



# VIBCO INSTRUCTION MANUAL

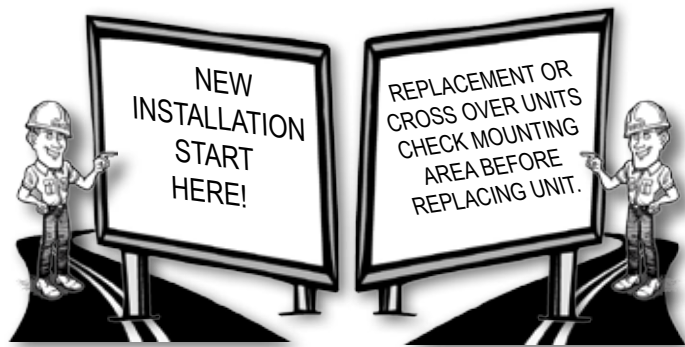


## Small Impact Electric Vibrators

**WARNING:** Failure to read and follow these installation instructions and safety precautions could result in personal injury, equipment damage, shortened service life or unsatisfactory equipment performance. All information in this document is vital to the proper installation and operation of the equipment. It is important that all personnel who will be coming in contact with this product thoroughly read and understand this manual.

### 1 START

**THANK YOU FOR CHOOSING A VIBCO VIBRATOR!**



### 2 MOUNTING INSTRUCTIONS CHECKLIST

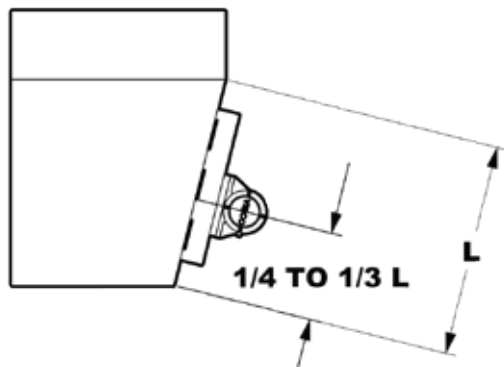
- Determine vibrator placement on equipment.
- Determine length of channel iron and style of mounting plate.
- STITCH** welding mounting plate to channel iron.
- STITCH** weld channel iron to bin.
- Attach vibrator to mounting plate. Check the mounting plate for warping & shim if necessary. **DO NOT OVER TIGHTEN THE BOLTS.**
- Install safety chain or cable.
- Connect wiring for vibrator using the NEC Standards.
- Take a voltage reading while vibrator is running.
- Take an amperage reading while vibrator is running.
- FILL OUT WARRANTY CARD AND MAIL TO VIBCO!!!!**



**ADDITIONAL DETAILS AVAILABLE ONLINE AT [www.vibco.com](http://www.vibco.com)**

### 3 VIBRATOR PLACEMENT

For coarse materials the vibrator should be mounted approximately 1/3 of the distance from the discharge opening to the top of the sloped portion of the bin. For fine materials place the vibrator 1/4 of the distance from the discharge to the top of the sloped portion of the bin.

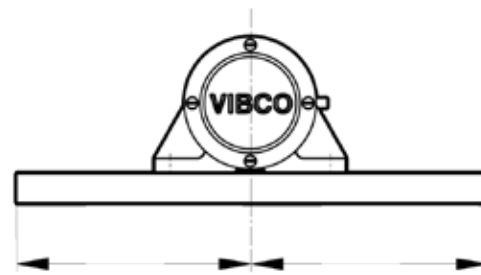


**FOR ALTERNATE MOUNTS** refer to full detail instruction manual online at [www.vibco.com](http://www.vibco.com) or call 800-633-0032

### 4 CHANNEL SELECTION

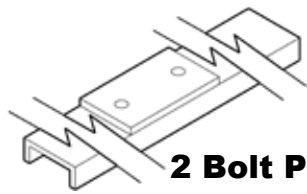
Bin Wall Thickness	Minimum Channel Iron Length
Less Than 1/8" (thin)	12" to 24" on both sides of vibrator
Greater Than 1/8"	6" to 8" on both sides of vibrator

**NOTE:** Longer channel iron will not affect the vibrator performance, but total channel iron length should not exceed the length of the bin wall.



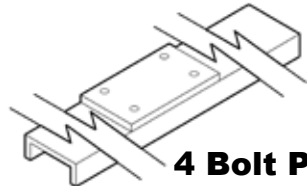
All of VIBCO'S SPR Electric Vibrators are designed to use standard 2" Channel Iron. However, 3" Channel Iron is also acceptable. The thickness of your bin walls determines the minimum length of channel iron needed (see chart).

### 5 MOUNTING PLATE



**2 Bolt Plate**

For all SPR vibrators use a 1/4" mounting plate. Align the mounting plate with the length of channel iron for best vibration transfer.



**4 Bolt Plate**

**NOTE:** For additional mounting plate & channel iron combinations, see full detail manual at [www.vibco.com](http://www.vibco.com)

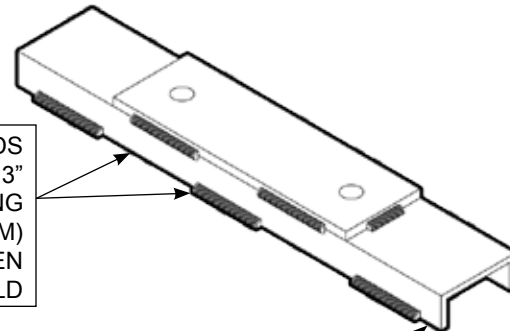
### 6 STITCH WELD



**DO NOT MOUNT VIBRATOR DIRECTLY TO SURFACE OF BIN!!!**  
Always use plate & channel iron

BE SURE ALL WELDING IS DONE BY A CERTIFIED WELDER. ALL STANDARD CHANNEL & PLATES PROVIDED BY VIBCO ARE A36 STEEL, 304 STAINLESS OR 6061 ALUMINUM

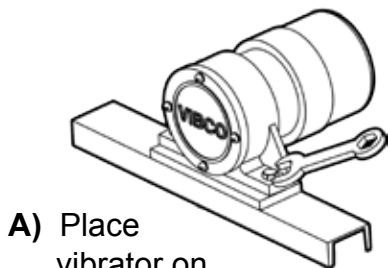
STITCH WELDS SHOULD BE 3" LONG LEAVING 3" (7.5CM) BETWEEN EACH WELD



ALWAYS START & STOP STITCH WELDS AT LEAST 1" (2.5CM) FROM THE END OF CHANNEL TO PREVENT CRACKING FROM HEAT CONCENTRATION

**800-633-0032 for Mounting Plates & Brackets, Spare & Replacement Parts and 24/7 Technical Support**

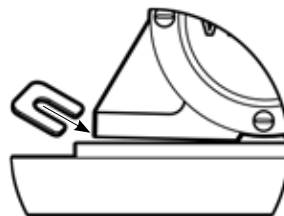
### 7 BOLTING PROCEDURE



**A)** Place vibrator on mounting plate, then insert and tighten one bolt.

GRADE 5 BOLT SIZE	MAX TORQUE FT-LBS
1/4"	9
5/16"	18
3/8"	32

**B)** After tightening the first bolt, check the foot on the other side. If a gap exists between the mounting plate and foot of the vibrator, shim the space under the foot.



**C)** After gap has been filled with shim(s), insert and tighten the second bolt.



Retighten the bolts after the first 10 to 15 minutes of operation and check them periodically to maintain proper tightness. Damage to both the bin and the vibrator can occur if the vibrator is not mounted securely. And remember, no matter how thick the mounting plate, it can still warp during welding, especially if VIBCO's instructions are not followed.

### 8 RESTRAINT



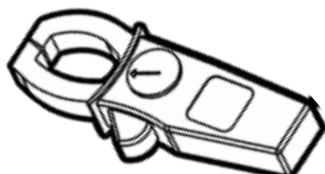
**ALWAYS INSTALL SAFETY CABLE or CHAIN**

Mount one end to the vibrator and the other to the hopper or bin **above** the vibrator

**NEVER ATTACH TO THE MOUNTING PLATE!**

### 9 ELECTRICAL INSTALLATION

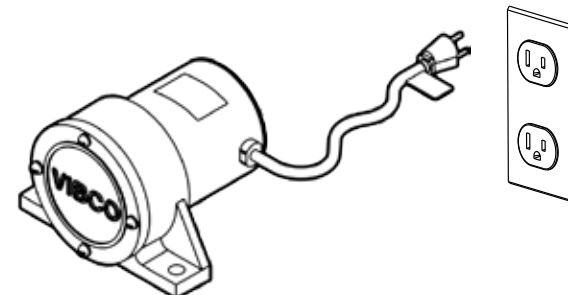
NOW THAT YOU'VE MOUNTED YOUR VIBRATOR AND ATTACHED A SAFETY CABLE/CHAIN . . . **PLUG IT IN!**



TAKE AN AMPERAGE DRAW WHILE THE VIBRATOR IS RUNNING



Operating amperage should not exceed the value listed on the vibrator label. If it does, it is most likely due to faulty mounting. Check your mounting welds, and re-tighten bolts if necessary. **See TROUBLESHOOTING for more info.**





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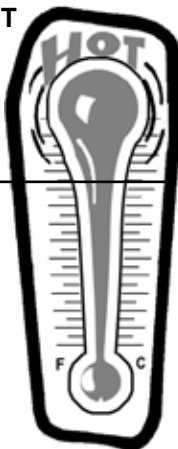
**WARNING:** Failure to read and follow these installation instructions and safety precautions could result in personal injury, equipment damage, shortened service life or unsatisfactory equipment performance. All information in this document is vital to the proper installation and operation of the equipment. It is important that all personnel who will be coming in contact with this product thoroughly read and understand this manual.

### 10 OPERATING TEMPERATURE

If the ambient temperature of the area exceeds 104°F (40°C) OR if the skin temperature of the application exceeds 150°F (66°C), consult VIBCO for alternate solutions.

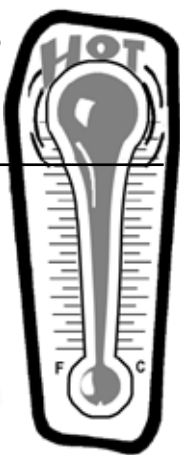
#### AMBIENT TEMP

104°F (40°C)



#### SKIN TEMP

150°F (66°C)

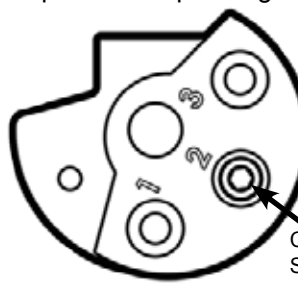


### 11 CHANGING OUTPUT SETTINGS

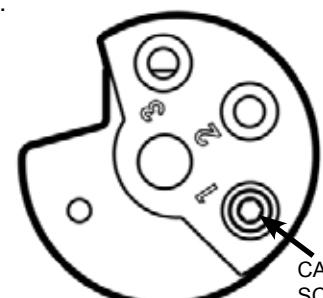
**ALWAYS DISCONNECT POWER SUPPLY BEFORE CHANGING SETTINGS!** To increase or reduce the force of the SPR-60HD, SPR-80HD, SPRT-60HD and SPRT-80HD, remove the cap screw that holds the outer eccentric to the inner eccentric and turn the outer eccentric so that the hole lines up properly. Replace the cap screw as per diagram below.



**MAXIMUM FORCE**  
Intermittent Duty Only



**FACTORY SETTING**  
Maximum Setting for Continuous Duty



**MINIMUM FORCE**  
Optimum Setting for Long Life of Vibrator



**NOTE:** If you reset eccentrics on any model to INCREASE the force of the vibrator, you **MUST** take a new amperage draw reading to ensure your vibrator is still operating within the specified limits.



For adjusting force settings on all other models refer to full details manual at [www.vibco.com](http://www.vibco.com) or call Technical Support at 800-633-0032.

### 12 TROUBLESHOOTING

#### MY MATERIAL STILL ISN'T MOVING!

1. Did you put your vibrator in the right location? Did you mount your vibrator properly?
2. Do you have the right vibrator for the job? Does it provide enough force? Is it the right frequency? Still not sure? Call VIBCO Technical Support at 800-633-0032.

#### THE VIBRATOR WON'T START!

1. Check power supply to unit.
2. Check motor continuity, if "open" motor winding is burned or has a short, replace motor. If unsure how to check continuity, call VIBCO Technical Support or consult a licensed electrical contractor.

#### BEARINGS GRIND OR MAKE EXCESSIVE NOISE, VIBRATOR WON'T RUN AT FULL SPEED.

1. Are you running the vibrator in a dusty or dirty environment? You may need to switch to an enclosed model SPRT vibrator.
2. Are you running the vibrator in a wet or washdown environment? You may need to switch to an enclosed model SPWT vibrator.
3. Are you running the vibrator in a high temperature environment? You may need to switch to a fan cooled model SPR or a heavy duty HD model vibrator and install a heat mount.
4. Are you running the vibrator continuously? You may need to switch to a heavy duty HD model vibrator.

#### VIBRATOR STOPS RUNNING

1. Check power supply to unit.
2. Units are supplied with Internal Thermal Overload Protection. If temperature of unit exceeds 195°F (90°C), vibrator will shut down & restart after it cools down. Repeated stops & starts will overload vibrator motor and burn out windings. To protect from overloads, install single phase overload protection. Make sure vibrator is mounted securely, & that there are no cracks in bin wall.
3. If unit does not restart after cooling down, check motor continuity. If "open" motor winding is burned or has a short, replace motor. If unsure how to check continuity, call VIBCO Technical Support or consult a licensed electrical contractor.
4. If vibrator DOES start after cooling down, take an amp reading. If amps over what is listed on Serial No. & Specs Tag check mounting bolts or look for cracks in welds or bin wall. If mount is OK, then vibration may be too much for hopper structure. You may need to reduce intensity (force) of vibration to reduce amperage draw, or reduce time of vibration to reduce temperature rise.

*NOTE: Proper force for full hopper can be excessive for empty or near empty hopper.*

#### Warranty

All warranty claims must be submitted to VIBCO for approval prior to any repairs being done. Failure to do so will void any and all warranty coverage. All repairs will be done at the VIBCO factory.

#### Errors, Shortages & Complaints

Complaints concerning goods received or errors should be made at once. Claims must be made within five days after receipt of goods. Clerical errors are subject to correction. Damage during shipping must be reported to the carrier, not VIBCO.

#### Returning Parts \*\*

Parts should not be returned to VIBCO without prior authorization. Call VIBCO's customer service department at 800-633-0032 (800-465-9709 in Canada) for a Return Goods Authorization (RGA) number. A return authorization will be emailed or faxed to you. Use this as your packing slip. Return shipping must be prepaid. Material returned may be subject to a 10% restocking fee. All returned shipments should clearly display your name, address and original invoice number to ensure proper credit.

\*\* Orders for custom equipment built to customer's specifications are not returnable.

## ADDITIONAL DETAILS AVAILABLE ONLINE AT [www.vibco.com](http://www.vibco.com)

#### Product Changes

VIBCO reserves the right to make changes in pattern, design or materials when deemed necessary, without prior notice or obligation to make corresponding changes in previous models. To be sure of exact mounting dimensions, it is recommended that you obtain a certified dimensional drawing from the factory.

#### Ordering Spare Parts

Parts can be ordered through authorized distributors or from VIBCO's Spare Parts Department. The following data should be provided when placing your spare parts order:

- From label: Model number of unit.
- From spare parts list: Reference number, part number, description & quantity required.
- Shipping instructions: Specify shipping point and method of shipping.

**For custom mounting applications or any other questions:**

**800-633-0032**

or

**[vibrators@vibco.com](mailto:vibrators@vibco.com)**

