



## Service Manual HBM-ZX Series

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**T**hank you for your purchase of the ISKCO HBM-ZX Series vibrator. This unit is designed to provide optimal performance in the placement of concrete when used properly. Prior to use of this vibrator, it is very important that this service manual be read and understood to ensure the proper operation and maintenance of the unit.

This service manual contains six (6) sections as follows:

- Specifications
- Operation
- Inspection
- Maintenance
- Important Reminders
- Warranty

Along with these sections, a current parts list and breakdown for the unit is included.

## Specifications

The following are the specifications for unit. The specifications chart is based upon each unit being equipped with a 50 foot power cord.

Model	Input Voltage	Amp	Hp	V.P.M.	Head Dia. & Length	Head Weight (lbs.)	Amplitude	Force Output (lbs.)
HBM40ZX	48	5.5	250W	14,400	1.69" x 13.39"	7	0.055"	445
HBM50ZX	48	9	400W	14,400	2.05" x 15.35"	11	0.067"	858
HBM60ZX	48	13	500W	14,400	2.40" x 15.90"	16	0.075"	1301

## Operation

Before operation of this unit, ensure that the proper power supply has been selected and extension cords (if used) are the correct size. This is critical to the life of the unit. Failure to provide the proper voltage to the vibrator can cause unnecessary damage and premature failure. The following guidelines will ensure the unit is operated properly.

- 1) Be sure the switch is in the OFF position
- 2) Insert the plug of the vibrator completely into the power unit or extension cord.
- 3) Turn unit ON and place in concrete.  
**NOTE:** Do not turn off the unit while it is inserted in the concrete. Doing so may cause difficulty removing the unit from the concrete.
- 4) Move the vibrator in a pattern that will allow the area of influence of the vibration to overlap. Using the vibrator in this manner will greatly enhance the consolidation of the concrete.

## Inspection

To ensure optimal performance, inspection of the unit must be performed before every operation.

Upon receiving the unit, inspect for any damage that may have occurred during shipment/transit. Claims for shipping damages must be filed with the carrier. ISKCO will not be liable for damages that occur during shipment of the product.

Before placing the unit into service or storage, inspection and service should be performed. The following is a checklist of areas for inspection.

- External Inspection
  - Cracks in the switch case or motor case of the vibrator
  - Cuts in the vibrator hose or power cord
  - Corroded or burned pins on the plug
  - Worn nose piece
  - Torn switch cover
- Internal Inspection
  - Check wiring for loose connections
  - Check fuses in the switch case
  - Check continuity of all wiring
  - Check continuity across switch

## Maintenance

The two main areas of maintenance in the unit are electrical components and bearings.

When performing maintenance of the unit's electrical components:

- Replace all blown fuses.
- Clean the pins of the vibrator plug. Width of each pin should be approximately that of a dime.
- Tighten all loose connections. Replace wire connectors where necessary.

For bearing maintenance, the normal duration of operation before a bearing change is required is approximately 200-250 hours. A bearing change may be required prior to this approximate time frame. This can be determined by listening for abnormal sounds in the vibrator during operation.

- **NOTE:** Bearing replacement kits are available for all sizes of the HBM-ZX Series vibrators. In order to avoid unnecessary down time with the unit, it is recommended to keep a bearing replacement kit on hand.

## Important Reminders

Improper use of the unit may result in damage and/or premature failure. The reminders listed below must be strictly followed to ensure the life of the unit.

- Never run the vibrator outside of the concrete for extended periods of time. The moisture of fresh concrete cools the vibrator. When the vibrator is run outside of concrete, heat is generated in the motor and will eventually cause the stator to fail.
- Do not place heavy objects on or drive over the power cord. If this occurs, it may cut the power cord or cause a voltage drop to the vibrator.
- Never pull the vibrator by the power cord. This can cause the wire to pull away from the plug or switch. It can also lead to vibrator failure or electrical shock.
- If the vibrator should stop suddenly or sound unusual during operation, turn it OFF immediately. Refer back to the Inspection and Maintenance sections of this manual for instruction. If further instruction is needed, contact the ISKCO Customer Service Department at 501.812.0220.

## Warranty

ISKCO, Ltd. warrants to the purchaser that the equipment to be delivered herein will be free from defects in material, workmanship, and title and will be of the kind and quality designated or described in the contract. The foregoing warranty is exclusive and in lieu of all other warranties whether written or implied (including any warranty of merchantability or fitness for purpose). If it appears within three (3) months from the date of shipping by the Company that the equipment delivered herein does not meet the warranties specified above and the purchaser notifies the Company promptly, the Company shall thereupon correct any defect, including non-conformance

with the specifications, at its option, either by repairing any defective part(s) or by making available at the Company's plant, a repaired or replacement part.

In no event will ISKCO, Ltd. be liable for business interruptions, loss of profits, personal injury, cost of delay, or for any other special, indirect, incident, or consequential losses, costs, or damages.

For assistance, contact the ISKCO Customer Service  
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