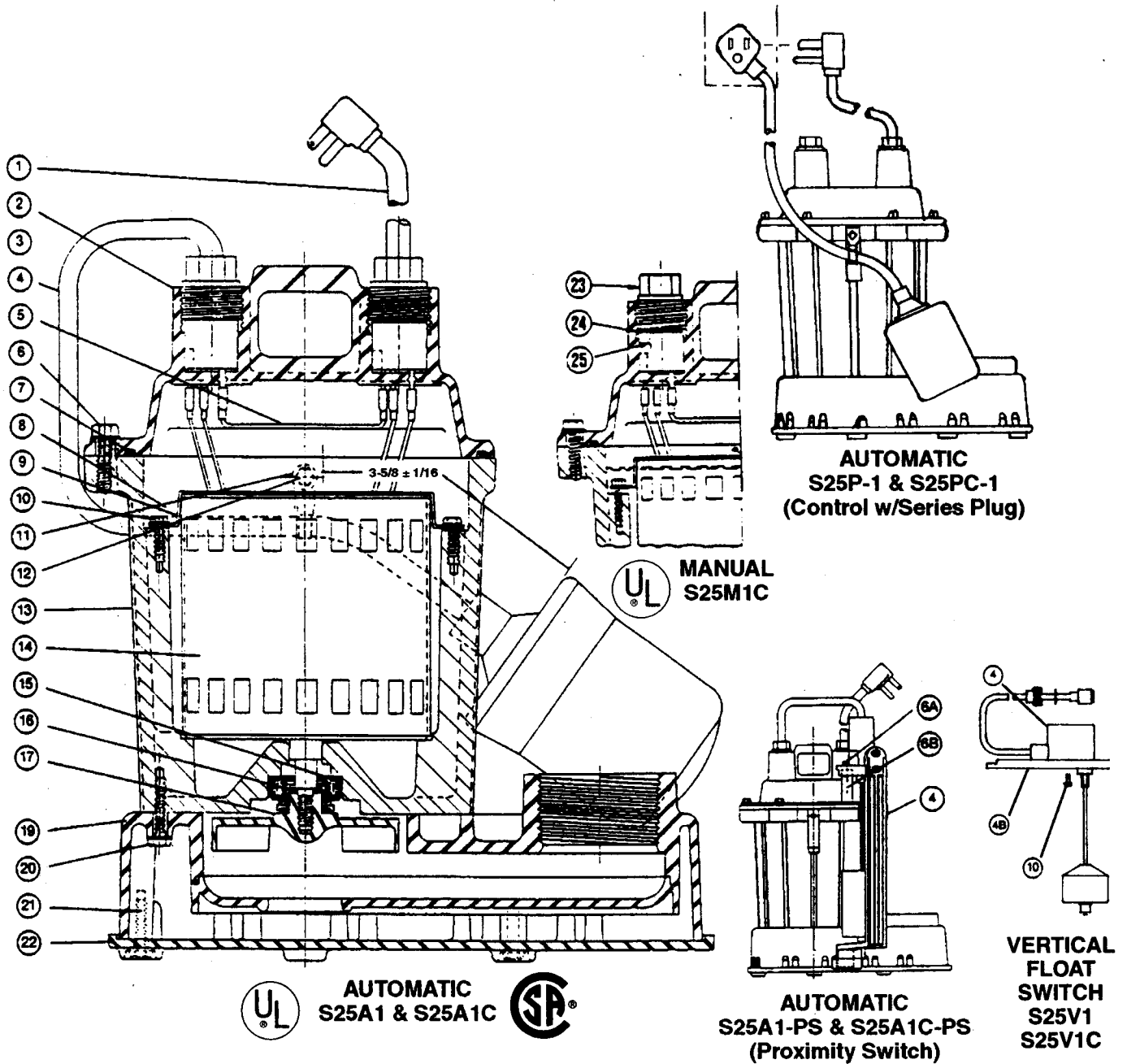


## S25 Domestic Sump Pump

### Instructions and Service Manual



REF. NO.	DESCRIPTION	NO. REQ'D.	PART NUMBERS								
			S25A1	S25A1C	S25M1C	S25A1-PS	S25A1C-PS	S25P-1	S25PC-1	S25V1	S25V1C
1	Cord, Electric w/plug	1	21628B017	21628B044	21628B044	21628B017	21628B044	21628B017	21628B044	21628B017	21628B044
2	Cap. Motor (Not Stamped)	1	24431C000	24431C000	24431C000	24431C000	24431C000	24431C000	24431C000	24431C000	24431C000
3	Plug, 1/4" Pipe	1	05022A056	05022A056	05022A056	05022A056	05022A056	05022A056	05022A056	05022A056	05022A056
4	Control, Level Float	1	25798A500	25798A500	-	24498B000	24498B000	-	-	26292B000	26292B000
4A	Control w/Serial Plug - 10' Cord	1	-	-	-	-	-	-	21813B130	-	-
4A	Control w/Serial Plug - 20' Cord	1	-	-	-	-	-	-	21813B131	-	-
4B	Bracket Switch Mtg.	1	-	-	-	-	-	-	-	26291B010	26291B010
5	Wire w/Terminals	1	09859A800	09859A800	09859A800	09859A800	09859A800	09859A800	09859A800	09859A800	09859A800
6	Screw, Machine, 1/4-20 x 7/8" Lg.	6	18475A003	18475A003	18475A003	-	-	18475A003	18475A003	18475A003	18475A003
6	Screw, Machine, 1/4-20 x 7/8" Lg.	5	-	-	-	18475A003	18475A003	-	-	-	-
6A	Screw, Cap, 1/4-20 x 3/4 Thrd - 2-3/8" Lg.	1	-	-	-	19099A016	19099A016	-	-	-	-
6B	Tube, Spacer, 1/2" O.D. x 1-1/2" Lg.	1	-	-	-	25588A002	25588A002	-	-	-	-
7	Ring, "O", 5-1/2 x 5-1/4 x 1/8"	1	05876A146	05876A146	05876A146	05876A146	05876A146	05876A146	05876A146	05876A146	05876A146
8	Oil, Transformer (1 Qt. in Can)	24 Gal.	11009A002	11009A002	11009A002	11009A002	11009A002	11009A002	11009A002	11009A002	11009A002
9	Support, Motor	1	24450B000	24450B000	24450B000	24450B000	24450B000	24450B000	24450B000	24450B000	24450B000
10	Screw, Tapping, #10-24 x 1/2" Lg.	2	09822A006	09822A006	09822A006	09822A006	09822A006	09822A006	09822A006	09822A006	09822A006
10	Screw, Tapping, #10-24 x 1/2" Lg.	4	-	-	-	-	-	-	-	09822A006	09822A006
11	Tie, Plastic Cable	1	17190A008	17190A008	-	-	-	17190A008	17190A008	-	-
12	Screw, Tapping, #10-24 x 1/2" Lg.	1	09822A006	09822A006	-	-	-	09822A006	09822A006	-	-
13A*	Housing, Motor (Prior to 2/1/94)	1	24446C050	24446C050	24446C050	24446C050	24446C050	24446C050	24446C050	-	-
13B*	Housing, Motor (After 2/1/94)	1	24446C051	24446C051	24446C051	24446C051	24446C051	24446C051	24446C051	24446C051	24446C051
14	Motor, 1/4 H.P.	1	24447B020	24447B020	24447B020	24447B020	24447B020	24447B020	24447B020	24447B020	24447B020
-	Tube, Plastic, 3/8 I.D. x 3" Lg.	1	10649A111	10649A111	10649A111	10649A111	10649A111	10649A111	10649A111	0649A111	0649A111
15A*	Seal, Shaft (Prior to 2/1/94)	1	21607A000	21607A000	21607A000	21607A000	21607A000	21607A000	21607A000	-	-
15B*	Seal, Shaft (After 2/1/94)	1	21607A001	21607A001	21607A001	21607A001	21607A001	21607A001	21607A001	21607A001	21607A001
16	Washer, Impeller	1	05030A216	05030A216	05030A216	05030A216	05030A216	05030A216	05030A216	05030A216	05030A216
17	Impeller	1	24433B000	24433B000	24433B000	24433B000	24433B000	24433B000	24433B000	24433B000	24433B000
19	Case, Volute	1	24432C000	24432C000	24432C000	24432C000	24432C000	24432C000	24432C000	24432C000	24432C000
20	Screw, Machine, #10-24 x 3/4" Lg.	4	18475A004	18475A004	18475A004	18475A004	18475A004	18475A004	18475A004	18475A004	18475A004
21	Screw, S-T, #10-24 x 3/4" Lg.	3	05910A012	05910A012	05910A012	05910A012	05910A012	05910A012	05910A012	05910A012	05910A012
22	Plate, Bottom	1	24432C003	24432C003	24432C003	24432C003	24432C003	24432C003	24432C003	24432C003	24432C003
23	Plug, Manual	1	-	-	24448A000	-	-	24448A000	24448A000	-	-
24	Washer, Plastic	1	-	-	05030A213	-	-	05030A213	05030A213	-	-
25	Plug, Connector	1	-	-	24449A000	-	-	24449A000	24449A000	-	-

\* To replace shaft seal (15A) in units built prior to February 1, 1994 with (15B) 21607A001, the motor housing (13B) 24446C051 must also be used.

For Reference Only:	
24430D000 - S25A1	24430D001 - S25A1C
24430D010 - S25M1C	
24430D050 - S25A1-PS	24430D051 - S25A1C-PS
24430D901 - S25P-1	24430D902 - S25PC-1

**WARNING** Risk of electric shock. This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

Pumps can be installed with ABS, PVC or Polyethylene plastic pipe, or galvanized or copper pipe. Proper adapters are required to connect plastic pipe to pump.

The discharge is threaded for 1-1/2 inch pipe. NOTE: DO NOT OVER-TIGHTEN DISCHARGE PIPE INTO PUMP PLASTIC DISCHARGE FITTING.

A CHECK VALVE MUST BE USED IN THE DISCHARGE LINE FOR ALL PUMPS. A shut-off valve should be used. 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 air in the pump and it cannot 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 THE 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 - S25A (Automatic)

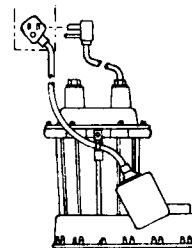
1. These pumps have an integral mechanical (mercury free) ball float switch as shown on installation drawing. "PS" models have a vertical actuated cylinder float.
2. Plug cord into a 115 volt GROUNDED RECEPTACLE.
3. Run water into sump until pump starts.
4. Allow pump to operate through several on-off 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 ON BALL FLOAT MUST BE MINIMUM OF 3-5/8" AS NOTED ON ASSEMBLY DRAWING.*

### STARTING PUMP - S25M (Manual) USING MFS SWITCH WITH SERIES PLUG & S25P-1, S25PC-1

1. Secure ball float to discharge pipe with minimum 3-1/2 inches between float and cable tie.
2. Plug MFS 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.
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 ON BALL FLOAT MUST BE MINIMUM OF 3-5/8" AS NOTED ON ASSEMBLY DRAWING.*



**S25P-1 & S25PC-1**

**WARNING:** Sump basin must be vented in accordance with local plumbing codes. These pumps are not designed for and **CAN NOT** be installed in locations classified as hazardous in accordance with the National Electric Code ANSI/NFPA 70.

### USING THE S25M SUMP PUMP 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 FLOODED BASEMENT.*

PUMP MUST NOT BE RUN CONTINUOUSLY OUT OF WATER.

DO NOT USE WITH EXTENSION CORD.

### AUTOMATIC/MANUAL MODEL

The Model S25 sump pump can be changed from one style, Automatic or Manual, to the other by only interchanging the plug ends of the float control with the manual plug. The ball floats must be tethered with a cable clamp, as shown. **DO NOT REMOVE THE MOTOR CAP.**

### HOW MECHANICAL SWITCH FLOAT OPERATES

This level control uses a mechanical switch sealed in a polypropylene float cylinder. The switch is not 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 45°, the steel ball rolls over a detent and actuates 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 45°, the steel ball drops away, deactivating the switch and the motor stops.

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

The PS models utilize a magnetically operated mercury proximity switch. It has a float that is an integral part of a vertical rod. These models require less space for operation.

### 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.

### MAINTENANCE AND SERVICE

If pump does not operate properly, follow steps shown on servicing chart. If trouble cannot 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 from sump and clean float.

1. Wipe all water and dirt from pump and float and also the vertical rod on PS models.
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

1. Remove (3) screws that hold bottom plate to volute case.
2. Remove (4) screws that hold volute case to metal motor housing.
3. Use screwdriver to pry plastic case from metal housing. Use care not to gouge groove in the plastic. Pry in several spots to loosen.
4. Remove volute case 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.**
5. Be sure impeller turns freely after cleaning.
6. Clean out holes in plastic pump base and wash thoroughly before replacing.
7. DO NOT UNSCREW IMPELLER.

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 in basin. 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 and stop several times by plugging and 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 loss due to friction.	Inlet holes in pump base may be clogged. Remove pump and clean out openings.									
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.



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