CERTIFICATE OF COMPLETION/OPERATION PERMIT

MECKLENBURG COUNTY ENVIRONMENTAL HEALTH
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 21621 DATE: 10-1-87
TC: 193-171-18 ☑ L ☐ CRT
SERIAL № 10564

Name of Owner Harold Elmore Juris.:
Address of Property 3101 Williams Rd.

Inspection Data:

Tank Material PCC
Total Length of Drainfield 400
Number of Lines 5 @ 80'
Cover Depth 12"
Water Supply Source well
Distance to Water Source > 50'
Excavation Inspected 8-12-87
Tank(s) Inspected 8-12-87
Wash Line Inspected —
High Water Alarm Inspected 10-1-87

PLOT

Design. 1226 ; 1500 ST, 1000 DT, PI, Conv, 1200 SF, 126, Crc CTR#

The undersigned has inspected the Septic Tank System described above, and certifies it has been
☑ installed or constructed ☐ altered or repaired
☑ in accordance with the permit issued ☐ as detailed in the plot above
and meets the provisions of 10 NCAC 10A .1900, "Laws And Rules For Sanitary Sewage Collection, Treatment, And Disposal" in effect on the date of issuance of the permit. The issuance of this
☑ Certificate of Completion ☐ Operation Permit
does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 10 NCAC 10A .1900 in addition to those listed below under "COMMENTS." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

COMMENTS

Jim Ensign
Environmentalist

Mecklenburg County services are available without regard to ethnic origin, sex, or disability.

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR PERMIT

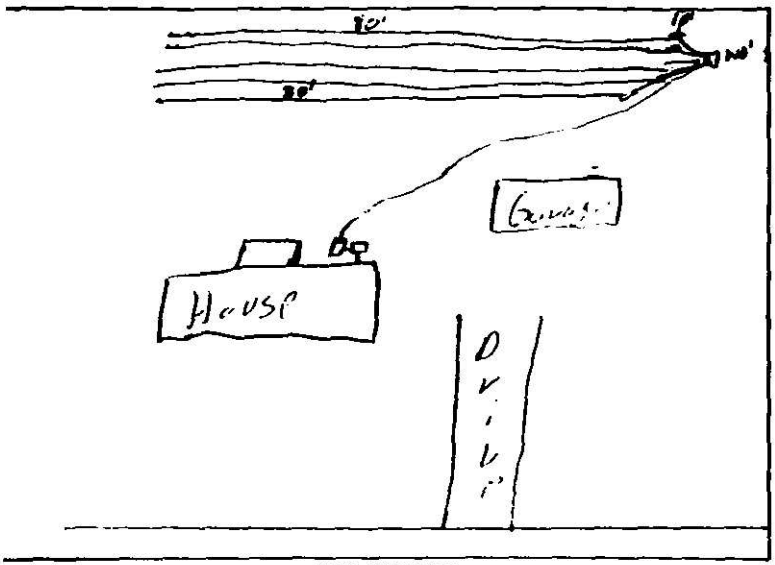
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 21621 DATE: 7-29-87

TC: 193-171-18 ☑ L

SERIAL № 11116

Permission is hereby given to ✓ Install or Construct, ____ Alter or Repair the individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge as specified herein at the described location. This permit is granted based upon the information supplied in the application dated Sept. 11, 86. All work shall be completed on or before 8-29-97, after which date this permit shall be null and void. The system shall meet all of the construction requirements of 10 NCAC 10A .1900 which are in effect on the date of the granting of this permit. A Certificate of Completion or an Operation Permit must be obtained from the Mecklenburg County Department of Environmental Health before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now or hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.



PLOT OF SYSTEM

Liquid Capacity of Septic Tank 1500 gallons

Liquid Capacity of Dosing Tank 1000 gallons

Tank Construction PCC

Absorption and/or Nitrification Lines:

Trench Width 3 feet

Total Line Length 400 feet

Number of Lines Five

Depth of Stone 12 inches

Distance from House 5 feet

Distance from Property Line 101 feet

Distance from Well 750 feet

NAME OF OWNER Hurale Elmore

LOCATION OF PROPERTY 3611 Williams Rd

Comments: Use Trench SP X 3 with 1" Stone, Use Stationary Certificate of Completion will not be issued until after Absorption is Inspected

Division or Section Head

Environmentalist

* If this permit is for the installation or construction of a new system, it must be signed by the division or a section head of the Department of Environmental Health in order to be valid. Only the signature of the Environmentalist is required where an existing system is being altered or repaired.

WHITE - ENVIRONMENTAL HEALTH DEPARTMENT'S COPY ● CANARY - ENVIRONMENTALIST'S COPY ● PINK - OWNER OR AGENTS COPY

APPLICATION FOR AN IMPROVEMENT PERMIT

MECKLENBURG COUNTY ENVIRONMENTAL HEALTH

1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

Mecklenburg County services are available without regard to ethnic origin, sex, or disability.

(OFFICE USE ONLY)
FILE: 21621
TC: 193-171-10
SERIAL: № 11349

☐ L ☑ CRT

JOB LOCATION

① ADDRESS: 3101 Williams Rd. (STREET NO / STREET) ② FILE: ____
③ JURISDICTION: ____ ④ TAX PARCEL NO.: 193-171-18
⑤ SUBDIVISION: ____ ⑥ LOT: ____ ⑦ BLOCK: ____

OWNER

⑧ NAME: Harold (FIRST) Dehu (MIDDLE) Evans (LAST)
⑨ MAILING ADDRESS: 3419 Shamrock Dr.
⑩ CITY: Charlotte ⑪ STATE: N.C. ⑫ ZIP: 28205
⑬ PHONE: (WORK) 336-4321 ⑭ (HOME) 537-9065

REQUEST

This request is for a(n):

⑮ ☒ New permit
⑯ ☐ Repair or alteration permit
⑰ ☐ Authorization for mobile home exchange
⑱ ☐ Other (specify) ____

DESIGN CRITERIA

System will serve:

⑲ ☒ Residence ⑳ ☐ Mobile home
㉑ ☐ Business or place of public assembly
㉒ Number of bedrooms? 3
㉕ Type? ____
㉓ Maximum occupancy? 2
㉖ Maximum number of employees? ____
㉔ Basement? ☐ yes ☒ no
㉗ Maximum number of seats? ____

WATER SUPPLY

㉘ Water supply from (present or proposed)

A ☒ Individual well
B ☐ Municipal system
C ☐ Community well
D ☐ Community system

㉙ The undersigned, owner of the property described above as the "JOB LOCATION" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the MECKLENBURG COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH to enter upon the property for the purpose of processing this request.

Signed: Harold D. Evans
Date: 11 Sept. 86

IMPROVEMENT PERMIT

The undersigned, an authorized agent of the MECKLENBURG COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, Treatment And Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

1. No sewage shall be discharged on the septic tank system until an Improvement Permit, Authorization and/or Repair permit is issued by this Department.
2. This permit is not transferable, and shall become null and void 36 months from the date of issuance.

Environmental Health Director or Authorized Section Head: John D. Atkisson Date: 9/11/86

*This permit must be signed by the Director of Environmental Health or an authorized section head in order to be valid.

DEPARTMENT OF ENVIRONMENTAL HEALTH
MECKLENBURG COUNTY, NORTH CAROLINA

SITE EVALUATION

S.I.R. NO. 21621

T.C. NO. 193-101-16

(Ground Absorption Sewage Disposal)

OWNER: Marshall M. Finley
ADDRESS: 1913 Jefferson Road Huntersville NC 28078
PLAT NO: Lots 21 & 21A
LOT SIZE: Approx 4 Acre
LOCATION OF SITE: Off Williams Branch

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4
1. SLOPE (%)	S (PS) U 2-8%	S (PS) U 2-8%	S PS U	S PS U
2. SOIL TEXTURE (12-36 inches) Sandy, Loamy, Clayey (Note 2-1 Clay)	S (PS) U Clay	S PS U 2:1 Clay	S PS U	S PS U
3. SOIL STRUCTURE (12-36 inches)	S (PS) U Blocky	S (PS) U Blocky	S PS U	S PS U
4. SOIL DEPTH (inches)	S (PS) U 36-40"	S (PS) U 36-40"	S PS U	S PS U
5. RESTRICTIVE HORIZONS (Inches) (Impervious strata, Rock)	S (PS) U >36"	S (PS) U >36"	S PS U	S PS U
6. SOIL DRAINAGE/GROUNDWATER (external and internal)	S (PS) U >36" to seasonal high water	S Perched (PS) U seasonal high water table 12-24"	S PS U	S PS U
7. OTHER (Specify)	S (PS) U Limited Area for septic	S PS U	S PS U	S PS U
8. SOIL GROUP	IIA	IIB		
9. SITE CLASSIFICATION	Provisionally suitable	unsuitable		
10. SOIL SERIES	Cecil Clay	Helena Clay		

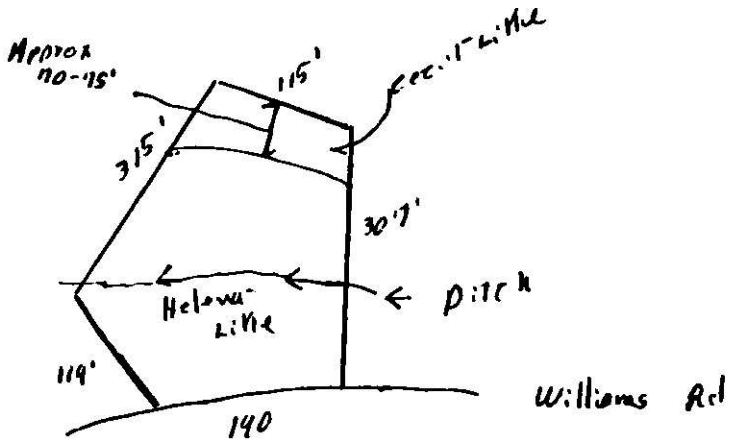
S - Suitable PS - Provisionally Suitable U - Unsuitable

**See Diagram on Back (includes: soil areas, property lines, roads, streams, gullies, wet areas, fill areas, wells, water bodies, slopes)

Recommendations/Comments: Limited area of provisionally suitable soils. Close spacing, reduced application rates may be required before permit is issued

Described by: William R. Martin
Title: Soil Scientist
Date: 11-27-84

14


Approx
110-115°
115'
315'
307'
Helena
Line
pitch
119'
140
Williams Rd

PROPOSED PLOT PLAN

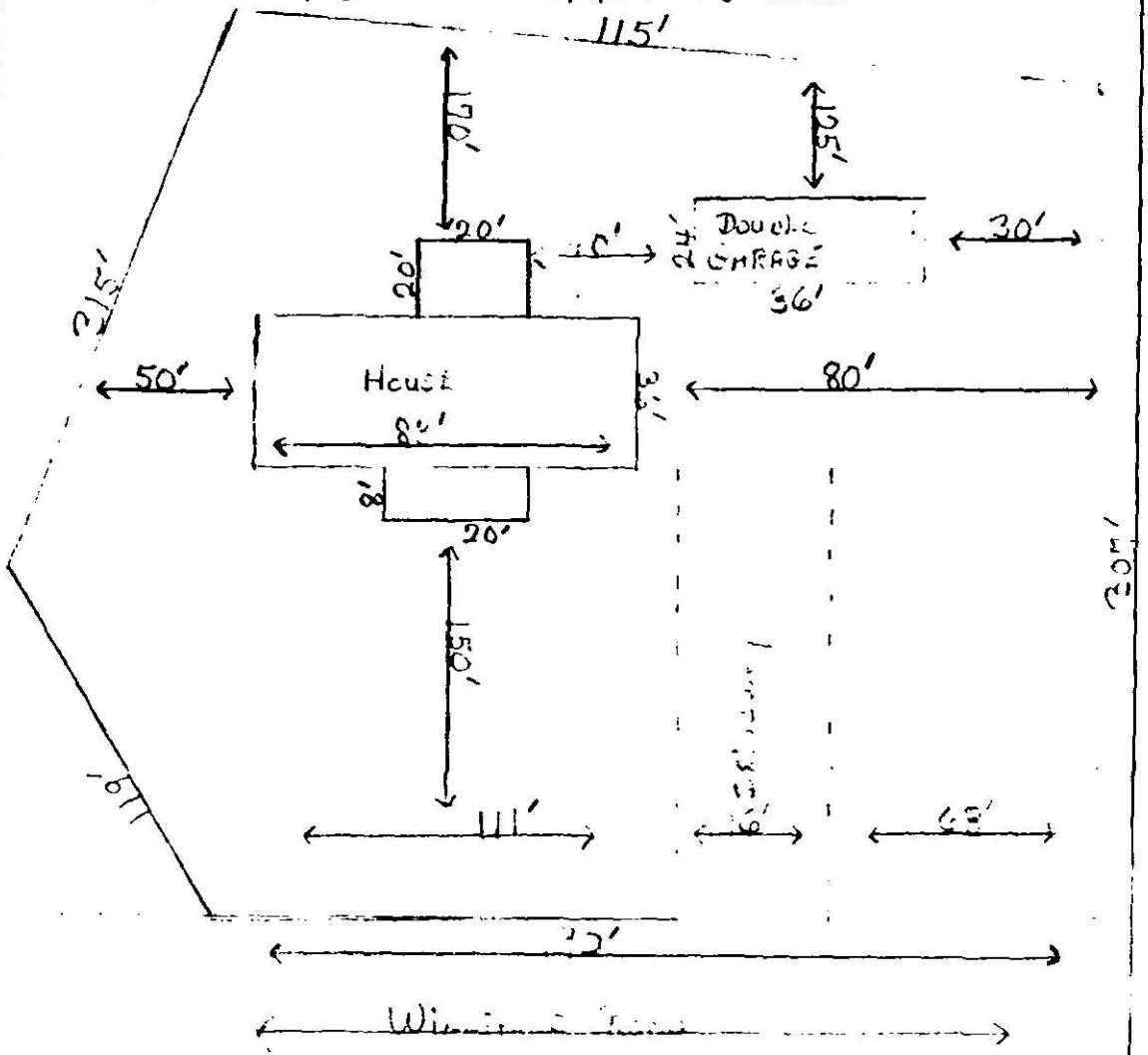
MECKLENBURG COUNTY · ENVIRONMENTAL HEALTH ·

1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 21621

TC: 193-171-8

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries, proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



Signed: Alice D. Ellis

Date: 11 Sept. 86

DATE: 8/18/86

TO: ENVIRONMENTAL HEALTH

FROM: COUNTY ENGINEERING

EHD FILE 21621 JURISDICTION CODE Matt

PARCEL NUMBER 193-171-18

ASSIGNED ADDRESS 3101 Williams Rd

EXISTING ADDRESS

PROJECT NAME N/A

THE ABOVE DESCRIBED LOCATION HAS BEEN CHECKED CONCERNING:

	APPROVED	NOT APPROVED
1. SUBDIVISION REGULATIONS	☑	☐ *
2. FLOODWAY REGULATIONS	☐	☐ *
3. EROSION CONTROL REGULATIONS	☐	☐ *
4. COMMERCIAL DRAINAGE PLAN	☐	☐ *

	PRESENT	NOT PRESENT
5. PUBLIC UTILITY EASEMENT	☐ *	☑
	YES	NO
6. PROPERTY FRONTS ON THOROUGHFARE	☐ *	☑
	YES	NO
7. DRIVEWAY PERMIT REQUIRED	☐ *	☑

* If checked, further investigation will be required to determine whether a building permit may be issued by Building Standards for the site.

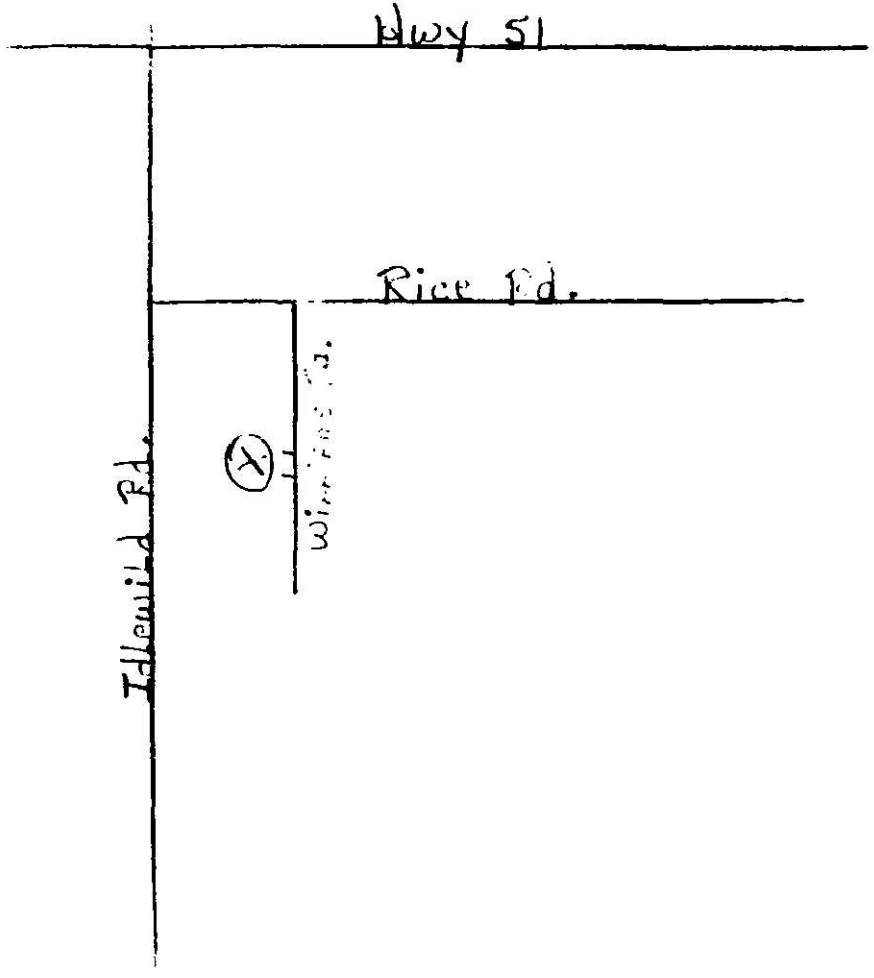
REMARKS:

NOTE: THIS FORM MUST BE TURNED IN AT THE CASHIERS OFFICE AT BUILDING STANDARDS WHEN PAYING PERMIT FEES.
A CERTIFICATE OF OCCUPANCY WILL NOT BE GRANTED UNTIL THE TRANSPORTATION DIVISION GRANTS FINAL APPROVAL ON DRIVEWAY(S).

SIGNED:

OFWEAR 02/86

Directions



DATE: 8/18/86

TO: ENVIRONMENTAL HEALTH

FROM: COUNTY ENGINEERING

EHD FILE 21621 JURISDICTION CODE Mart

PARCEL NUMBER 193-171-18

ASSIGNED ADDRESS 3101 Williams Rd

EXISTING ADDRESS

PROJECT NAME N/A

THE ABOVE DESCRIBED LOCATION HAS BEEN CHECKED CONCERNING:

	APPROVED	NOT APPROVED
1. SUBDIVISION REGULATIONS	☐	☐ *
2. FLOODWAY REGULATIONS	☐	☐ *
3. EROSION CONTROL REGULATIONS	☐	☐ *
4. COMMERCIAL DRAINAGE PLAN	☐	☐ *

	PRESENT	NOT PRESENT
5. PUBLIC UTILITY EASEMENT	☐ *	☑
	YES	NO
6. PROPERTY FRONTS ON THOROUGHFARE	☐ *	☑
	YES	NO
7. DRIVEWAY PERMIT REQUIRED	☐ *	☑

* If checked, further investigation will be required to determine whether a building permit may be issued by Building Standards for the site.

REMARKS:

NOTE: THIS FORM MUST BE TURNED IN AT THE CASHIERS OFFICE AT BUILDING STANDARDS WHEN PAYING PERMIT FEES.
A CERTIFICATE OF OCCUPANCY WILL NOT BE GRANTED UNTIL THE TRANSPORTATION DIVISION GRANTS FINAL APPROVAL ON DRIVEWAY(S).

SIGNED: JCH

OPWTAR 02/86

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
1200 BLYTHE BOULEVARD
CHARLOTTE, NORTH CAROLINA 28203

SIR. NO. 21621
T.C. NO. 193-171-18
DATE: 11-27-84

Marshall M. Lindsay
11908 Idlewild Road
Matthews, NC 28105

RE: Property located at Williams Road, Lots 21 & 21-A

Dear Mr. Lindsay:

At your request, a field investigation was conducted on the property designated above. The soils on the property were found to contain a limited area of provisionally suitable soil for the installation of a ground absorption sewage disposal system. A copy of the site evaluation report is enclosed for your information.

Should you desire to file for permission to install a ground absorption sewage disposal system, please submit plot plans for the proposed construction, well, and ground absorption sewage disposal system to this office. They will be reviewed and if it is found that there is an adequate area of provisionally suitable soil to accommodate the proposed installation, an Improvements Permit will be issued by this office.

If I may be of assistance, please feel free to call.

Sincerely,

Bill D. Hardister, Jr.
Environmental Health Supervisor

BDH/kbg

Enclosure

Date Received 11-13-84

RECEIVED
NOV 13 1984
ENVIRONMENTAL HEALTH

SIR No. 21621
T. C. No. 193-171-10
Map Date L

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

APPLICATION FOR SOIL INVESTIGATION

1) NAME OF OWNER LINDSAY (LAST) MARSHALL (FIRST) MELVIN (MIDDLE)

2) ADDRESS OF OWNER 11408 IDLEWILD ROAD MATTHEWS, N.C. ZIP 28105

3) PHONE NO. Home 847-7422 Office —

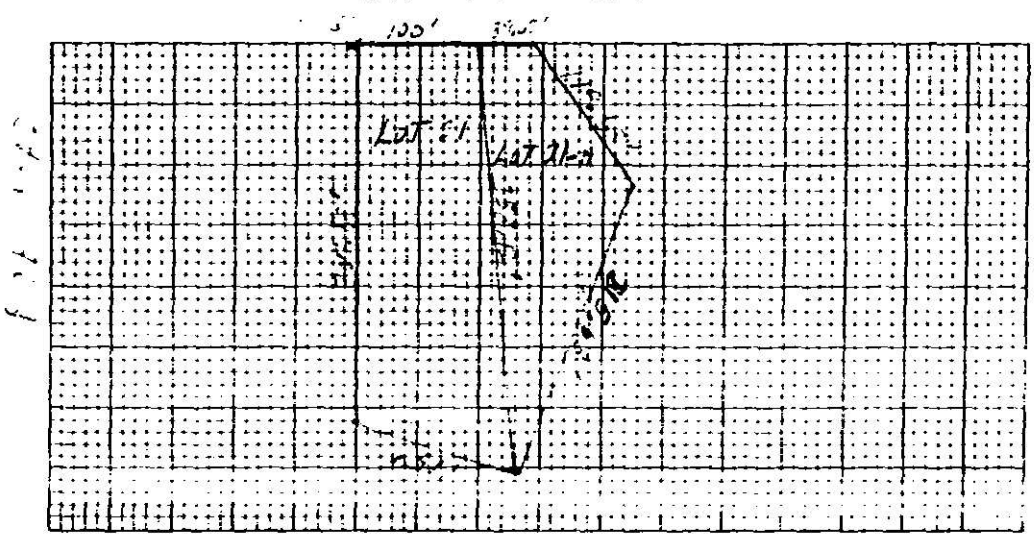
4) LOCATION OF PROPERTY WILLIAMS ROAD (STREET OR COUNTY ROAD)

5) SUBDIVISION SUE S ERNEST + W.H. STARRETTE LOT NO. 21+21A BLOCK NO. —

MAP BOOK NO. [redacted] 8 PAGE NO. [redacted] 245

6) DEED REFERENCE DEED BOOK 1963 PAGE NO. 270

Application is hereby made to the Mecklenburg County Department of Environmental Health for the conduct of a soil investigation and an on site inspection of the lot hereinabove described for the purpose of determining if the lot is suitable for the installation of an individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge



7) ACCURATELY DIAGRAM & DIMENSION LOT

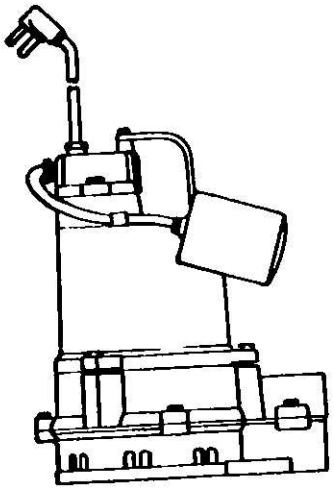
Marshall M. Lindsay
OWNER

EHD-5-76

ENVIRONMENTAL HEALTH DEPARTMENT'S COPY

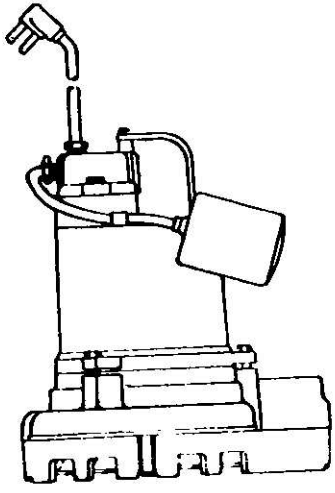
Myers

21621

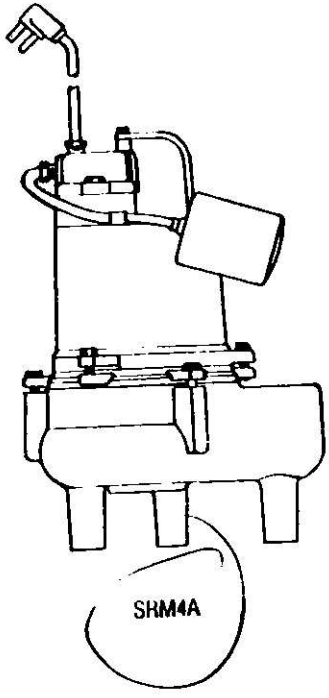


SSM25A

INSTALLATION, MAINTENANCE, AND
SERVICING INSTRUCTIONS
FOR
MYERS SUMP,
EFFLUENT & SEWAGE PUMPS
MODELS SSM25A1-SSM25A1C-YSSM25A2
SSM25M1C-YSSM25M2
SSM4A1C-SSM4A2C
SSM4M1C-SSM4M2C
SRM4A1C-SRM4A2C
SRM4M1C-SRM4M2C



SSM4A



SRM4A

F.E. MYERS CO.
DIVISION OF McNEIL CORPORATION
400 ORANGE STREET
ASHLAND, OHIO 44805-2285
419-289-1144 TELEX 98-7443

13800A991

UNPACK THE PUMP

The sump pumps are carefully packaged to prevent damage in shipping, however, occasionally damage may result due to rough handling. Carefully go over the pump and check for cracks or other damage that could cause pump to fail. Read these instructions before installing pump.

SAFETY PRECAUTIONS

All Myers sump pumps are grounded to prevent electrical shock. POWER CORD MUST BE PLUGGED INTO GROUNDED TYPE RECEPTACLE. A separate circuit breaker or fuse block should be used for the pump and 15 amp circuit breaker or fuse should be used.

Receptacle must be installed at least 4 feet above floor level to prevent tampering by small children and to be out of possible flooding range. Be careful with power cord to prevent cutting or pinching.

DO NOT USE AN EXTENSION CORD WITH SUMP PUMP. DO NOT CUT OFF GROUND PIN OR USE AN ADAPTER FITTING. DO NOT WORK ON PUMP OR SWITCH UNTIL POWER CORD OR CORDS ARE UNPLUGGED.

VOLTAGES

The SSM25 is offered in 115 volt-60 hertz, and the SSM4 & SRM4 are offered for either 115 volt or 230 volt-single phase-60 hertz.

USES - SSM25 & SSM4

The SSM25 and SSM4 sump pumps can be used to pump any basement drainage water. NOT TO BE USED FOR SEWAGE WATER EXCEPT TO PUMP SEPTIC TANK EFFLUENT.

The SSM4 pumps are generally used where more capacity or a heavier duty pump is desired. DO NOT POUR PAINT, TAR, PAINT THINNERS, OR OTHER SOLVENTS INTO SUMP BASIN. See installation drawings with these instructions.

USES - SRM4

The SRM4 sewage pumps are used to pump all domestic sewage and waste water generated in the home. Pump will pass 2 inch diameter solids.

Whenever the sewer or septic tank inlet is above the house drainage system a pump must be used. This usually occurs where a toilet or bath facility is required in the basement and the footer drainage is generally piped off to a lower area. If gravity drainage of the footer is not possible, a sump pump must be used and is usually discharged at ground level.

Many cities require a home to have two sump pumps, one to pump footer drainage and other clean water into the storm sewer and a second pump to handle washing machine water, water softener and mop or other cleaning water. The water handled by this second pump is sometimes called gray water and is pumped into the septic tank.

SEPTIC TANK PUMPING

All of these models can be used to pump septic tank effluent but must be installed in separate tank or compartment at the discharge side of the septic tank. NEVER INSTALL PUMP DIRECTLY IN MAIN TANK WHERE SLUDGE COLLECTS.

For septic tank pumping the Automatic pumps should be used with a junction box. The Manual pumps should be used with a junction box and a MLC level control. When a junction box is used, cut-off the plugs on the pump cord and the MLC switch cord and strip ends. The MLC switch must be connected in series with one line. This provides a completely sealed system for power cord and pump cord with no open receptacles or taped connections that can cause electrical failure.

SUMP BASIN

The SSM25 or SSM4 sump pumps can be installed in any open or closed type sump basin with a diameter of 12 to 18 inches. A polyethylene, fiberglass or concrete tile basin may be used. If concrete tile is used, cement should be poured in the bottom to give a smooth surface free of stones.

The SRM4 sewage pumps must be installed in a basin with gas tight cover and basin must have a vent pipe that is connected to the house sewage vent system. The basin must be a minimum of 18 inches diameter and 30 inches deep.

A float control or adjustable level ALC control can be used with any of these models.

PIPING

Pumps can be installed with ABS, PVC, Polyethylene or galvanized steel pipe. Proper adapters are required to connect plastic pipe to pump. Copper pipe is generally not used because of cost but if used a plastic threaded insulation bushing must be used in the pump case.

The SSM25 and SSM4 units use 1½ inch pipe and the SRM4 units use 2 inch pipe.

A CHECK VALVE MUST BE USED IN THE DISCHARGE LINE FOR ALL PUMPS. The SRM4 sewage pumps require a free flow valve that will not clog with solids. A shutoff valve should be used with all SSM25 and SSM4 sump pumps and must be used for the SRM4 sewage pumps. Always install check valve with arrow on body in direction of flow

AIR LOCKING

A sump pump is said to be air locked if water traps in the pump and it can not get out, thus preventing pump from operating.

ALL MYERS SUMP PUMPS HAVE A SMALL AIR VENT HOLE IN THE IMPELLER CHAMBER TO LET OUT TRAPPED AIR. IF THIS HOLE BECOMES PLUGGED, PUMP MAY AIR LOCK. THIS USUALLY HAPPENS ON PUMPS THAT ARE USED MAINLY IN THE WET SEASONS. IN SUMMER MONTHS, THE PUMP MAY BE TURNED OFF AS SUMP WATER DRIES UP. WHEN PUMP IS TURNED ON AGAIN AND WATER COMES UP IN SUMP, THE AIR WILL TRAP IN PUMP IF NOT VENTED.

AS A SECONDARY PRECAUTION IN INSTALLATIONS OF THIS TYPE - 1/8" HOLE SHOULD BE DRILLED IN THE DISCHARGE PIPE BELOW THE CHECK VALVE. THE CHECK VALVE SHOULD BE 12 TO 18 INCHES ABOVE PUMP DISCHARGE. DO NOT PUT CHECK VALVE DIRECTLY INTO PUMP DISCHARGE OPENING.

In normal sumps where the pump is operating daily, air locking rarely occurs.

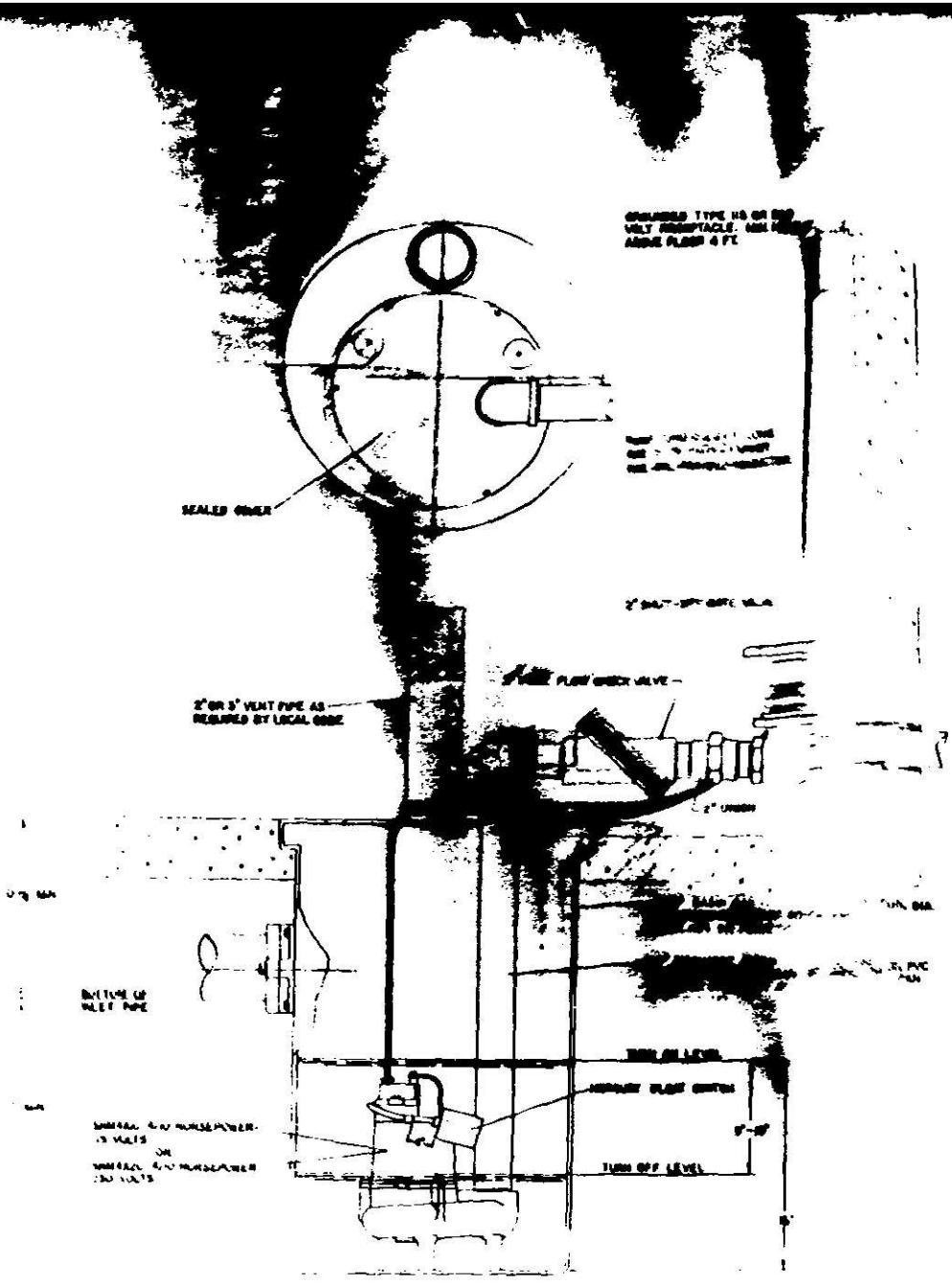
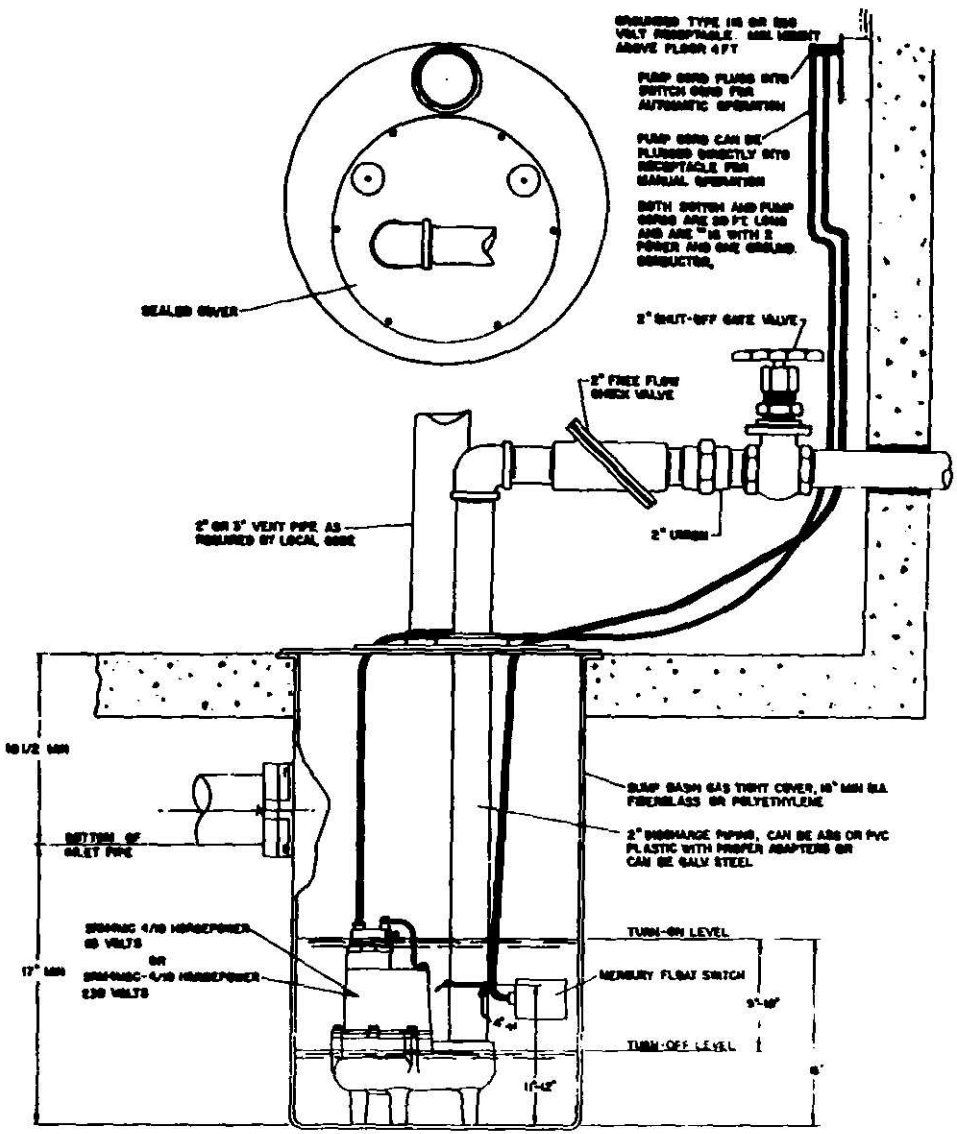

SEALED RISER
2" OR 3" VENT PIPE AS REQUIRED BY LOCAL CODE
FLOW CHECK VALVE
TURN OFF LEVEL

Figure 3



TYPICAL INSTALLATION SHOWING SIMPLEX OR DUPLEX SEWAGE PUMP WITH MJC MERCURY FLOAT CONTROL

13800A891

Figure 4

STARTING PUMP—SSM25A & SSM4A

1. These pumps have an integral mercury ball float switch as shown on installation drawing.
2. The SSM25A1-A1C & SSM4A1C are for 115 volts and SSM4A2C is for 230 volts. Plug cord into the proper voltage GROUNDED RECEPTACLE. The 115 volt plug will not plug into a 230 volt receptacle and vice versa.
3. Run water into sump until pump starts.
4. Allow pump to operate through several on-off cycles to be sure operation is satisfactory.
5. If shut-off valve is used in discharge line, be sure valve is open.
6. If pump does not operate properly, see trouble service chart for remedy.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 3½" AS NOTED IN DIAGRAMS.

STARTING PUMP—SSM25M & SSM4M USING MLC SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 3½ inches between float and cable tie.
2. The SSM25M1C & SSM4M1C are for 115 volts and the SSM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
3. Plug pump cord plug into back of switch cord series plug.
4. Run water into sump until pump starts. The level should be 12 to 13 inches above sump bottom.
5. Be sure gate valve in discharge line is open.
6. Run pump through several on-off cycles.
7. If pump does not operate properly, see trouble service chart for remedy.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 3½" AS NOTED IN DIAGRAMS

STARTING PUMP—SRM4A

1. These pumps have an integral mercury ball float switch as shown on installation drawing.
2. These units are installed in basin with sealed cover, so switch operation cannot be observed. The sump cover, however, usually has a spare hole that is closed with a rubber plug. This plug can be removed and a flashlight can be used to observe switch operation.
3. The SRM4A1C is for 115 volts and the SRM4A2C is for 230 volts. Plug cord into proper voltage GROUNDED RECEPTACLE. The 115 volt plug will not plug into a 230 volt receptacle and vice versa.
4. Run water into sump until pump starts.
5. Be sure gate valve in discharge line is open.
6. Allow pump to operate through several on-off cycles.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS

STARTING PUMP—SRM4M USING MLC SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 4 inches between float and cable tie.
2. As the basin cover is sealed, the rubber plug in the cover can be removed for observation using a flashlight.
3. The SRM4M1C is for 115 volts and the SRM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
4. Plug pump cord plug into back of switch cord series plug.
5. Run water into sump until pump starts. Be sure discharge line valve is open.
6. Operate pump through several on-off cycles. Observe operation through inspection hole. Be sure to replace rubber plug after observation.
7. If pump does not operate properly, see trouble service chart with these instructions.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS

USING THE SSM25M, SSM4M, OR SRM4M FOR MANUAL OPERATION

The pump cord for these units can be plugged directly into proper GROUNDED RECEPTACLE for continuous pump operation.

CAUTION: THIS TYPE OF OPERATION SHOULD BE USED ONLY FOR EMERGENCY USE OR WHERE A LARGE VOLUME OF WATER IS TO BE PUMPED, SUCH AS A FLOODED BASEMENT.

PUMP MUST NOT BE RUN CONTINUOUSLY OUT OF WATER.

DO NOT USE WITH EXTENSION CORD.

HOW MERCURY SWITCH FLOAT OPERATES

This level control uses a mercury switch sealed in a polypropylene float cylinder. The mercury switch is made so not to be position sensitive; that is, it will operate regardless of position.

When level rises in the sump, the cylinder floats up with the level. When the cylinder position is at an angle of about 60°, the mercury flows over and makes contact with electrodes in the switch. This starts the pump motor.

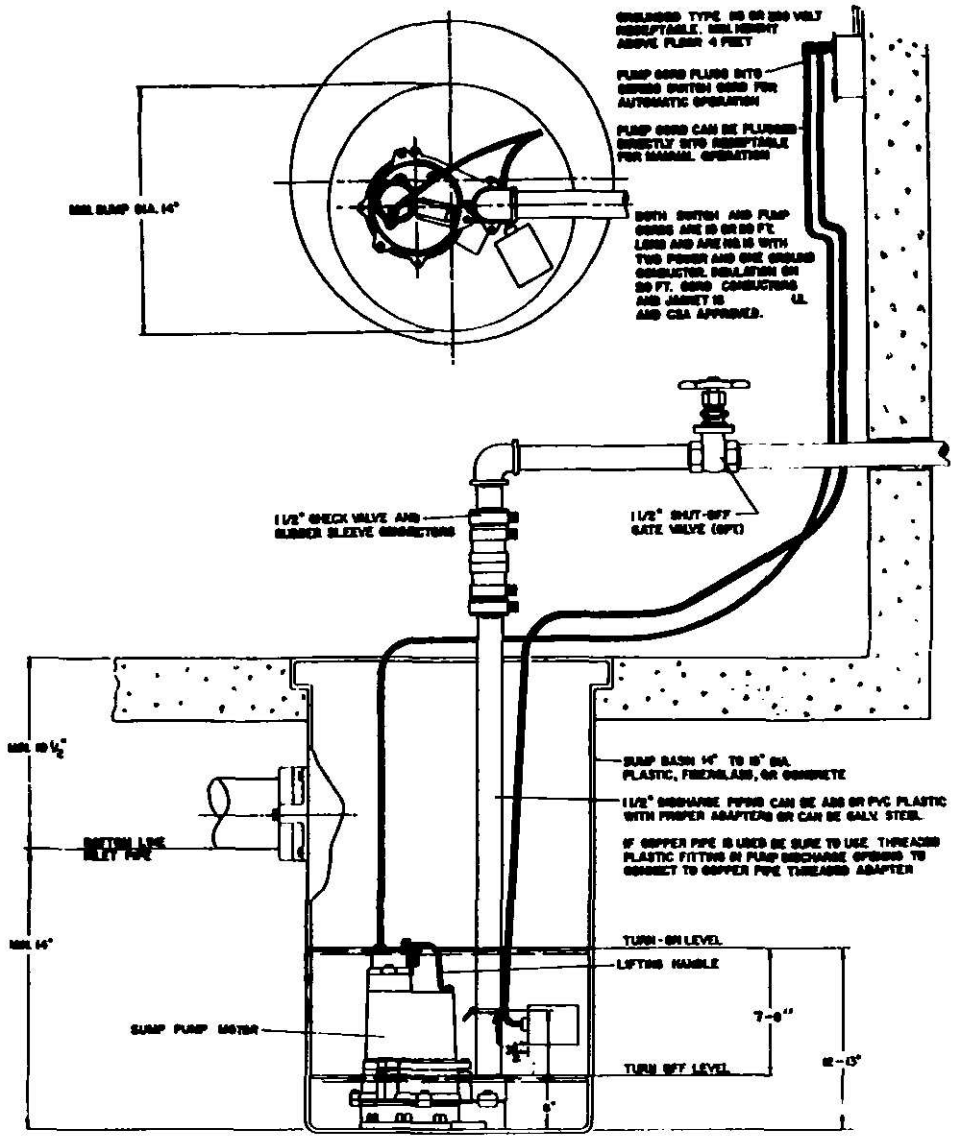
As the sump level draws down, the cylinder floats down and when it is again at an angle of about 60°, the mercury flows away from the electrodes and the motor stops.

BE SURE CYLINDER FLOATS FREELY IN SUMP BASIN WITHOUT TOUCHING THE BASIN WALLS. ADJUST PUMP POSITION IN SUMP IF NECESSARY.

This level control is the simplest and most dependable of any switch ever used to control sump pumps.

PUMP MOTOR

NEVER REMOVE MOTOR HOUSING OR UNSCREW PUMP IMPELLER. Warranty on pump is void if motor housing, impeller or seal have been removed. Any repair on motor must be done by an authorized Myers service center.

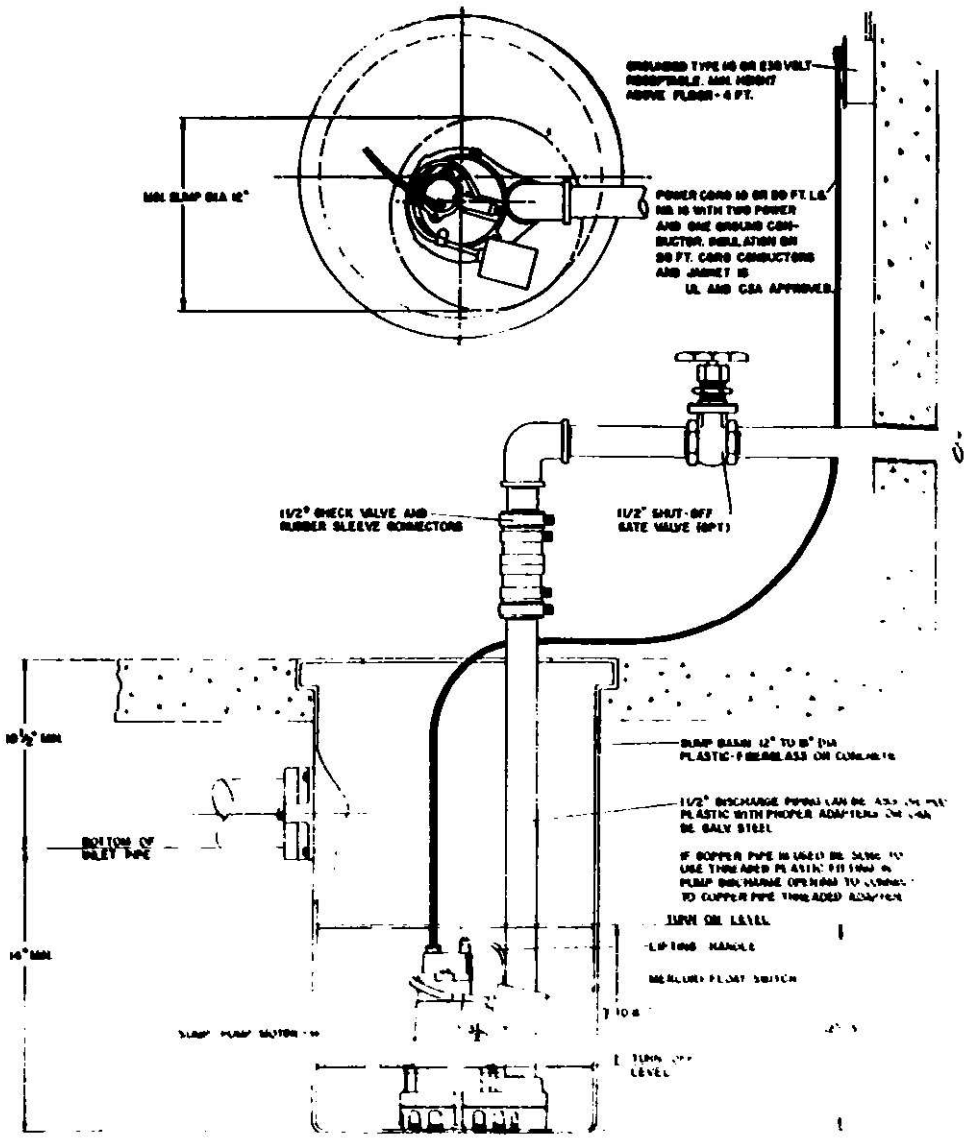


TYPICAL INSTALLATION

WITH MLC MERCURY FLOAT CONTROL

13800A991

Figure 2



TYPICAL INSTALLATION DRAWING SSM3SA OR SSM4SA
SUMP PUMP WITH MERCURY FLOAT SWITCH

PUMP MOTOR - 50 HERTZ - YSSM25A & YSSM25M

The same pump ends are used for both 50 and 60 cycle current but the 50 cycle pumps have motors wound especially for 50 cycle. Most 50 cycle pumps are for 220 volts.

As the same pump end is used for both 50 and 60 cycle, the 50 cycle unit delivers less flow and head since the 50 cycle speed is slower. Motor speed is reduced in the ratio of 50/60 or 0.833 times the speed.

The 60 cycle pumps operate at about 1650 RPM, so the 50 cycle pumps operate at about 1375 RPM.

See pump curves for 50 cycle performance. 50 cycle pumps generally take a special cord and plug for the 220 volts used in countries using 50 cycle.

MAINTENANCE AND SERVICE

If pump does not operate properly, follow steps shown on servicing chart. If trouble can not be located with these steps shown, call Myers service dealer, or take pump to Myers authorized service center.

CAUTION: FOR ANY WORK ON PUMP OR SWITCH, ALWAYS UNPLUG POWER CORD. DO NOT JUST TURN OFF CIRCUIT BREAKER OR UNSCREW FUSE.

CLEANING FLOAT

If pump becomes inoperative because of accumulation of trash on the float, remove pump from sump and clean float

1. Wipe all water and dirt from pump and float.
2. Be sure float operates freely after cleaning.
3. If tar or paint has been put in the basin, it may be necessary to thoroughly clean the float. Kerosene can be used to remove tar or paint.

CLEANING IMPELLER AND VOLUTE CASE FOR SSM25 & SSM4

1. Remove screws that hold lower plastic base to metal housing.
2. Use screwdriver to pry plastic base from metal housing. Use care not to gouge groove in the plastic. Pry in several spots to loosen.
3. Remove base and clean impeller and volute passage. If tar or paint has entered pump, it may be necessary to clean with kerosene. DO NOT USE STRONG PAINT SOLVENTS ON THESE PARTS.
4. Be sure impeller turns freely after cleaning.
5. Clean out holes in plastic pump base and wash thoroughly before replacing.
6. DO NOT UNSCREW IMPELLER.

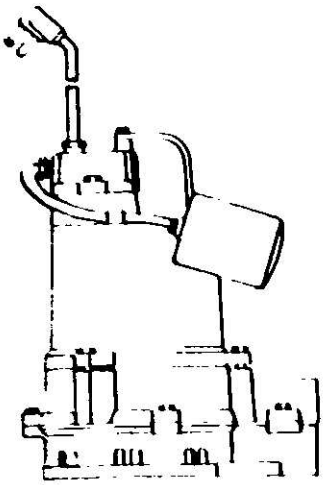
SERVICE CHART

SYMPTOMS	SOLUTIONS																
	Line circuit breaker may be ert. or fuse if used, may be blown or loose.	Water level in sump may be too low. Run in more water. Turn on level is 12 to 13 inches above pump bottom.	Pump cord plug may not be making contact in receptacle.	If pump is using the series cord plug, the two plugs may not be plugged tight together.	Float may be stuck. Be sure float operates freely in basin.	If all symptoms check OK, motor winding may be open; take to service center for check.	Check valve may be installed backwards. Arrow on valve points in direction of flow.	Discharge shut-off valve, if used, may be closed.	Pump may be air locked. Start & stop several times by plugging & unplugging cord. Check vent hole in pump case for plugging.	Pump head may be too high. Pump cannot deliver water over 18ft. vertical. Horizontal distance does not affect pumping, except loss due to friction in inlet holes in pump base may be clogged. Remove pump and clean out openings.	Impeller or volute openings may be clogged. Remove pump.	Float is stuck in up position. Be sure float operates freely in basin.	Pump impeller may be partially clogged with tar or paint, causing motor to run slow, resulting in motor overload.	Fuse size or circuit breaker is too small. Must be 15 amps.	Defective motor stator, return to Myers service center.
Pump does not run or hum.	X	X	X	X	X	X											
Pump runs but does not deliver water							X	X	X	X	X	X					
Pump runs and pumps out sump but does not stop													X				
Pump runs but delivers only small amount of water.									X	X	X	X		X			
Fuse blows or circuit breaker trips when pump starts.											X	X		X	X	X	
Motor runs for short time then stops. Then after short period starts again. Indicates tripping overload caused by symptom shown.											X	X		X		X	

FOR ANY OTHER SYMPTOMS CALL MYERS SERVICE DEALER . — CHECK TETHER LENGTH OF SWITCH PER INSTRUCTIONS.

Myers®

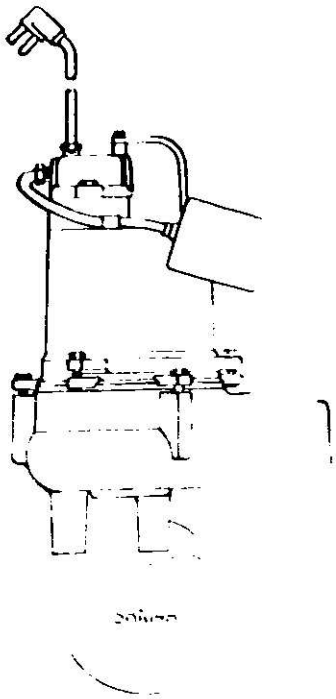
21621



SSM25A

INSTALLATION, MAINTENANCE AND SERVICING INSTRUCTIONS
FOR
MYERS SUMP,
EFFLUENT & SEWAGE PUMPS
MODELS SSM25A1-SSM25A1C-YSSM25A2
SSM25M1C-YSSM25M2
SSM4A1C-SSM4A2C
SSM4M1C-SSM4M2C
SRM4A1C-SRM4A2C
SRM4M1C-SRM4M2C





F. E. MYERS CO.
A DIVISION OF McNEIL CORPORATION
ASHLAND, OHIO 44805
419 289 1144 TELEX 98 1443

UNPACK THE PUMP

The sump pumps are carefully packaged to prevent damage in shipping, however, occasionally damage may result due to rough handling. Carefully go over the pump and check for cracks or other damage that could cause pump to fail. Read these instructions before installing pump.

SAFETY PRECAUTIONS

All Myers sump pumps are grounded to prevent electrical shock. POWER CORD MUST BE PLUGGED INTO GROUNDED TYPE RECEPTACLE. A separate circuit breaker or fuse block should be used for the pump and 15 amp circuit breaker or fuse should be used.

Receptacle must be installed at least 4 feet above floor level to prevent tampering by small children and to be out of possible flooding range. Be careful with power cord to prevent cutting or pinching.

DO NOT USE AN EXTENSION CORD WITH SUMP PUMP. DO NOT CUT OFF GROUND PIN OR USE AN ADAPTER FITTING. DO NOT WORK ON PUMP OR SWITCH UNTIL POWER CORD OR CORDS ARE UNPLUGGED.

VOLTAGES

The SSM25 is offered in 115 volt-60 hertz, and the SSM4 & SRM4 are offered for either 115 volt or 230 volt-single phase-60 hertz.

USES - SSM25 & SSM4

The SSM25 and SSM4 sump pumps can be used to pump any basement drainage water. NOT TO BE USED FOR SEWAGE WATER EXCEPT TO PUMP SEPTIC TANK EFFLUENT.

The SSM4 pumps are generally used where more capacity or a heavier duty pump is desired. DO NOT POUR PAINT, TAR, PAINT THINNERS, OR OTHER SOLVENTS INTO SUMP BASIN. See installation drawings with these instructions.

USES - SRM4

The SRM4 sewage pumps are used to pump all domestic sewage and waste water generated in the home. Pump will pass 2 inch diameter solids.

Whenever the sewer or septic tank inlet is above the house drainage system a pump must be used. This usually occurs where a toilet or bath facility is required in the basement and the footer drainage is generally piped off to a lower area. If gravity drainage of the footer is not possible, a sump pump must be used and is usually discharged at ground level.

Many cities require a home to have two sump pumps, one to pump footer drainage and other clean water into the storm sewer and a second pump to handle washing machine water, water softener and mop or other cleaning water. The water handled by this second pump is sometimes called gray water and is pumped into the septic tank.

SEPTIC TANK PUMPING

All of these models can be used to pump septic tank effluent but must be installed in separate tank or compartment at the discharge side of the septic tank. NEVER INSTALL PUMP DIRECTLY IN MAIN TANK WHERE SLUDGE COLLECTS.

For septic tank pumping the Automatic pumps should be used with a junction box. The Manual pumps should be used with a junction box and a MLC level control. When a junction box is used, cut-off the plugs on the pump cord and the MLC switch cord and strip ends. The MLC switch must be connected in series with one line. This provides a completely sealed system for power cord and pump cord with no open receptacles or taped connections that can cause electrical failure.

SUMP BASIN

The SSM25 or SSM4 sump pumps can be installed in any open or closed type sump basin with a diameter of 12 to 18 inches. A polyethylene, fiberglass or concrete tile basin may be used. If concrete tile is used, cement should be poured in the bottom to give a smooth surface free of stones.

The SRM4 sewage pumps must be installed in a basin with gas tight cover and basin must have a vent pipe that is connected to the house sewage vent system. The basin must be a minimum of 18 inches diameter and 30 inches deep.

A float control or adjustable level ALC control can be used with any of these models.

PIPING

Pumps can be installed with ABS, PVC, Polyethylene or galvanized steel pipe. Proper adapters are required to connect plastic pipe to pump. Copper pipe is generally not used because of cost but if used a plastic threaded insulation bushing must be used in the pump case.

The SSM25 and SSM4 units use 1½ inch pipe and the SRM4 units use 2 inch pipe.

A CHECK VALVE MUST BE USED IN THE DISCHARGE LINE FOR ALL PUMPS. The SRM4 sewage pumps require a free flow valve that will not clog with solids. A shutoff valve should be used with all SSM25 and SSM4 sump pumps and must be used for the SRM4 sewage pumps. Always install check valve with arrow on body in direction of flow.

AIR LOCKING

A sump pump is said to be air locked if water traps in the pump and it can not get out, thus preventing pump from operating.

ALL MYERS SUMP PUMPS HAVE A SMALL AIR VENT HOLE IN THE IMPELLER CHAMBER TO LET OUT TRAPPED AIR. IF THIS HOLE BECOMES PLUGGED, PUMP MAY AIR LOCK. THIS USUALLY HAPPENS ON PUMPS THAT ARE USED MAINLY IN THE WET SEASONS. IN SUMMER MONTHS, THE PUMP MAY BE TURNED OFF AS SUMP WATER DRIES UP. WHEN PUMP IS TURNED ON AGAIN AND WATER COMES UP IN SUMP, THE AIR WILL TRAP IN PUMP IF NOT VENTED.

AS A SECONDARY PRECAUTION IN INSTALLATIONS OF THIS TYPE - 1/8" HOLE SHOULD BE DRILLED IN THE DISCHARGE PIPE BELOW THE CHECK VALVE. THE CHECK VALVE SHOULD BE 12 TO 18 INCHES ABOVE PUMP DISCHARGE. DO NOT PUT CHECK VALVE DIRECTLY INTO PUMP DISCHARGE OPENING.

In normal sumps where the pump is operating daily, air locking rarely occurs.

STARTING PUMP—SSM25A & SSM4A

1. These pumps have an integral mercury ball float switch as shown on installation drawing
2. The SSM25A1-A1C & SSM4A1C are for 115 volts and SSM4A2C is for 230 volts. Plug cord into the proper voltage GROUNDED RECEPTACLE. The 115 volt plug will not plug into a 230 volt receptacle and vice versa
3. Run water into sump until pump starts.
4. Allow pump to operate through several on-off cycles to be sure operation is satisfactory.
5. If shut-off valve is used in discharge line, be sure valve is open.
6. If pump does not operate properly, see trouble service chart for remedy

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 3½" AS NOTED IN DIAGRAMS.

STARTING PUMP—SSM25M & SSM4M USING MLC SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 3½ inches between float and cable tie.
2. The SSM25M1C & SSM4M1C are for 115 volts and the SSM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
3. Plug pump cord plug into back of switch cord series plug.
4. Run water into sump until pump starts. The level should be 12 to 13 inches above sump bottom.
5. Be sure gate valve in discharge line is open.
6. Run pump through several on-off cycles.
7. If pump does not operate properly, see trouble service chart for remedy.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 3½" AS NOTED IN DIAGRAMS

STARTING PUMP—SRM4A

1. These pumps have an integral mercury ball float switch as shown on installation drawing.
2. These units are installed in basin with sealed cover, so switch operation cannot be observed. The sump cover, however, usually has a spare hole that is closed with a rubber plug. This plug can be removed and a flashlight can be used to observe switch operation.
3. The SRM4A1C is for 115 volts and the SRM4A2C is for 230 volts. Plug cord into proper voltage GROUNDED RECEPTACLE. The 115 volt plug will not plug into a 230 volt receptacle and vice versa.
4. Run water into sump until pump starts.
5. Be sure gate valve in discharge line is open.
6. Allow pump to operate through several on-off cycles.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS.

STARTING PUMP—SRM4M USING MLC SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 4 inches between float and cable tie
2. As the basin cover is sealed, the rubber plug in the cover can be removed for observation using a flashlight
3. The SRM4M1C is for 115 volts and the SRM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
4. Plug pump cord plug into back of switch cord series plug
5. Run water into sump until pump starts. Be sure discharge line valve is open.
6. Operate pump through several on-off cycles. Observe operation through inspection hole. Be sure to replace rubber plug after observation
7. If pump does not operate properly, see trouble service chart with these instructions

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS.

USING THE SSM25M, SSM4M, OR SRM4M FOR MANUAL OPERATION

The pump cord for these units can be plugged directly into proper GROUNDED RECEPTACLE for continuous duty operation

CAUTION: THIS TYPE OF OPERATION SHOULD BE USED ONLY FOR EMERGENCY USE OR WHERE A LARGE VOLUME OF WATER IS TO BE PUMPED, SUCH AS A FLOODED BASEMENT

PUMP MUST NOT BE RUN CONTINUOUSLY OUT OF WATER

DO NOT USE WITH EXTENSION CORD

HOW MERCURY SWITCH FLOAT OPERATES

This level control uses a mercury switch sealed in a polypropylene float cylinder. The mercury switch is mounted so not to be position sensitive, that is, it will operate regardless of position.

When level rises in the sump, the cylinder floats up with the level. When the cylinder position is at an angle of about 30° the mercury flows over and makes contact with electrodes in the switch. This starts the pump motor.

As the sump level draws down, the cylinder floats down and when it is again at an angle of about 30° the mercury flows away from the electrodes and the motor stops.

BE SURE CYLINDER FLOAT IS FREELY IN SUMP BASIN WITHOUT TOUCHING THE BASIN WALLS. ADJUST PUMP POSITION IN SUMP IF NECESSARY.

This level control is the simplest and most dependable of any switch ever used to control sump pumps.

PUMP MOTOR

NEVER REMOVE MOTOR HOUSING OR UNSCREW PUMP IMPELLER. Warranty on pump is void if motor housing, impeller or seal have been removed. Any repair on motor must be done by an authorized Myers service center.

PUMP MOTOR - 50 HERTZ - YSSM25A & YSSM25M

The same pump ends are used for both 50 and 60 cycle current but the 50 cycle pumps have motors wound especially for 50 cycle. Most 50 cycle pumps are for 220 volts.

As the same pump end is used for both 50 and 60 cycle, the 50 cycle unit delivers less flow and head since the 50 cycle speed is slower. Motor speed is reduced in the ratio of 50/60 or 0.833 times the speed.

The 60 cycle pumps operate at about 1650 RPM, so the 50 cycle pumps operate at about 1375 RPM.

See pump curves for 50 cycle performance. 50 cycle pumps generally take a special cord and plug for the 220 volts used in countries using 50 cycle.

MAINTENANCE AND SERVICE

If pump does not operate properly, follow steps shown on servicing chart. If trouble can not be located with these steps shown, call Myers service dealer, or take pump to Myers authorized service center.

CAUTION: FOR ANY WORK ON PUMP OR SWITCH, ALWAYS UNPLUG POWER CORD. DO NOT JUST TURN OFF CIRCUIT BREAKER OR UNSCREW FUSE.

CLEANING FLOAT

If pump becomes inoperative because of accumulation of trash on the float, remove pump from sump and clean float

1. Wipe all water and dirt from pump and float.
2. Be sure float operates freely after cleaning.
3. If tar or paint has been put in the basin, it may be necessary to thoroughly clean the float. Kerosene can be used to remove tar or paint.

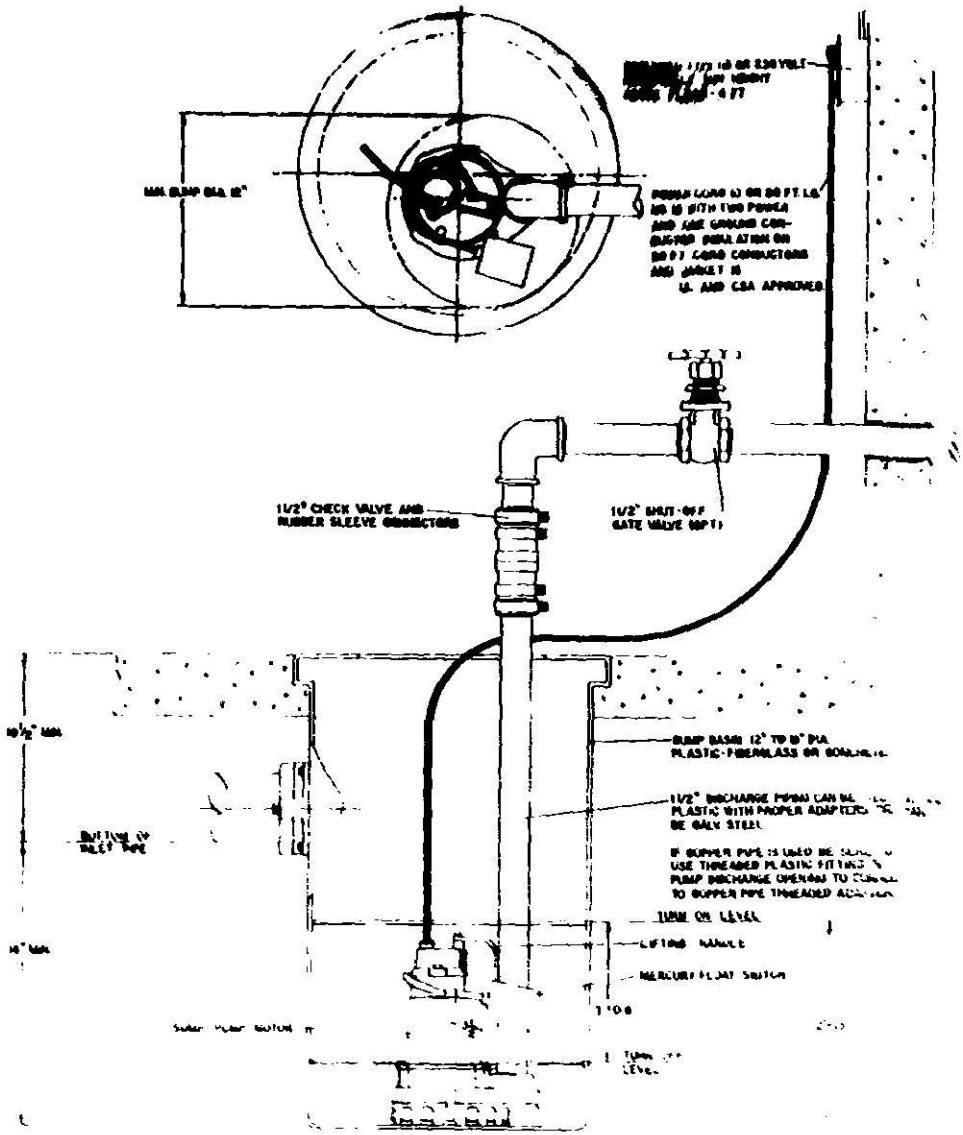
CLEANING IMPELLER AND VOLUTE CASE FOR SSM25 & SSM4

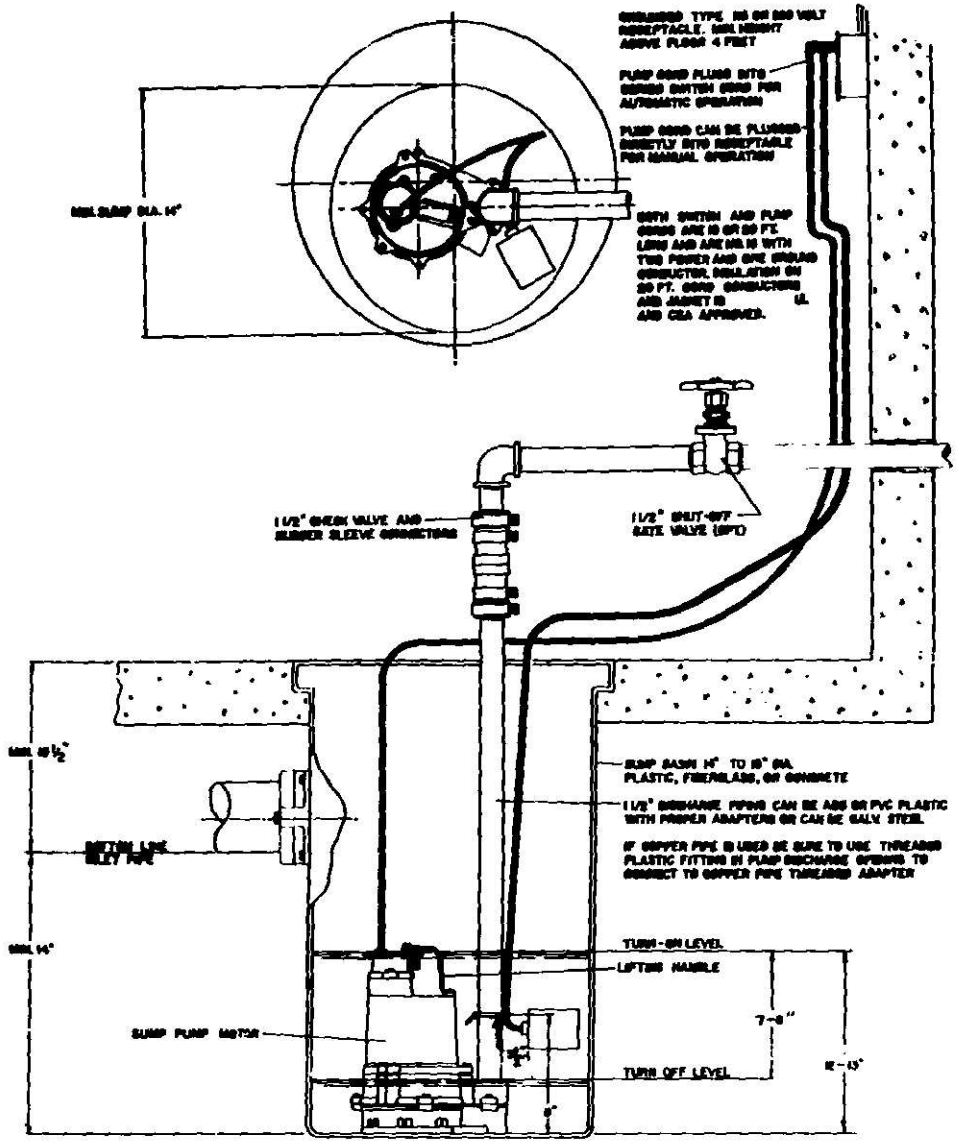
1. Remove screws that hold lower plastic base to metal housing.
2. Use screwdriver to pry plastic base from metal housing. Use care not to gouge groove in the plastic. Pry in several spots to loosen.
3. Remove base and clean impeller and volute passage. If tar or paint has entered pump, it may be necessary to clean with kerosene. DO NOT USE STRONG PAINT SOLVENTS ON THESE PARTS.
4. Be sure impeller turns freely after cleaning.
5. Clean out holes in plastic pump base and wash thoroughly before replacing.
6. DO NOT UNSCREW IMPELLER.

SERVICE CHART

SYMPTOMS / SOLUTIONS	Line circuit breaker may be off, or fuse if used, may be blown or loose.	Water level in sump may be too low. Run in more water. Turn on level is 12 to 13 inches above sump bottom.	Pump cord plug may not be making contact in receptacle.	If pump is using the series cord plug, the two plugs may not be plugged tight together.	Float may be stuck. Be sure float operates freely in basin.	If all symptoms check OK, motor winding may be open; take to service center for check.	Check valve may be installed backwards. Arrow on valve points in direction of flow.	Discharge shut-off valve, if used, may be closed.	Pump may be air locked. Start & stop several times by plugging & unplugging cord. Check vent hole in pump case for plugging.	Pump head may be too high. Pump cannot deliver water over 18 ft. vertical. Horizontal distance does not affect pumping, except less due to friction.	Inlet holes in pump base may be clogged. Remove pump and clean out openings.	Impeller or volute openings may be plugged or partially plugged. Remove pump & clean per maintenance instructions.	Float is stuck in up position. Be sure float operates freely in basin.	Pump impeller may be partially clogged causing motor to run slow, resulting in motor overload.	Fuse size or circuit breaker is too small. Must be 15 amps.	Defective motor stator; return to Myers service center.
Pump does not run or hum	X	X	X	X	X	X										
Pump runs but does not deliver water							X	X	X	X	X	X				
Pump runs and pumps out sump but does not stop													X			
Pump runs but delivers only small amount of water									X	X	X	X		X		
Fuse blows or circuit breaker trips when pump starts											X	X		X	X	X
Motor runs for short time then stops. Then after short period starts again. Indicates tripping overload caused by symptom shown.											X	X		X		X

FOR ANY OTHER SYMPTOMS CALL MYERS SERVICE DEALER . — CHECK TETHER LENGTH OF SWITCH PER INSTRUCTIONS.


1½" CHECK VALVE AND
RUBBER SLEEVE CONNECTORS
1½" SHUT-OFF
GATE VALVE (NPT)
SUMP BASIN 12" TO 18" DIA.
PLASTIC-FIBERGLASS OR CONCRETE
1½" DISCHARGE PIPING CAN BE
PLASTIC WITH PROPER ADAPTERS
BE GALV STEEL
IF COPPER PIPE IS USED BE SURE
USE THREADED PLASTIC FITTINGS
PUMP DISCHARGE OPENING TO CONN
TO COPPER PIPE THREADED ADAPTER
TURN ON LEVEL
LIFTING HANDLE
MERCURY FLOAT SWITCH
TURN OFF LEVEL



TYPICAL INSTALLATION

WITH M.C. MERCURY FLOAT CONTROL

13800A991

Figure 2

STARTING PUMP—SSM25A & [illegible]

1. These pumps have an integral mercury [illegible] switch as shown on installation drawing.
2. The SSM25A1-A1C & SSM4A1C are for 115 volts. [illegible] SSM4A2C is for 230 volts. Plug cord into the proper voltage GROUNDED RECEPTACLE. The 115 volt plug will [illegible] 230 volt receptacle and vice versa.
3. Run water into sump until pump starts.
4. Allow pump to operate through several on-off cycles. Be sure operation is satisfactory.
5. If shut-off valve is used in discharge line, be sure valve is open.
6. If pump does not operate properly, see [illegible] chart for remedy.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 3½" AS NOTED IN DIAGRAMS.

STARTING PUMP—SSM25M & [illegible] USING [illegible] SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 3½ inches between float and cable tie.
2. The SSM25M1C & SSM4M1C are for 115 volts and the SSM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
3. Plug sump cord plug into back of switch cord series plug.
4. Run water into sump until pump starts. The [illegible] be 12 to 13 inches above sump bottom.
5. Be sure gate valve in discharge line is open.
6. Run sump through several on-off cycles.
7. If pump does not operate properly, see trouble service chart for remedy.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF [illegible] AS NOTED IN DIAGRAMS.

STARTING PUMP—SRM4A

1. These pumps have an integral mercury ball float switch as shown on installation drawing.
2. These units are installed in basin with sealed cover. [illegible] however, operation cannot be observed. The cover usually has a spare hole that is closed with a rubber plug. This plug can be removed and a flash[illegible] used to observe switch operation.
3. The SRM4A1C is for 115 volts and the SRM4A2C is for [illegible] Plug cord into proper voltage GROUNDED RECEPTACLE. The 115 volt plug will not plug into a 230 volt receptacle and vice versa.
4. Run water into sump until pump starts.
5. Be sure gate valve in discharge line is open.
6. Allow pump to operate through several on-off cycles.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS.

STARTING PUMP—SRM4M USING MLC SWITCH WITH SERIES PLUG

1. Install unit as shown on the installation drawing. Secure ball float to discharge pipe with minimum 4 inches between float and cable tie.
2. As sealed cover is sealed, the rubber plug in the cover can be removed and a flashlight used to observe operation.
3. The SRM4A1C is for 115 volts and the SRM4M2C is for 230 volts. Plug MLC switch cord series plug into proper voltage GROUNDED RECEPTACLE.
4. Plug sump cord plug into back of switch cord series plug.
5. Run water into sump until pump starts. Be sure discharge line valve is open.
6. Operate sump through several on-off cycles. Observe operation through inspection hole. Be sure to replace rubber plug.
7. If pump does not operate properly, see trouble service chart with [illegible] remedies.

NOTE: TETHER LENGTH OF SWITCH CORD MUST BE A MINIMUM OF 4" AS NOTED IN DIAGRAMS.

USING THE SSM25M, SSM4M, OR SRM4M FOR MANUAL OPERATION

These pump cords for these units can be plugged directly into proper GROUNDED RECEPTACLE for manual operation.

CAUTION: THIS TYPE OF OPERATION SHOULD BE USED ONLY FOR EMERGENCY USE AND FOR SMALL CHARGE VOLUMES OF WATER IS TO BE PUMPED, SUCH AS A FLOODED BASEMENT.

PUMP MUST NOT BE RUN CONTINUOUSLY OUT OF WATER

DO NOT USE AN EXTENSION CORD

HOW MERCURY SWITCH FLOAT OPERATES

This [illegible] has a mercury switch sealed in a polypropylene float cylinder. The mercury switch is [illegible] not to be disturbed because it will operate regardless of position.

When [illegible] the cylinder floats up with the lever. When the cylinder position is at an angle [illegible] 60°, the mercury [illegible] contact with electrodes in the switch. This starts the pump motor.

As [illegible] cylinder floats down and when it is again at an angle of about 60° the mercury flows away from the electrodes.

SUCTION [illegible] SUMP BASIN WITHOUT TOUCHING THE BASIN WALLS OR PUMP.

[illegible] dependable 3" [illegible] ever used to control sump pumps.

[illegible] IMPELLER

[illegible]

[illegible]