

## **BH Vibrator Operation, Maintenance, and Troubleshooting**

**Air Control Connection:**

1. Install air control package (Figure 1).
2. Blow out air line to flush contaminants before connecting the vibrator.
3. Fill the lubricator with recommended lubricant or oil (see Lubrication Recommendation Bulletin 4000.503).
4. Open valve.
5. Set the pressure regulator to 50 PSI (see FRL instructions).
6. Adjust the lubricator to recommended setting (see Lubrication Recommendation Bulletin 4000.503).
7. Adjust air regulator to the lowest pressure that will give the desired material flow performance, NOT to exceed 60 PSI.

**Installation Note:** All vibrators must be installed with a filter, regulator, and lubricator (FRL).

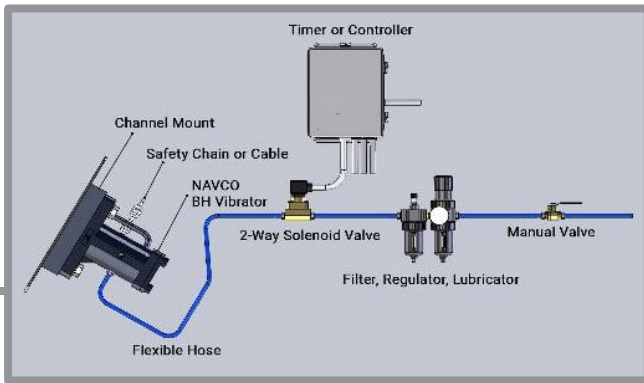


Figure 1 (Air inlet located on top headplate for single impact BH models)

### Mounting With Channel Mounting:

Note: Use channel mounting plate (See Figure 2). Safety cable recommended.

1. Determine proper mounting location. Assure a mounting angle greater than 20° unless an internal spring is installed.
2. Skip-weld reinforcing bars to hopper. Do not weld corners.
3. Skip-weld both channel legs to reinforcing bars. Do not weld corners.
4. Install vibrator and mounting bolts.
5. Install lock washer (if included) and nut. Torque mounting hardware to recommended specification. (See Bin Hopper (BH) Vibrator Operation Manual)
6. Re-torque mounting hardware after 24 hours of equipment operation.

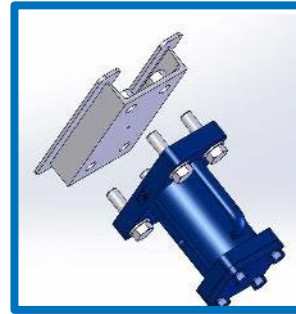


Figure 2

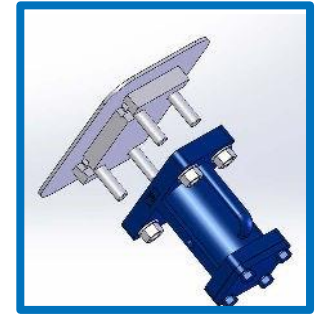


Figure 3

**Maintenance:**

1. Check lubricator and fill with recommended oil type if level is low (see Lubrication Recommendation Bulletin 4000.503).
2. Check that air pressure is correctly set for most efficient operation. Drain filter to remove contaminants (water, scale, etc).
3. Check all air connections and tighten if necessary.
4. Torque all bolts that may have been loosened over a period of time (maintenance/plant-shutdown).
5. Be certain vibrator is well lubricated at all times. One way to check this is to place hand over exhaust while running. A fine film of oil on the palm of the hand will confirm that the vibrator is being lubricated properly.

### Mounting With T-Slot Mounting Plate:

Note: Use T-slotted mounting plate (See Figure 3). Safety cable recommended.

1. Determine proper mounting location. Assure a mounting angle greater than 20°, unless internal spring is installed.
2. Skip-weld reinforcing plate to hopper. Do not weld corners.
3. Skip weld t-slot to reinforcing plate. Do not weld corners.
4. Insert bolts in slots and position vibrator onto t-slot.
5. Install lock washer and nut. Torque mounting hardware to recommended specification. (See Bin Hopper (BH) Vibrator Operation Manual)
6. Re-torque mounting hardware after 24 hours of equipment operation.

## Troubleshooting

**Vibrator will not start:**

1. Check to see that quick-acting valve is properly installed.
2. Vibrator should be within 5 to 10 feet of quick-acting valve.
3. Check vibrator has adequate air pressure and volume available.

**Vibrator is sluggish and slow to start:**

1. Check for adequate lubrication.
2. Check for leaking airline or defective operating valve.
3. Check air supply for pressure and volume.

**For additional information consult the Bin Hopper (BH) Vibrator Operation Manual, available at our website, or contact NAVCO directly.**

## Limited Warranty

Seller warrants that the product purchased will be of the kind and quality described in the order or contract and will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within one year of purchase, seller shall upon notification from buyer, correct such non-conformity, including non-conformance with the specifications, at its option, either by repairing any defective part or parts, or by making available F.O.B. the seller's plant, a repaired or replaced part.

This warranty is in lieu of all warranties of merchantability, fitness for purpose or other warranties, express or implied, except of title and against patent infringement. Correction of non-conformities, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of seller to buyer, whether based on contract, negligence or otherwise with respect to, or arising out of such equipment.

Neither party shall be liable for special, indirect, or consequential damages. The remedies set forth herein are exclusive, and the liability of seller with respect to any contract or sale, or anything done in connection therewith, whether in contract, in tort, under any warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the product or part on which such liability is based.

