

MICROJET
Marine Head



Installation/Service Manual
P/N 24558

Thank you for purchasing a Microphor Product!

Your MicroJet Marine Head is designed to provide you with years of reliable service while using salt or fresh water to flush. Please read this Owner's Manual completely prior to installation.

PRE-INSTALLATION

The following procedures apply to all MicroJet models unless otherwise noted. Remove your MicroJet Marine Head from box carefully. Install toilet seat before mounting the MicroJet to the floor. The seat is included with this model. Bolt caps and closet screws are provided.

WATER LINES

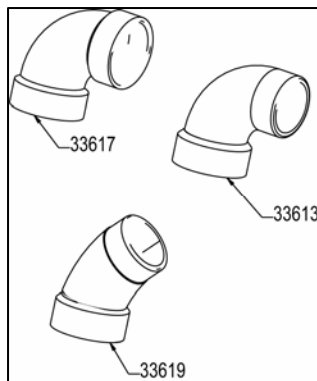
Use reinforced 1" water line rated for a minimum of 120 PSI and install a water shut-off valve between bulkhead and toilet. Water **at the toilet** must be a minimum of 15 gallons per minute at 45-60 PSI flowing.

DRAIN CONNECTION

For direct overboard discharge, contact Microphor or your dealer.

Toilet discharge can be rear or downward.

- For rear discharge: Glue one each 90° elbow fittings (P/N 33617 & 33619) onto jet valve assembly.
- For down discharge: Glue one each elbow (P/N 33617 & 33613) onto jet valve assembly.



Note: Use ABS compatible cement and solvents.

When using a 1-1/2" (38.1 mm) discharge line, each toilet must go individually to the waste tank. Do not connect more than one toilet to a 1-1/2" (38.1 mm) discharge line. When multiple heads are installed, a vented 3" gravity collection line is to be used with not more than 4 heads per 3" line. Manifold the 1-1/2" lines into the 3" collection line and provide a grade of at least 1/4" per foot towards the waste tank. Vent 3" line at the manifold point.

ELECTRICAL CONNECTION

The MicroJet is available as a 12VDC or 24VDC toilet. The electrical connection is made as shown in Figure A on page 3.

START UP

1. Turn ON water. Check for water leaks.
2. Flush the MicroJet Marine Head two (2) times, waiting twenty (20) seconds between flushes to get water through the system and operating regularly.

CLEANING

Use MicroClean Organic Spray Cleaner (P/N 24542).

Note: Sanitizers like Lysol, Pine-Sol, Hexol, ammonia base products, caustic drain openers or non-biodegradable cleaners should never be used if the plumbing system is connected to a Microphor MSD.

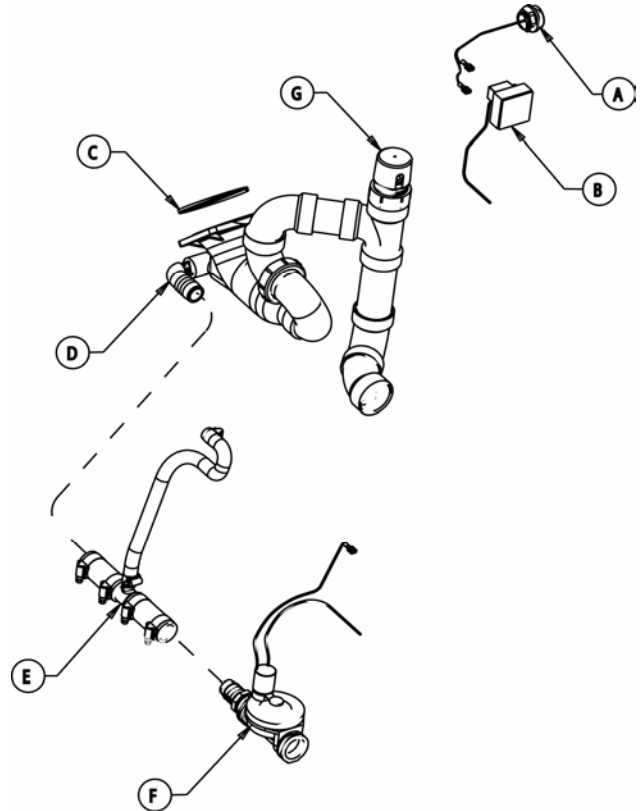
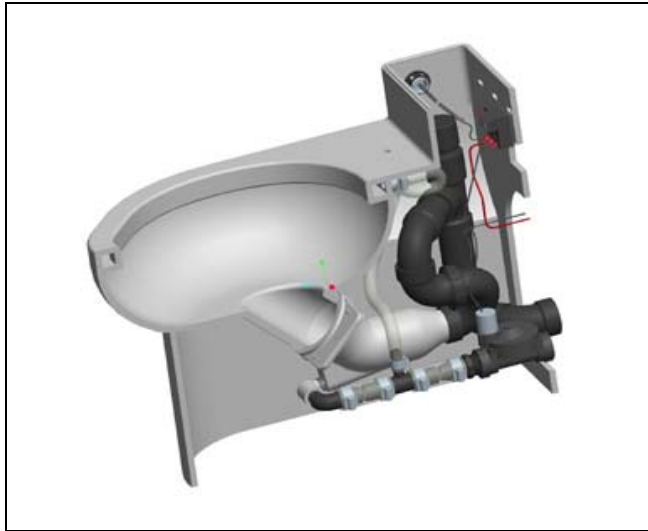
CLEARING YOUR MICROJET MARINE TOILET

If your MicroJet Marine Head becomes plugged, clear the toilet as you would a conventional household toilet

WINTERIZING (Out-of-Service Winter Service)

Shut OFF the water to MicroJet Marine Toilet. Flush (3) three times or until water no longer flows into the bowl. Unhook water supply at water shut off valve. Empty the water in supply line into a receptacle. The unit is now prepared for freezing temperatures.

EXPLODED VIEWS & REPLACEABLE PARTS



REPLACEABLE PARTS

	Model Part	Part #
A	Push Button Assembly Brushed Aluminum Gold	94374 94374-3
B	Timer Assembly 24VDC 12VDC	72027 72027-3
C	Quad Seal Kit	72024
D	Jet Valve Assembly	72018
E	Pressure Hose Assembly	72026
F	Solenoid Valve Assembly	72025
G	Vent	40056

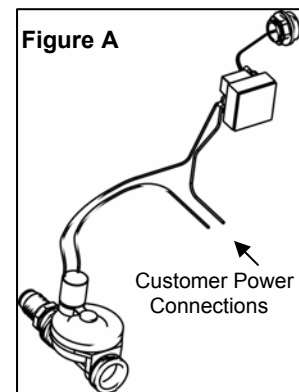


Figure A
Flush Button, Timer & Solenoid Sub-Assembly

VITREOUS CHINA COLOR CHART

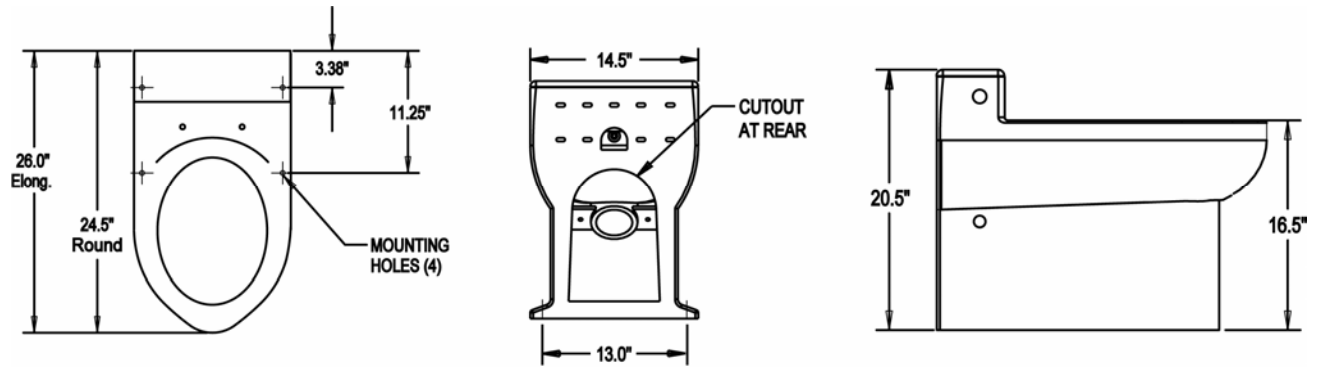
Color	LF-710 Round Shell & Lid	LF-710 Elongated Shell & Lid	Lid Only	LF-719 Round Shell	LF-719 Elongated Shell	Bolt Caps
White	94531	94532	94537	94530	94730	93972
Biscuit	94531-3	94532-3	94537-3	94530-3	94730-3	44370
Black	94531-5	94532-5	94537-5	94530-5	94730-5	44369
Grey	94531-7	94532-7	94537-7	94530-7	94730-7	44377

ROUGH-IN DIMENSIONS: MICROJET MODEL

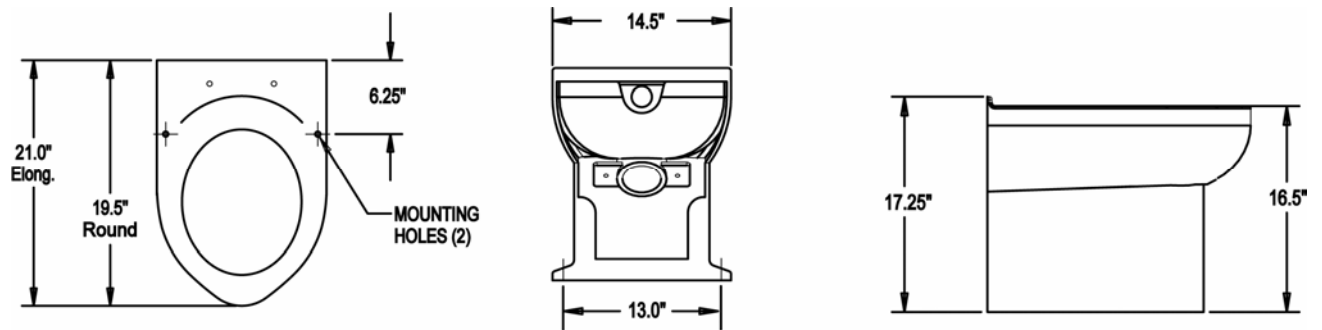
Note: All dimensions may vary $\frac{1}{2}'' \pm$

Note: All drawings shown without internal components.

LF 710



LF 719



MICROJET PUMP

SPECIFICATIONS

The MicroJet pump is a closed vane impeller centrifugal pump with stainless steel pump shaft and casing. Motor is TEFC 115VAC, 1 Phase, 0.2 Amps, 1000 Watts, producing maximum pressure of 65 PSI and the tank is suitable for fresh water applications. For salt water applications, please contact Microphor or your local distributor.

Operating limits:

Capacity:	19 GPM
Suction lift:	25 feet
Water inlet size:	1.0" NPT
Water outlet size:	1.0" NPT
Maximum system pressure:	109 PSI

INSTALLATION

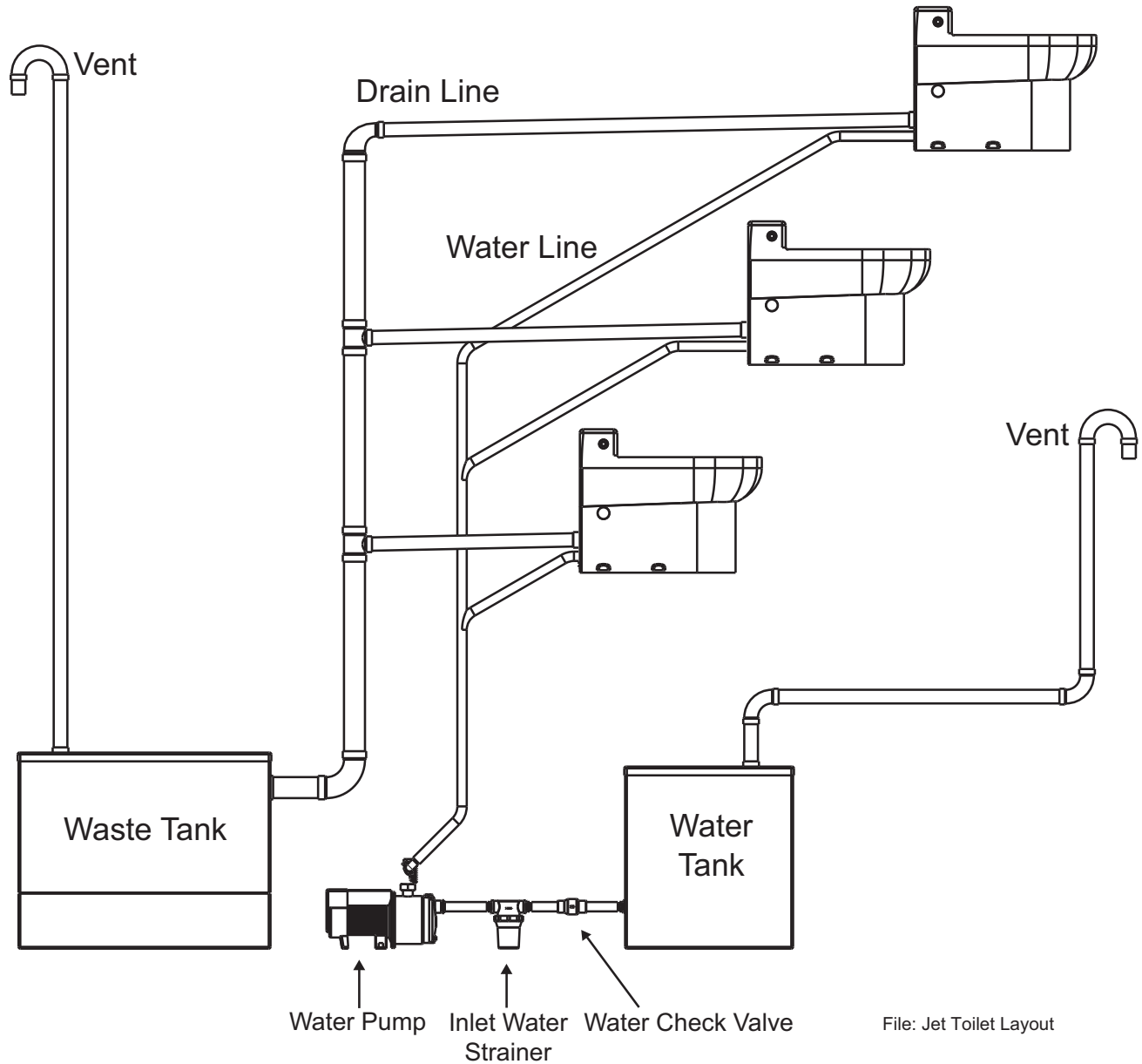
- Install inlet water strainer (P/N 87015) on suction side of pump.
- Connect to 115VAC power supply.
- Pump must be primed before initial operation by filling the pump and suction line with water at the priming port.
- Hold in the yellow push button on the pressure switch while establishing prime.
- If suction lift exceeds 3 foot, install a foot (water check) valve (P/N 40057). The factory installed inlet check valve must be screwed out from the inlet before installing suction piping.
- Water supply line: minimum 1" reinforced 120 PSI tubing

Caution: Do not use pipe thread sealing compound; use only Teflon sealing tape.

REPLACEABLE PARTS

Pump Seal Kit P/N 27024

TYPICAL MULTI-TOILET SYSTEM LAYOUT



WARNINGS

- DO NOT use any “Locktite” brand adhesives on any plastic or Delrin components as fumes will cause damage.
- DO NOT use Teflon tape on any fittings as clogging may occur.

TROUBLE SHOOTING

Your MicroJet Toilet is designed to give you years of trouble-free operation. Please check the following before beginning any service or repair:

Trouble	Possible Cause	Correction
Toilet water backs up	<ol style="list-style-type: none">1. Toilet or discharge pipe is blocked with foreign object2. Waste tank is full or not adequately vented	<ol style="list-style-type: none">1. Use a plunger to dislodge the debris and clear drain line of debris2. Empty tank and/or correct venting
Flush button is depressed and no flushing action occurs	<ol style="list-style-type: none">1. No electricity to the pump or pump has failed/needs primed2. No water in the water tank3. Water inlet valve is closed	<ol style="list-style-type: none">1. Restore power to the pump or repair/prime pump2. Supply water to the water tank3. Open valve
Pump cycles repeatedly	<ol style="list-style-type: none">1. Accumulator tank bladder ruptured2. Pressure switch incorrectly set3. Accumulator air pressure too high4. Water system has a leak	<ol style="list-style-type: none">1. Replace2. Adjust pressure switch3. Adjust to 4 PSI below pump cut-in pressure4. Correct leakage

CUSTOMER SERVICE

Please contact your local Microphor dealer for questions, parts and service. For a list of dealers, please contact Microphor at 1-800-358-8280 or visit our website at www.microphor.com.

PATENTS

U.S. Patents pending

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