1. START

THANK YOU FOR CHOOSING A VIBCO VIBRATOR!

NEVER ATTACH TO THE CABINET OR WALL. A MOUNTING PLATE MUST BE USED.

2. MOUNTING INSTRUCTIONS CHECKLIST

- Determine vibrator placement on equipment.
- Determine length of channel iron and style of mounting plate.
- STITCH weld mounting plate to channel iron.
- STITCH weld channel iron to bin or equipment.
- 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!!!

3. VIBRATOR PLACEMENT

For coarse materials: mount vibrator 1/3 of the distance from the discharge to the top of the sloped portion of the bin.

For fine materials: mount 1/3 of the distance from the discharge opening to the hopper or bin.

Determine the length of channel iron and style of mounting plate.

Determine vibrator placement on equipment.

4. PLATES & CHANNEL SELECTION

<table>
<thead>
<tr>
<th>VIBRATOR FORCE ≤ 200#</th>
<th>MOUNTING PLATE THICKNESS</th>
<th>CHANNEL IRON SIZE</th>
<th>FACTOR A</th>
<th>BIN WALL THICKNESS</th>
<th>FACTOR B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot; - 3/8&quot; 10 ga.</td>
<td>3/8&quot; - 1/2&quot; 10 ga.</td>
<td>1/2&quot; &amp; up 10 ga.</td>
<td>0</td>
<td>1/4&quot; - 1/2&quot; 10 ga.</td>
<td>6</td>
</tr>
<tr>
<td>3/8&quot; - 1/2&quot; 10 ga.</td>
<td>1/2&quot; &amp; up 10 ga.</td>
<td>5/16&quot; - 3/8&quot; 10 ga.</td>
<td>1</td>
<td>1/4&quot; - 1/2&quot; 10 ga.</td>
<td>6</td>
</tr>
<tr>
<td>1/2&quot; 10 ga.</td>
<td>3/8&quot; - 1/2&quot; 10 ga.</td>
<td>1/2&quot; 10 ga.</td>
<td>2</td>
<td>1/4&quot; - 1/2&quot; 10 ga.</td>
<td>6</td>
</tr>
<tr>
<td>110/115VAC</td>
<td>90VDC</td>
<td>3/8&quot; - 1/2&quot; 10 ga.</td>
<td>3</td>
<td>1/4&quot; - 1/2&quot; 10 ga.</td>
<td>6</td>
</tr>
<tr>
<td>230/250VAC</td>
<td>110VDC</td>
<td>1/2&quot; 10 ga.</td>
<td>4</td>
<td>1/4&quot; - 1/2&quot; 10 ga.</td>
<td>6</td>
</tr>
</tbody>
</table>

1) Longer channel iron will not affect vibrator performance, total channel length should not exceed length of bin wall.
2) Percentages shown indicate % of bin wall height your channel iron should be for shorter bins.
3) To match your vibrator on chart above, model number suffixes generally correspond to pounds of force generated. For any question, consult VIBCO.

5. MOUNTING HARDWARE

A MOUNTING PLATE MUST BE USED to ensure proper stability for the vibrator.

Orientation of the mounting plate depends on number of mounting holes of the vibrator. Determine number of mounting holes and orient as shown here.

2 BOLT STANDARD STUDDED

4 BOLT STANDARD STUDDED

6. STITCH WELD

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

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

7. BOLTING PROCEDURE

NOTE: SHIMMING THE FEET IS NECESSARY TO AVOID STRAIN ON THE SHAFT & BEARINGS THAT CAN CAUSE HIGH AMPERAGE DRAW & BURN OUT THE VIBRATOR.

Step 1
Place vibrator on mounting plate, then insert & tighten 2 Grade 5 bolts on same end of vibrator. See proper torque values right.

FOR ALTERNATE MOUNTS refer to full detail instruction manual online at www.vibco.com or call 800-633-0032

Step 2
Now, look at feet on other end of vibrator. If a gap exists between the mounting plate & foot, welding warped the mounting plate. Shim space under feet.

Step 3
After gap has been filled with shim(s), insert & tighten the other TWO Grade 5 bolts.

Step 4
Connect wiring for vibrator using the NEC Standards.

8. RESTRRAINT

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

POWER CONVERTED AT THE SPEED CONTROL BOX FROM 110/115VAC TO 90VDC OUTPUT

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 watts, and re-tighten bolts if necessary. See TROUBLESHOOTING for more info.
**CHANGING OUTPUT SETTINGS**

**MODELS: SCR-100 & SCR-200**

To change the force:
1. **Disconnect power** and remove the end cover.
2. **Remove the cap screw** that holds the outer eccentric to the inner eccentric and turn the outer eccentric so that the numbered hole aligns with the threaded hole in the inner eccentric. **NOTE:** You must set both ends of the vibrator to the same eccentric setting.
3. **Apply Loctite 242** (or equivalent). Replace the cap screw.
4. **Replace both end covers.** End cover bolts have a locking path and do not need Loctite.

**MODELS: SCR-300, 400, 500**

To change the force:
1. **Disconnect power** and remove both end covers.
2. **Remove the cap screw** that holds the outer eccentric to the inner eccentric and turn the outer eccentric so that the numbered hole aligns with the threaded hole in the inner eccentric. **NOTE:** You must set both ends of the vibrator to the same eccentric setting.
3. **Apply Loctite 242** (or equivalent). Replace the cap screw.
4. **Replace both end covers.** End cover bolts have a locking path and do not need Loctite.

**MODEL: SCR-1000**

**To change the force:**
1. **Disconnect power** and remove both ends of the vibrator from the material.
2. **Loosen the bolt** that holds the outer, labeled eccentric to the shaft. **NOTE:** Some models have only one eccentric per side.
3. **Turn the eccentric** on the shaft to adjust force output. **NOTE:** The arrow on the shaft must point in the desired setting. The higher the number, the greater the force.
4. **Tighten eccentric bolts** and reinsert end covers.

For vibrators mounted in tandem (side to side, not end-to-end) to produce linear motion on tables & feeders:
To produce linear motion you must make sure vibrators rotate opposite from one another. Force controls should be opposite to one another. See left and right side diagrams for proper installation. See diagram above (side view from the same side (one in clockwise, the other counter-clockwise as in picture above). Follow instructions as above, & be sure you set both vibrators & both ends to the same setting. Consult VIBCO for more details.

**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.**

**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? Is it set to the maximum force? See eccentric setting info to left. Still not sure? Call VIBCO Technical Support at 800-633-0032.

**THE VIBRATOR WON'T START!**

   **NOTE:** For SCR Models 50, 60, 100, 200, 300 & 400, fuse is located inside control box. For SCR Models 500 & 1000, fuse is located on lid of control box in holder marked FUSE.
2. Check power supply to unit. Are you getting the proper voltage? **NOTE:** Remember that SCR units are built with a 90VDC motor powered by 115VAC power, converted at the speed control box.
3. Check field continuity. If "open" field winding is burned or has a short, replace field. If unsure how to check continuity, call VIBCO or consult a licensed electrician.
4. Check control potentiometer. If shorted, replace.
5. Check vibrator brushes for wear. Each unit has two brushes. Refer to full detail manual at www.vibco.com for correct brush lengths. Replace if worn below minimum length.
6. **VIBRATOR STOPS RUNNING!**
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**DUTY CYCLE**

All SCR Models are rated for CONTINUOUS DUTY at frequency settings between 950 - 2500 vibrations per minute (VPM) – which is approx. 25 to 60 on speed control dial. For frequencies below 950 or above 2500 VPM, rating is INTERMITTENT DUTY. Use the following guidelines for proper timing of starts and stops.

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<tr>
<th>Condition</th>
<th>Duty Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling 50%</td>
<td>Duty cycle where maximum run time = 30 minutes in any one hour period.</td>
</tr>
<tr>
<td>Normal</td>
<td>Duty cycle can be increased by adding additional ventilation. Consult VIBCO for details.</td>
</tr>
</tbody>
</table>

**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 (800-465-6709 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 mounting applications or any other questions:**

800-633-0032 or vibrators@vibco.com

**VIBCO INSTRUCTION MANUAL**

**SCR Adjustable Speed & Force 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.