

# BAH Series Air Hammer Operation Manual



## Operation principle:

When the inlet air pressure overcomes the magnetic strength between the piston and the plate, the magnet piston is released from the anchor plate. The released piston shakes the piston bottom, which are fixed on the based of the knocker, with high velocity. Then it will consequently transmit the shock the bin wall. The magnetic piston is return back to it original position by the return spring during the exhaust stroke.

- ★ Minimum air pressure is 3kg/cm<sup>2</sup> (43.5PSI), maximum air pressure is 7kg/cm<sup>2</sup> (101.5 PSI). Nitrogen can be used as a power medium if necessary.
- ★ The ambient operating temperatures don't exceed 100°C (220°F).
- ★ Keep mounting area clean and even before installation. For the best vibrating results, it is recommended to reinforce mounting area with a U shape iron that is stitch welded. Shown Fig. 1

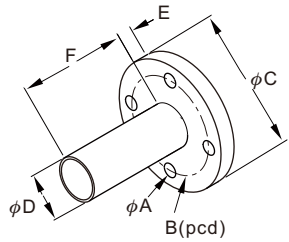
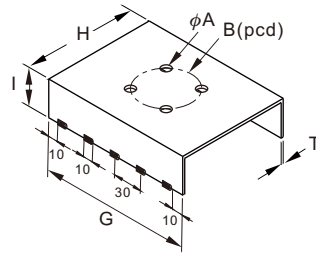


Fig. 1



Model No.	A	B	C	D	E	F
BAH-30	9	60	80	27.2	6	30
BAH-40	11	75	95	34	10	90
BAH-60	15	105	140	76.3	14	100
BAH-80	19	140	175	89.1	18	100

Model No.	A	B	G	H	I	T
BAH-30	9	60	200	150	50	4
BAH-40	11	75	280	205	70	6
BAH-60	15	105	300	220	70	6
BAH-80	19	140	350	260	70	8

- ★ When used for outdoor, the exhaust should be pointed downward to keep rain and other liquids out.
- ✎ Install the vibrator using high-tension screws. The tightening torque should not exceed the ranges shown [table 1](#).
- ★ It is recommended that an adhesive sealant applied to prevent any tooth lock washers, spring washers or self-locking nuts from loosening during vibration.
- ★ Install filter in the air supply. Use a lubricator in the air supply to increase life of vibrator if necessary.
- ★ When starting vibration first time, check the operating frequency with full load. The working pressure shall not exceed the value of [table 2](#) at the respective working pressure air consumption.

Table 1.

Model No.	Thread	Torque range (kgm)
BAH-30	M8	150~210
BAH-40	M10	300~420
BAH-60	M14	600~800
BAH-80	M18	950~1200

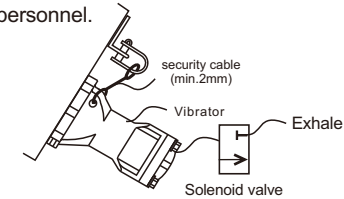
- ✎ Inspect regularly, beginning with first use and at least once each month thereafter. (Ensure that vibrator was firmly mounted, and muffler, filter and air source are working normally.)
- ✎ ℓ /e.t. means the air consumption (ℓ) per one shot.

Table 2.

Model No.	Useful pressure (kg/cm <sup>2</sup> )	Air consumption (ℓ/e.t)	Impact (kgm.s)	Weight (kg)
BAH-30	3~6	0.028	1.0	1.1
BAH-40	3~6	0.082	2.8	1.8
BAH-60	4~7	0.228	7.4	4.0
BAH-80	4~7	0.455	12.5	8.4

## ⚠ Caution

- ❖ Don't test the air hammer with air before it is properly mounted on the pedestal, as it will cause deformation and adamage on the spring.
- ❖ Pressure should not exceed 7kg/cm<sup>2</sup>(101.5PSI). Temperatures should not exceed 100°C (220°F)
- ❖ Ensure air supply is cut off during installing and maintenance of air hammer.
- ❖ Blocked exhaust (e.g. muffler clogs) and high temperature may cause one of side plate to be pressed out.
- ❖ Loosen screws could cause the air hammer to fall down and injure personnel.
- ❖ Please use a muffler at exhaust port to reduce the noise of vibration and to protect person's ear.
- ❖ The exhaust is under pressure, please keep away from exhaust port with care.
- ❖ Before installation, be sure there is no foreign matter in the air hammer, flange are flat and clean.
- ❖ Wind the thread of the quick- joint with anti- leakage tape2-3 times. (Avoid the 2mm up front to prevent the tape from getting into the vibrator and cause damage.



## 🔧 Trouble shooting

Problem	Fault Possibility	Trouble Shooting
Vibrator can not run when switch on	No air supply	Make sure turn on the air supply valve and compressor.
	Air supply pressure too low	To check pressure gauge in F.R.L combination and air compressor should be adjusted.
	Solenoid valve no activate	Solenoid valve is breakdown needs to change, make sure whether solenoid valve has driver
	Install mistaken air inlet hole	To make sure air in/outlet installation position right.
Too weak vibration force	Too many branches on main tube	To enlarge cross section of main tube equal or bigger to sum of manifold or branches tubes or to install tubings individually.
	Insufficient air supply	To make sure applied accessories match to required ones.
	To make mistake in AH of inlet installation.	To check pressure of F.R.L. combination and air supply its value higher
	In appropriate chosen tube, solenoid valve, F.R.L. combination to required ones	To make sure applied accessories match to required ones.
	Tubing too long	The length of tubing should not beyond 5M.
Vibration noise	Something jam in muffler	To check pressure of air supply and adjusting it stronger.
	Screw loosen	To tight screw
	U shape steel doesn't being weld well	To weld again
Solenoid valve noise	There is no foreign matter in the air hammer	Cleaning or maintenance.
	Articles are in solenoid valve	To replace solenoid valve.
	Solenoid circle loosen	To firm solenoid circle again.

✎ Please contact us for any unormal happened soon.



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