



SMS SERIES MIXER SYSTEM
INSTALLATION AND MAINTENANCE MANUAL
.....
PERISTALTIC METERING PUMPS SINCE 1957

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SMS0411 Rev0912

WARRANTY AND CUSTOMER SERVICE

LIMITED WARRANTY

Stenner Pump Company will for a period of one (1) year from the date of purchase (proof of purchase required) repair or replace – at our option – all defective parts. Stenner is not responsible for any removal or installation costs. Stenner will incur shipping costs for warranty products shipped from our factory in Jacksonville, Florida. Any tampering with major components, chemical damage, faulty wiring, weather conditions, water damage, power surges, or products not used with reasonable care and maintained in accordance with the instructions will void the warranty. Stenner limits its liability solely to the cost of the original product. We make no other warranty expressed or implied. The mixer pump head assembly and components are considered perishable and not covered in this warranty.

RETURNS

Stenner offers a 30-day return policy on factory direct purchases. Except as otherwise provided, no merchandise will be accepted for return after 30 days from purchase. To return merchandise at any time, call Stenner at 800.683.2378 for a Return Merchandise Authorization (RMA) number. A 15% re-stocking fee will be applied. Include a copy of your invoice or packing slip with your return.

DAMAGED OR LOST SHIPMENTS

All truck shipments: Check your order immediately upon arrival. All damage must be noted on the delivery receipt. Call Stenner Customer Service at 800.683.2378 for all shortages and damages within seven (7) days of receipt.

SERVICE & REPAIRS

Before returning a mixer for warranty or repair, thoroughly rinse the wetted portion of the mixer with water or a compatible buffer solution to remove chemical and avoid contact. Following expiration of the warranty period, Stenner Pump Company will clean and overhaul any Stenner mixer for a minimum labor charge plus necessary replacement parts and shipping. All mixers received for overhaul will be restored to their original condition. The customer will be charged for missing parts unless specific instructions are given. To return merchandise for repair, call Stenner at 800.683.2378 or 904.641.1666 for a Return Merchandise Authorization (RMA) number.

DISCLAIMER

The information contained in this manual is not intended for specific application purposes. Stenner Pump Company reserves the right to make changes to prices, products, and specifications at any time without prior notice.

SAFETY INFORMATION



⚠ WARNING Warns about hazards that **CAN** cause death, serious personal injury, or property damage if ignored.



⚠ WARNING **ELECTRIC SHOCK HAZARD:**

Mixer supplied with grounding power cord and attached plug. To reduce risk of electrical shock, connect only to a properly grounded, grounding type receptacle. Install only on a circuit protected by a Ground-Fault Circuit-Interrupter (GFCI).



⚠ AVERTISSEMENT **RISQUE DE CHOC ELECTRIQUE:**

Ce mélangeur est équipée d'une fiche de mise à terre. Pour réduire le risque de choc électrique, s'assurer que la fiche est bien raccordée à une prise de courant avec une connexion de mise à terre. Installer seulement sur un circuit protéger par un interrupteur protéger par une mise à la terre.



DO NOT alter the power cord or plug end.



DO NOT use receptacle adapters.



DO NOT use mixer with a damaged or altered power cord or plug. Contact the factory or an authorized service facility for repair.



ELECTRIC SHOCK HAZARD



⚠ WARNING **HAZARDOUS VOLTAGE:**

DISCONNECT power cord before removing motor cover for service. **Electrical service by trained personnel only.**



⚠ WARNING **EXPLOSION HAZARD:**

This equipment **IS NOT** explosion proof. **DO NOT** install or operate in an explosive environment.



⚠ WARNING **RISK OF CHEMICAL EXPOSURE:**

Potential for chemical burns, fire, explosion, personal injury, or property damage. To reduce risk of exposure, the use of proper personal protective equipment is mandatory.



⚠ WARNING **RISK OF FIRE HAZARD:**

DO NOT install or operate on any flammable surface.



⚠ WARNING **RISK OF CHEMICAL OVERDOSE:**

To reduce risk, follow proper installation methods and recommendations. Check your local codes for additional guidelines.

SAFETY INFORMATION continued



This is the safety alert symbol. When displayed in this manual or on the equipment, look for one of the following signal words alerting you to the potential for personal injury or property damage.



Electrical installation should adhere to all national and local codes. Consult a licensed professional for assistance with proper electrical installation.



The use of an auxiliary safety device (not supplied), such as a level switch or sensor, is recommended to prevent mixer operation in the event of a low solution level.



Suitable for indoor use only.



DO NOT run mixer dry.



NOTICE: Indicates special instructions or general mandatory action.




NOTICE: This mixer and its components have been tested for use with the following chemicals: sodium carbonate (soda ash).




NOTICE: Mixer is intended for intermittent use applications.

MIXER SYSTEM IDENTIFICATION

BOX LABEL

	STENNER PUMP COMPANY Jacksonville, FL Phone: 904.641.1666 www.stenner.com MADE IN USA	
	Model (Modelo)	SMS15A
	Voltage (Voltaje)	120
	Serial Number (Número de Serial)	02010503943

DATA LABEL



STENNER PUMP COMPANY
 3174 DeSalvo Road
 Jacksonville, FL 32246 USA
 Phone: 904.641.1666

SMS15A

MODEL Modelo

1.7 amp
120V 60Hz

02010503943

SERIAL NUMBER Número de Serial

MADE IN USA

FL

WARNING LABEL

⚠ WARNING To reduce risk of electric shock, connect only to a properly grounded grounding-type receptacle.

⚠ PELIGRO Para reducir el riesgo de descarga eléctrica, conéctelo a un receptáculo eléctrico con conexión a tierra adecuado.

⚠ CAUTION To reduce risk of electric shock, pull plug before servicing.

⚠ CUIDADO Para reducir el riesgo de descarga eléctrica, desconéctelo antes de realizar reparaciones.

⚠ WARNING To reduce risk of electric shock, install only on a circuit protected by a ground-fault circuit interrupter (GFCI).

⚠ PELIGRO Para reducir el riesgo de descarga eléctrica, instale el disyuntor en un circuito protegido por un interruptor diferencial.

⚠ WARNING RISK OF ELECTRIC SHOCK: This pump has not been investigated for use in swimming pool or marine areas.


⚠ PELIGRO RIESGO DE DESCARGA ELÉCTRICA: Este dosificador no ha sido investigado para su uso en piscinas o áreas de marinas.

Thermally protected motor for indoor use.
 Motor termal protegido para el uso interior.

Acceptable for indoor use only.
 Aceptable para uso interior solamente.

Nonsubmersible.
 No sumergible.

ENCLOSURE TYPE 2
 BOTTIER DE TYPE 2
 CARCASA TIPO 2



MATERIALS OF CONSTRUCTION

Motor Housing

Polycarbonate

All Fasteners

Stainless Steel

Wetted Parts

Nylon, Fiberglass, Santoprene[®]*, PE, PVC, NSF approved or FDA compliant
Hastelloy

* Santoprene[®] is a registered trademark of Exxon Mobil Corporation.

INSTALLATION

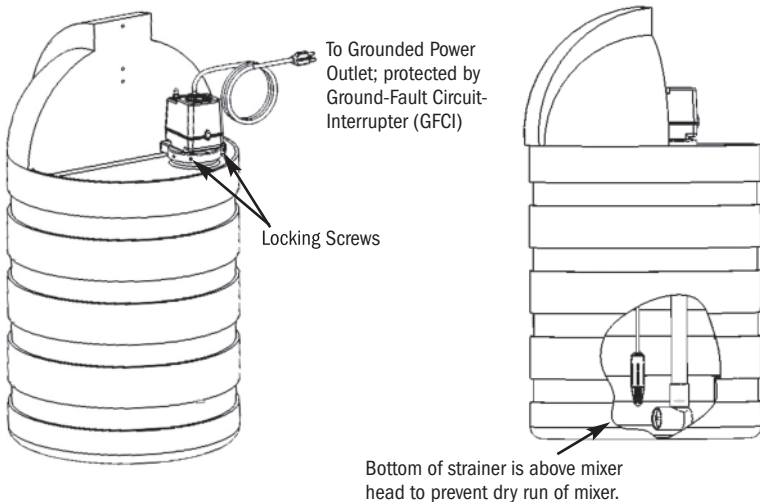
ADDITIONAL SAFETY INSTRUCTIONS

! **NOTICE:** Indicates special instructions or general mandatory action.

- !** Read all safety hazards before installing or servicing the mixer. The mixer is designed for installation and service by properly trained personnel.
- !** Use all required personal protective equipment when working on or near a chemical metering pump or mixer.
- !** Install the mixer so that it is in compliance with all national and local electrical codes.
- !** Use the proper product to treat potable water systems, use only chemicals listed or approved for use.
- !** Mixer is only for use on Stenner STS Tank Series.
- !** **DO NOT** run mixer dry.
- !** The suction line and strainer must be above the level of the mixer head so that the mixer will not run dry.
- !** Mixer is intended for intermittent use applications.

INSTALLATION continued

- ❗ **Select a dry location to avoid water damage via water intrusion into mixer motor.**
 - ❗ **Ensure that the suction strainer is above the mixer head to prevent dry run of the mixer.**
 - ❗ **Mixer is intended for use with solutions, not slurries. Ensure mixer head is immersed in fluid and not in dry chemical.**
 - ❗ **Mixers are only designed for use with Stenner STS tanks. Use the proper size mixer for the tank to ensure proper mixing.**
1. Remove fill cap from tank.
 2. Ensure that the bottom of the strainer is at least 3" off of the bottom of the tank.
 3. Fill tank with desired solution so that the tank has a solution level sufficient to prevent dry run.
 4. Insert mixer into tank as shown. The flat on the mixer mount must be aligned with the flat wall on the tank for proper installation.
 5. Install the locking screws.
 6. Plug cord into receptacle and turn mixer on to verify operation.
 7. Operate mixer manually or activate by a timer or the pump control as required by the application.



TROUBLESHOOTING – DRIVE



⚠ WARNING

HAZARDOUS VOLTAGE:

DISCONNECT power cord before removing drive cover for service. **Electrical service should be performed by trained personnel only.**

PROBLEM	POSSIBLE CAUSE	SOLUTION
Loud or excessive noise	Worn ball bearings	Replace mixer rotor assembly
Drive does not work; fan does not turn	Faulty electrical supply	Check supply voltage circuit
	Rotor bound to coil	Replace bearing brackets if cracked
	Damaged motor coil	Replace motor coil
	Worn or damaged motor bearings	Replace mixer rotor assembly
	Damaged power cord	Inspect and/or replace power cord
	Rotor rusted to coil	Clean off coil and motor or replace
	Faulty wire connections	Inspect and/or repair electrical connections
Drive overheats and shuts off and on	Obstructed fan	Remove obstruction
	Incorrect voltage	Check voltage and frequency matches data label
	High ambient temperature	Mixer rated at 125 °F maximum
	Damaged/malfunctioning coil	Replace motor coil

TROUBLESHOOTING – MIXER HEAD





PROBLEM	POSSIBLE CAUSE	SOLUTION
Components cracking	Chemical attack	Check chemical compatibility
No mixing, mixer head rotates	Depleted solution tank Pump suction line weight is below mixer head Life of mixer head is exhausted Solution is over saturated	Replenish solution Maintain suction line 2-3" above bottom of tank Replace mixer head Reduce solution concentration
No mixing, mixer head doesn't rotate	Mixer head assembly is broken Motor problem	Replace mixer head assembly Refer to motor section

MIXER HEAD REPLACEMENT – SAFETY INFORMATION





WARNING

RISK OF CHEMICAL EXPOSURE

-  To reduce risk of exposure, the use of proper personal protective equipment is mandatory when working on or near chemical metering pumps or mixers.
-  To reduce risk of exposure, and also prior to service, shipping, or storage, pump generous amounts of water or a compatible buffer solution to remove chemical from mixer.
-  Consult chemical manufacturer and MSDS sheet for additional information and precautions for the chemical in use.
-  Personnel should be skilled and trained in the proper safety and handling of the chemicals in use.



NOTICE: Indicates special instructions or general mandatory action.

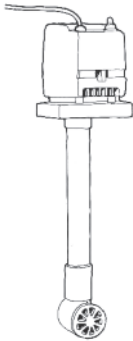
-  **NOTICE:** Inspect the entire head for cracks or damaged components. Ensure mixer screws turn freely.
-  **NOTICE:** Rinse off chemical residue and clean all chemical and debris from mixer head components prior to replacement.

MIXER HEAD REPLACEMENT continued

PREPARATION

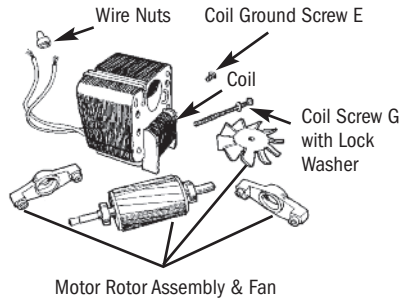
1. Follow all safety precautions prior to mixer head replacement.
2. Prior to service, pump water or a compatible buffer solution through the mixer head to remove chemical and avoid contact.
3. Turn off mixer. Disconnect power.
4. With mixer horizontal, hold the mixer tube and rotate the mixer pump head assembly counter-clockwise (as viewed from the mixer head end).
5. Remove the mixer head assembly.
6. Remove the splined adapter by gently pulling it off of the drive shaft using a pair of pliers. The rubber coupling will be attached to the splined adapter.
7. Pull the splined adapter out of the rubber coupling. Install new splined adapter into the rubber coupling.
8. Press the splined adapter and rubber coupling assembly onto the drive shaft. Press down firmly on splined adapter to ensure that it is fully seated. The circular flat area on the splined adapter should be inside the tank mount/drive shaft assembly.
9. Install the new mixer head assembly by aligning and inserting the splined adapter on the shaft into the gear in the mixer head assembly. Once inserted, rotate the mixer head clockwise until hand tight. DO NOT use a wrench or pliers.

MIXER AND MOTOR SERVICE KITS



COMPLETE MIXER

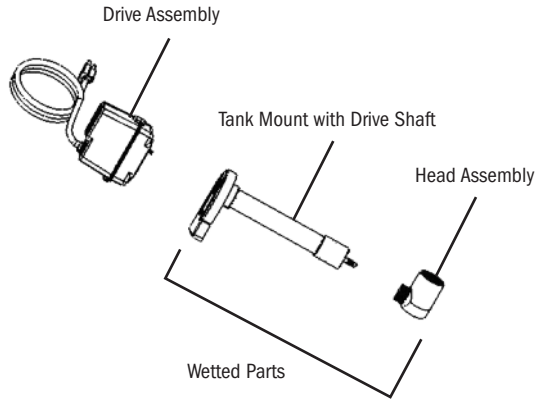
	PART NUMBER	UM
For 7.5-gallon tank		
120V 60Hz	SMS75A	EA
220V 60Hz	SMS75B	EA
For 15-gallon tank		
120V 60Hz	SMS15A	EA
220V 60Hz	SMS15B	EA
For 30-gallon tank		
120V 60Hz	SMS30A	EA
220V 60Hz	SMS30B	EA



MOTOR SERVICE KIT

	PART NUMBER	UM
120V 60Hz	MX120	KIT
220V 60Hz	MX220	KIT

MIXER EXPLODED VIEW AND PARTS



DRIVE ASSEMBLY

	PART NUMBER	UM
120V 60Hz	MXAD	EA
220V 60Hz	MXBD	EA

TANK MOUNT WITH DRIVE SHAFT

	PART NUMBER	UM
For 7.5-gallon tank	MX75M	EA
For 7.5-gallon tank	MX15M	EA
For 30-gallon tank	MX30M	EA

HEAD ASSEMBLY

	PART NUMBER	UM
For all mixers	MX100	EA




STENNER PUMP COMPANY

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Jacksonville, Florida 32246

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Fri. 7:00 am-5:30 pm

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