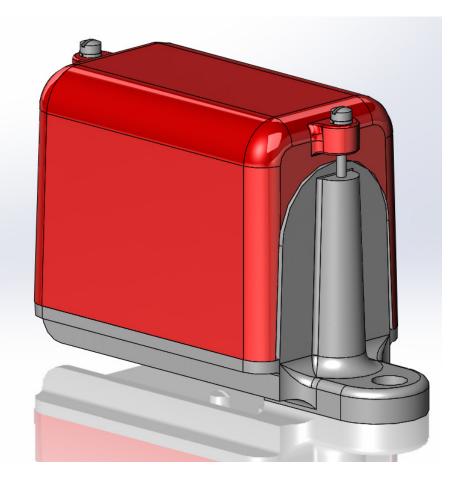
Syntron Material Handling

Service Instructions

Syntron® Vibrator Model: V-4 (AC)



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SMH Corporation reserves the right to make changes at any time, without any liability or other obligation on its part, in materials, equipment, specifications and models, and also to discontinue the manufacture and sale of models, and the parts and components thereof. For further detailed information contact, SMH Corporation, material handling equipment operation.

INTRODUCTION

The Syntron ®Electromechanical Vibrator, Model V-4 (AC) produces a pattern of vibrations which penetrate a material mass, keeping the particles agitated and in a free flowing condition.

The vibrator can be operated directly from an AC power supply using a standard controller.

INSTALLATION

The vibrator may be installed in any position, when on a vertical surface the mounting bolt should be at the top.

The base is provided with a 17/32 inch (13.5 mm) diameter mounting hole. The bolt must be securely tightened; check frequently to see that this bolt remains tight.

The current supply must be the same as the rating designated on the nameplate.

OPERATION

NOTE: If the vibrator is installed on a hopper, do not operate the vibrator while the hopper is closed, the vibratory action will compact the contents of the hopper.

To operate the vibrator, simply connect the leads to the power supply. If a controller is furnished, the vibrator is connected to the control terminals and the control to the power supply. The use of a controller permits the output of the vibrator to be controlled by turning the rheostat knob clockwise to increase output, and counterclockwise to decrease output.

CAUTION: Excessive current draw is caused by too wide an air gap or too much spring tension, resulting in heat buildup and blown fuses. Low current draw is caused by too narrow of an air gap, resulting in striking of the core and armature assemblies. Do not operate the vibrator while these conditions exist.

Refer to Air Gap Adjustment instructions to correct a striking condition.

MAINTENANCE

WARNING: Disconnect the power supply at the safety disconnect switch before performing any maintenance.

The V-4 Vibrator requires very little maintenance. It should be kept clean and dry. The hardware should be kept tight.

If it is necessary to replace springs, remove the cover, then the cap screws which secure the springs. Take note of the arrangement of springs, spacers and clamps. The spring stacks must be replaced in the reverse order as removed. SMH recommends replacing the entire spring stack rather than only a portion

After replacing springs it will be necessary to adjust the air gap.

TROUBLE SHOOTING

<u>Problem</u>	<u>Cause</u>	Correction
Vibrator operates Below capacity	Loose hardware	Repair
, ,	Defective springs	Replace
	Defective magnet	Replace
Vibrator does Not run	Loose connections	Repair
	Defective rheostat	Replace

Replace parts only with those supplied or recommended by SMH.

AIR GAP ADJUSTMENT

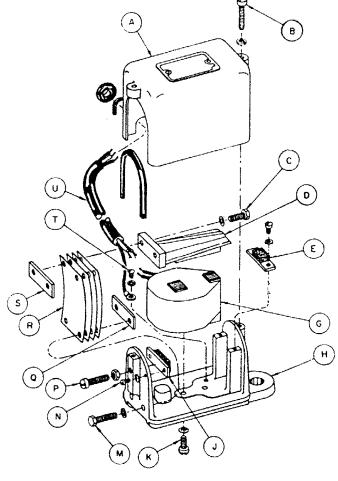
The air gap is the area between the faces of the magnet and armature assemblies. The maximum air gap is determined to be the maximum allowable ampere rating: .8 amps, 115v/50-60Hz; .45amps, 230v/50-60Hz.

CAUTION: the air gap adjustment is made while vibrator is in operation. Use caution to avoid electrical shock or physical harm to personnel.

To adjust the air gap, connect an ammeter in line "L1" or "L2" inside controller. With the vibrator in operation, loosen the hex nut on (P). Turn the screw (P) clockwise to decrease the air gap and counterclockwise to increase the air gap. Adjust the air gap until the most efficient operation is obtained, then check the current draw indicated on the ammeter. It must not exceed the rating designated on the nameplate. If the current draw is excessive, turn the screw clockwise until the designated rating is attained. Tighten the hex nut to lock the screw in place. The vibrator is now ready for operation.

PARTS LIST – V-4 (AC) VIBRATOR

ITEM	DESCRIPTION	QTY	PART NO.
A	Cover *Name Plate *Caution Label	1 1 1	C-52244-2 A-61712-1 A-125694
В	Channel Gasket Mach. Screw, Fil.Hd. (#10-24 x 1 1/4')	15" 2	0197X006 H0207601
С	Lockwasher (#10) Cap Screw, Hex Hd. (1/4 -10 x 3/4")	2 2	H0112458 H0301201
D E	Lockwasher (1/4") Armature Assembly Rubber Cushion Ass Mach. Screw, Rd. Ho		H0112809 B-14249 A-14199 H0200601
F G	(#6-32 x 5/16") Lockwasher (#6) Magnet Assy	2	H0112109
u	(115V/25Hz) Magnet Assy	{1	B-127310-F
	(115V/50Hz) O	NLY}	B-127310-B
	Magnet Assy (115V/60Hz}		B-127310-A
	Magnet Assy (230V/50Hz)		B-127310-H
	Magnet Assy (230V/60Hz)		B-127310-E
Н	Magnet Assy Base Casting	1	D-52245-A
J	Rubber Cushion Ass	•	A-22324
K	Mach.Screw, Fil> Ho (#10-32 x 5/8")		H0208001
М	Lockwasher (#10) Cap Screw, Hex Hd.	2	H0112458 H0301601
IVI	(1/4"-20 X 1")	2	110301001
N	Mach. Screw, Fil. Ho (#6-32 x 5/8")	l.2	H0216501
Р	Lockwasher (#6) Mach. Screw, Fil. Ho (1/4"-20 x 1")	2 I.1	H0112109 H0208901
Q R S T	Jam Nut (1/4"-20) Spring Clamp (Btm.) Leaf Spring Spring Clamp (Top) Mach. Screw, Rd. Ho	1	H0101604 A-22315 4 A-14193 A-14192 H0202902
U	(#10-32 x 1/4") Lockwasher (#10) Cable Assembly	1 1	H0112458 C-160136-P



* Do not remove or paint over safety labels. Should safety labels require replacement contact SMH Corporation, Material Handling Equipment Operation for an additional supply free of charge.

Important
Syntron Material Handling reserves the right to alter at any time, without notice and without liability or other obligations on its part, materials, equipment specifications, and models. Syntron Materials
other obligations on its part, materials, equipment specifications, and models. Syntron Material Handling also reserves the right to discontinue the manufacture of models, parts, and components thereof. Your satisfaction is very important to us. Please direct any comments, questions, or concerns to our Marketing Communications Department.



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