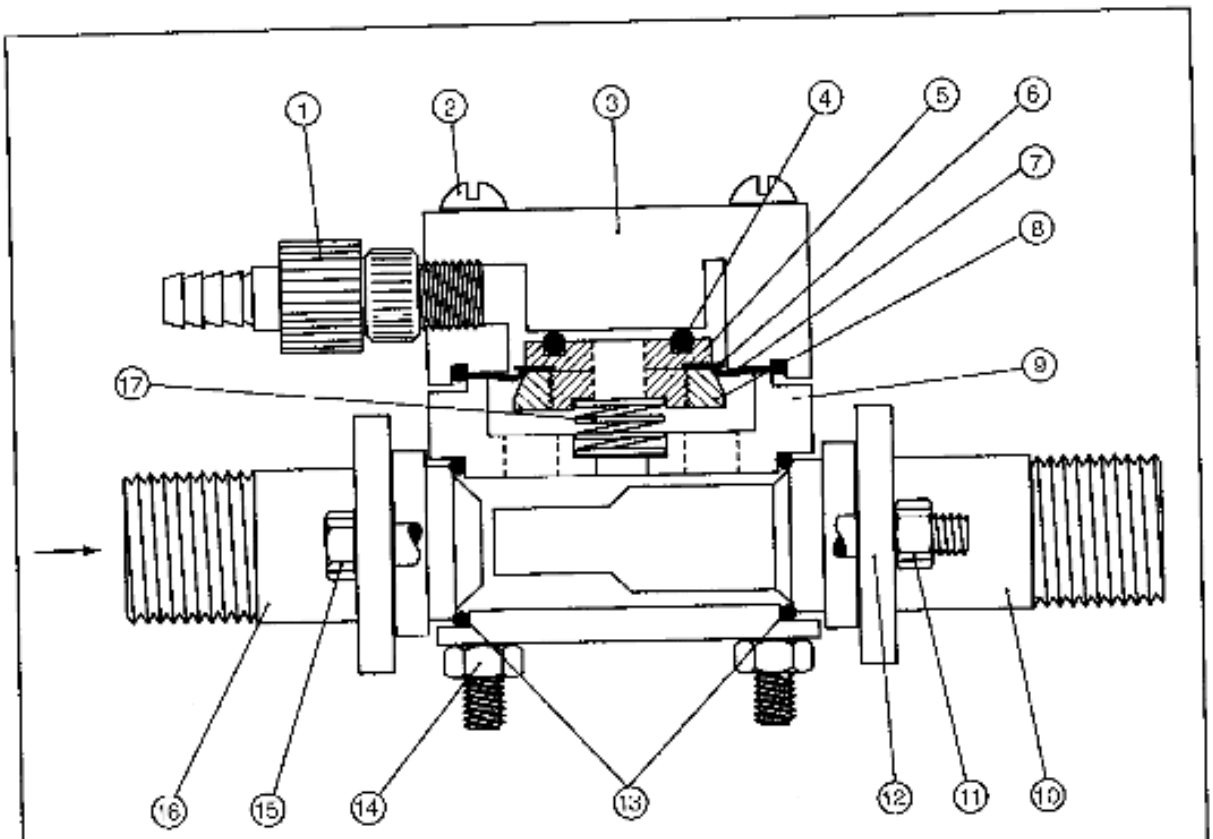
1	3/8" Tubing Connector	TCE-100-100
2	5/16 - 18 x 31/2" Bolt	BTE-STA-135
3	Seat Plug	EJE-311-200
4	Valve Seat	GAE-VIT-122
5	Diaphragm Bolt	EJE-206-200
6	Diaphragm	DIE-104-500
7	Support Diaphragm	DIE-105-500
8	Diaphragm Nut	EJE-146-500
9	Top Body	EJE-208-200
10	Bottom Body	EJE-153-500
11	Multi Purpose Diffuser	EJE-982-100
12	O-Ring	ORE-BUN-121
13	5/16 - 18 Nut	NTE-STA-104
14	Nozzle *	See Note
15	Spring	SPE-106-000
16	O-ring	ORE-VIT-137
17	O-ring	ORE-VIT-022

*Note: Available Nozzles:
CNE-016-106 (10 ppd max.)
CNE-013-128 (25 ppd max.)
CNE-015-156 (50 ppd max.)
CNE-012-191 (100 ppd max.)

EJECTOR: 100ppd max capacity

Enchlor Inc.	Series E4000/E2000
Ecometrics:	Series 4000/Series 2000
Capital Controls:	Series 480/Series 201
Hydro Instruments:	Series 800/Series 300

Repair Kit #KTE-100-EJS includes items 1,4,6,12



Item No.	Description	Part No.
1	5/8" Tubing Connector	TC - 110-500
2	5/16 - 18 x 4" Bolt	BT —STA-136
3	Top Body	EJ —237-500
4	O-Ring	OR-CEM-210
5	Diaphragm Bolt	EJ —236-500
6	Support Diaphragm	DI —105-500
7	Diaphragm	DI —104-500
8	Diaphragm Nut	EJ —146-500
9	Bottom Body	EJ —153-500
10	Throat	* TT —189-386
11	3/8 - 16 Nut	NT —STA-106
12	Flange	EJ —136-500
13	O Ring	OR-BUN-121
14	5/16 - 18 Nut	NT —STA-104
15	3/8 - 16 x 4 1/2" Bolt	BT —STA-145
16	Nozzle	* TN —187-300
17	Spring	SP —106-000

*Note: Many different nozzle/throat combinations are available to work within given hydraulic conditions. The above sizes are supplied as standard equipment. Refer to nozzle sizing charts for correct sizing.

EJECTOR: O-Ring 600ppd	
Enchlor Inc.	Series 2000
Ecometrics	Series 7000
Hydro	Series 300
Capital Controls	Series 200

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