

OWNER'S MANUAL

WASTEWATER TREATMENT SYSTEMS

MODEL NUMBER

M-6A

M-8A

M-1050A

M-1200A

M-2000A



A Division of Consolidated Treatment Systems, Inc.

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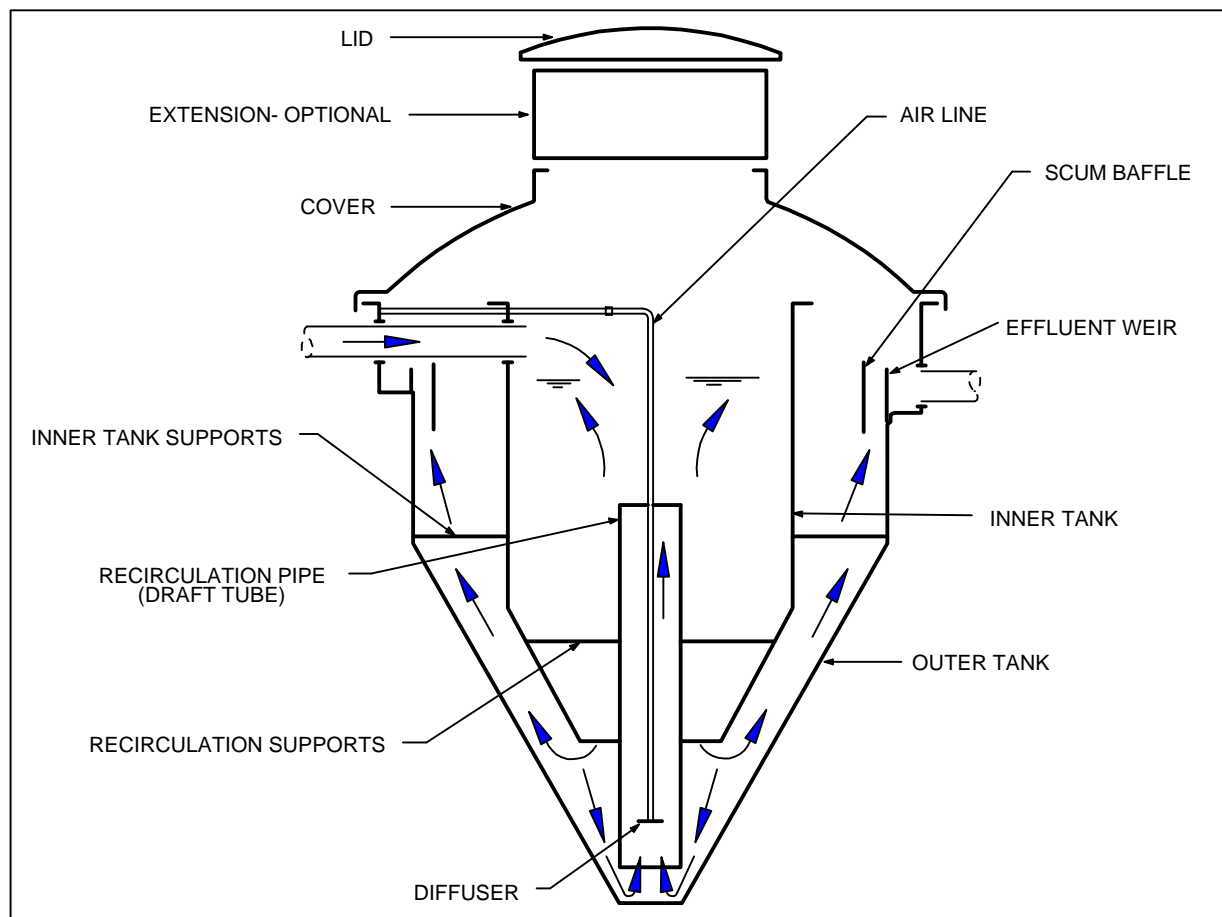
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SYSTEM DESIGN AND METHOD OF OPERATION

Purification of raw wastewater is a simple process with **NAYADIC** units. Wastewater flows by gravity through a four inch waste pipe from the home or business to the unit's influent line where it is deposited in the center of the aeration-setting tank.

An air compressor installed in, or near, the source of the wastewater supplies air to a diffuser located at the bottom of the tank. This aeration speeds the natural biological breakdown of the wastewater.

Next, the treated wastewater flows into a clarification zone where it flows over a 360 degree weir. The clear effluent is then piped and dispersed.



NAYADIC was tested by the National Sanitation Foundation and is listed under their ANSI/NSF Standard 40 as a Class I plant.

MAINTENANCE PROGRAM

Your NAYADIC unit requires periodic, routine maintenance

The **NAYADIC** system is designed to achieve a high degree of treatment necessary to protect both environmental and public health concerns. As with any piece of equipment, proper user care in addition to regular routine maintenance, will help insure optimum treatment efficiency, as well as reducing long-term operating costs.

Your **NAYADIC** system comes with an initial two-year (2) maintenance policy offered by your authorized **NAYADIC** service representative. During the first two (2) years (from the date of installation) your service representative will inspect your **NAYADIC** at six (6) month intervals and make any necessary adjustment or servicing of the mechanical or electrical component parts. This initial service policy is provided at no additional charge except for labor or materials cost due to “physical abuse” (see items listed below).

An annual service contract will be offered to you by your **NAYADIC** representative at the end of this period. Please contact him for further details. In the event that a problem arises or service is required, refer to the systems data plate (located on the alarm and access lid) or the service label for instructions on contacting your closest service representative.

Occasional pumping of your **NAYADIC** system is required due to accumulation of solids. This may not be covered by your representative’s maintenance agreement. If you should need parts or service, please contact the factory for the name of the nearest **NAYADIC** service representative.

Your **NAYADIC** system is designed and intended to treat residential wastewater (i.e., human body waste and liquid waste generated by the occupants of an individual residence). To insure optimum performance and maintenance requirements, do not discharge any type of non-residential wastewater or other types of high strength waste, including commercial food water, without contacting the manufacturer to determine if this will be acceptable or if additional pre-treatment may be required.

OPERATION AND MAINTENANCE

Your NAYADIC unit requires periodic routine maintenance

You are the owner of a **NAYADIC** Wastewater Treatment System. The **NAYADIC** system utilizes highly efficient, aerobic bacteria to treat and stabilize the organic contaminants of domestic wastewater. While the **NAYADIC** has been engineered to operate with only minimal maintenance requirements, the owner can further reduce the frequency and cost of unnecessary service calls by observing the following “DO’s and DO NOT’s”, as well as the recommendations of your authorized **NAYADIC** representation.

To insure proper operation . . .

- DO . . . Install the **NAYADIC** level and with the access lid above finished grade (refer to installation manual).
- DO . . . Install the compressor in a dry, well ventilated area; or, if installed outside, provide an approved protective housing.
- DO . . . Install the alarm or indicator of failure in a conspicuous location.
- DO . . . Always contact your **NAYADIC** service representative whenever your alarm is activated or if you detect any objectionable odor coming from your system. **It is important that you contact your service representative immediately to prevent any unnecessary maintenance costs.**
- Do . . . Connect the compressor to a 115 volt electrical service.
- Do . . . Maintain electrical power, to the compressor at all times unless otherwise advised by your authorized **NAYADIC** service representative.
- Do . . . Contact your authorized **NAYADIC** service representative if the system is to be used intermittently or if extended periods of non-use are anticipated.
- Do . . . Check that your unit's access lid is properly and securely fastened to prevent unauthorized entry.
- Do . . . Periodically check you compressor and alarm indicator for proper operation. All clamps and fittings should be tight with no leaking in the air line.
- Do . . . Periodically pump excess solids and scum build-up. (Check with your authorized **NAYADIC** service representative for the proper frequency.)
- Do . . . Call your authorized **NAYADIC** service representative at the first sign of trouble. He is trained to ensure that your unit operates at its maximum efficiency.

Do Not . . . Put non-biodegradable articles into your system. These may include, but are not limited to: paper towels, disposable diapers, sanitary napkins, rubber and plastic products.

Do Not . . . Place excessive amounts of grease into your **NAYADIC** system.

Do Not . . . Put solvents, paints, drain cleaners, or other toxic materials into your **NAYADIC** system.

Do Not . . . Allow surface water to pond around the unit.

Do Not . . . Allow non-wastewater water flows caused by infiltration, storm water connections, leakage from plumbing fixtures, water softener back wash, etc., to enter the **NAYADIC** system.

Do Not . . . Attempt to service the unit yourself; or to use replacement parts other than those supplied by **NAYADIC**.

Do Not . . . Alter, repair or modify your system without the authorization of your **NAYADIC** service representative.

IMPORTANT: The **NAYADIC** system must be installed and maintained in compliance with all State and Local Laws and regulations. This also includes compliance with all regulations concerning proper effluent disposal, as well as the pumping and disposal of sludge (i.e., treatment plant solids).

WARRANTY

Consolidated Treatment Systems, Inc., warrants the parts in each aerobic treatment plant to be free from defects in material and workmanship for a period of two (2) years from date of installation for treatment of household wastewater when properly registered with the manufacturer. Consolidated Treatment Systems, Inc., sole obligation under this warranty is as follows: Consolidated Treatment Systems, Inc., shall fulfill this warranty by repairing or exchanging any component part, FOB Factory, that shows evidence of defects, provided said component part has been paid for and is returned through an authorized dealer, transportation prepaid. The warrantee must also notify Consolidated Treatment Systems, Inc., of the defect complained of. There is no informal dispute settlement mechanism available under this LIMITED WARRANTY.

No warranty is made as to the field performance of any plant. This LIMITED WARRANTY applies only to the parts manufactured by Consolidated Treatment Systems, Inc., does not include any portion of the household plumbing, drainage, or installation of disposal system. Components or accessories supplied by Consolidated Treatment Systems, Inc., but manufactured by others, are warranted only to the extent of and by the terms and conditions of the original manufacturer's warranty. In no event shall Consolidated Treatment Systems, Inc., be responsible for delay or damages of any kind or character resulting from, or caused directly or indirectly by, defective components or materials manufactured by others.

Recommendations for special applications will be based on the best available experience of Consolidated Treatment Systems, Inc., and published industry information. Such recommendations do not constitute a warranty of satisfactory performance.

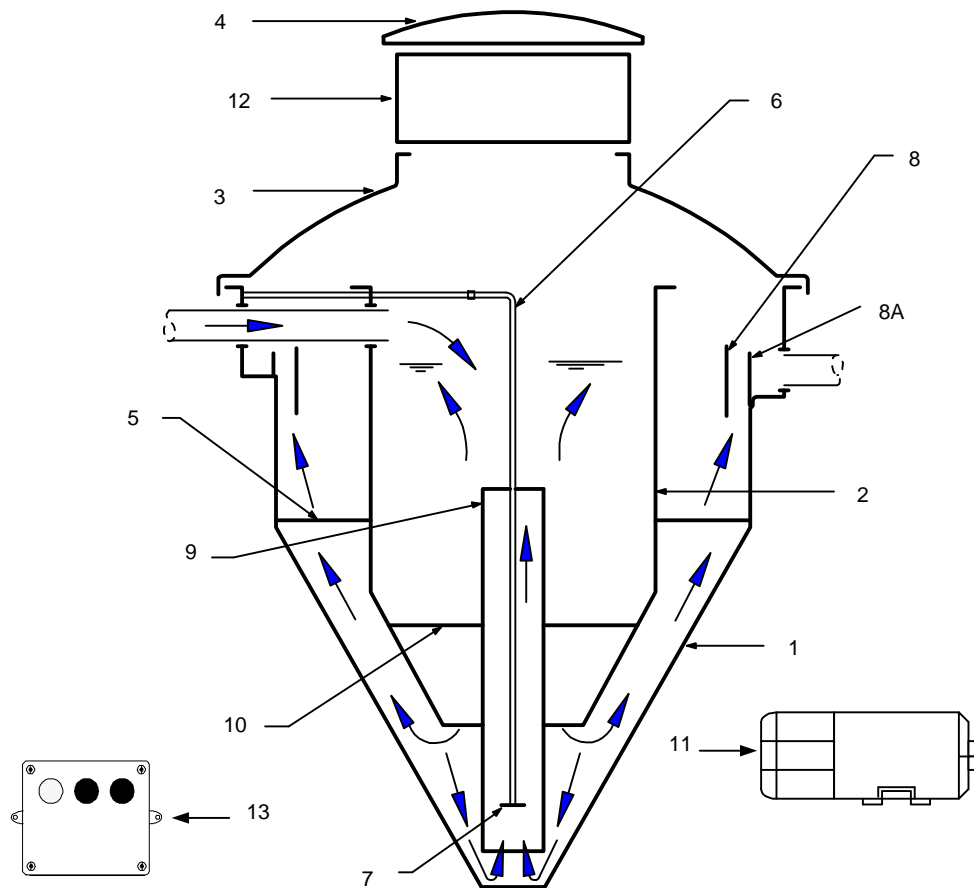
This LIMITED WARRANTY extends to the consumer of the product. As used herein, "consumer" is defined as the purchaser who first uses the plant or the subsequent user(s) for the 2 years after its initial installation. It is the first user's or servicing dealer's obligation to make known to the subsequent user(s) the terms and conditions of this warranty.

This warranty is a LIMITED WARRANTY and no claim of any nature shall be made against Consolidated Treatment Systems, Inc., unless and until the consumer, or his legal representative, notifies Consolidated Treatment Systems, Inc., in writing of the defect complained of and delivers the product and/or defective part(s), freight prepaid, to the factory or an authorized service station.

Consolidated Treatment Systems, Inc., reserves the right to revise, change, or modify the construction and design of the aerobic treatment plants for household wastewater, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in equipment previously sold. Consolidated Treatment Systems, Inc., also reserves the right, in making replacements of component parts under this warranty, to furnish a component part which, in its judgment, is equivalent to the part replaced.

UNDER NO CIRCUMSTANCES WILL CONSOLIDATED TREATMENT SYSTEMS, INC., BE RESPONSIBLE TO THE WARRANTEE FOR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST INCOME, LABOR CHANGES, DELAYS IN PRODUCTION AND/OR IDLE PRODUCTION, WHICH DAMAGES ARE CAUSED BY A DEFECT IN MATERIAL AND/OR WORKMANSHIP IN ITS PRODUCT OR PARTS SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER OBLIGATION ON THE PART OF CONSOLIDATED TREATMENT SYSTEMS, INC., SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIAL LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.



COMPONENT PARTS

Part No.	Description	No. Req'd	Material
1	OUTER TANK	1	FIBERGLASS
2	INNER TANK	1	FIBERGLASS
3	COVER	1	FIBERGLASS
4	LID	1	FIBERGLASS
5	INNER TANK SUPPORTS	1	FIBERGLASS
6	AIR LINE	1	SCH. 40 ½" PVC
7	DIFFUSER	1	FIBERGLASS
8	SCUM BAFFLE	1	FIBERGLASS
9	OVERFLOW WEIR	1	FIBERGLASS
10	RECIRCULATION PIPE	1	SDR – 41 PVC
11	RECIRCULATION SUPPORTS	3	STAINLESS STEEL
12	COMPRESSOR	1	CAST IRON ALUM. ALLOY
13	EXTENSION – optional	1	FIBERGLASS
14	ELECTRICAL ALARM	1	PLASTIC

UNIT SPECIFICATIONS

Model M-6A

Capacity
600 Gal. Holding
500 Gal. Treated
Specifications
Apx. 485 lbs.

Aeration Rates:

3000 cf/lb. BOD/day at 3 psig

Compressor:

1/4 hp, 1725 rpm,
60 cycle, 115V
Rated Capacity – 2 to 3.7 cfm –
up to 5 psig KW 0.19

Diffuser: Disc Plate

Diaphragm type

Organic Loading:

.5 to 1.5 lbs. BOD/day

Model M-8A

Capacity
800 Gal. Holding
600 Gal. Treated
Specifications
Apx. 625 lbs.

Aeration Rates:

2950 cf/lb. BOD/day at 3 psig

Compressor:

1/4 hp, 1725 rpm,
60 cycle, 115V
Rated Capacity – 3 to 4 cfm – up
to 8 psig KW 0.19

Diffuser: Disc Plate

Diaphragm type

Organic Loading:

1 to 2 lbs. BOD/day

Model M-1050A

Capacity
1050 Gal. Holding
800 Gal. Treated
Specifications
Apx. 760 lbs.

Aeration Rates:

2900 cf/lb. BOD/day at 3 psig

Compressor:

1/4 hp, 1725 rpm,
60 cycle, 115V
Rated Capacity – 3 to 4 cfm – up
to 8 psig KW 0.19

Diffuser: Disc Plate

Diaphragm type

Organic Loading:

1.7 to 2.4 lbs. BOD/day

Model M-1200A

Capacity
1200 Gal. Holding
1000 Gal. Treated
Specifications
Apx. 950 lbs.

Aeration Rates:

2300 cf/lb. BOD/day at 3 psig

Compressor:

1/3 hp, 1725 rpm,
60 cycle, 115V
Rated Capacity – 3 to 4 cfm – up
to 8 psig KW 0.19

Diffuser: Disc Plate

Diaphragm type

Organic Loading:

1.7 to 2.5 lbs. BOD/day

Model M-2000A

Capacity
2000 Gal. Holding
1500 Gal. Treated
Specifications
Apx. 1180 lbs.

Aeration Rates:

2710 cf/lb. BOD/day at 4 psig

Compressor:

1/2 hp, 1725 rpm,
60 cycle, 115V
Rated Capacity – 6 to 7 cfm – up
to 8 psig KW 0.19

Diffuser: Disc Plate

Diaphragm type

Organic Loading:

2.4 to 4.25 lbs. BOD/day

Specifications

Wastewater Treatment Test Results (ANSI/NSF Standard 40 Test Evaluation)

	<u>Influent Mean mgl</u>	<u>Effluent Mean mgl</u>	<u>Reduction</u>
BOD (5 days)	150	6	96%
SS	195	7	96%