



HB Series Pre-Install Information

DANGER

The procedures in this Instruction Manual require measurement of high voltages. Electrical shock can cause serious personal injury or death. Read this document in its entirety prior to machine installation.

Machine Information

HB400 Machine Weight : 4700 lbs.

Floor Footprint : 69"wide x 54"deep.

Please allow 30" clearance at the left and right of the machine.

Crate: 8' x 7'10" x 7'5" - 4,620 lbs

HB600 Machine Weight : 6100 lbs.

Floor Footprint : 78"wide x 74"deep.

Please allow 30" clearance at the left and right of the machine.

Crate: 9'3" x 8' x 6'8" - 6,160 lbs

HB800 Machine Weight : 8800 lbs.

Floor Footprint : 103"wide x 100"deep.

Please allow 30" clearance at the left and right of the machine.

Crate: 7'4" x 9' x 8'3" - 7,700 lbs

HB1200 Machine Weight : 12,450 lbs.

Floor Footprint : 107"wide x 131"deep.

Please allow 40" clearance at the left and right of the machine.

Crates:

9'10" x 5'11" x 5'8" - 7,920 lbs

9' x 4'6" x 9' - 5,720 lbs

7'4" x 7'2" x 4'7" - 1,650 lbs

RIGGING (Customer Responsible)

Machine rigging should be performed by trained personnel. Please refer to "Specifications" in Chapter 1 of the Operating Manual for machine and machine component dimensions and weights. Failure to follow safe rigging procedures may result in serious personal injury.

SUPPLY VOLTAGE

EDM Performance is not responsible for supply voltage, main-disconnect or transformer wiring. All electrical installations must be performed by qualified personnel. To avoid serious electrical shock, do not open the power supply door or remove any electrical enclosure when supply voltage is turned on. Contact EDM Performance prior to turning on machine power.

SUPPLY VOLTAGE (Customer Responsible)

Acceptable supply voltage is 208, 220,240,360,460, VAC, 3 phase, 50/60Hz (four wire, neutral not required). The included step up/step down transformer should be used if incoming voltage is NOT 360 VAC. **If you have 480V a 480-360V step down transformer is required**, this can be purchased through EDM Performance Accessories. Minimum 10 amp service is required. Fluctuating supply voltage can cause inconsistent machining and damage the power supply. For best results, use a dedicated supply line with voltage fluctuation less than $\pm 5\%$.

INCOMING POWER (Customer Responsible)

It is normal to cut off the existing machine plug and wire the machine direct or with a plug common to the USA. Factory plug has 3 hot cables and no ground. Transformer and machine cabinet must be independently grounded. 12-14 AWG x 4 stranded wire (12/4 or 14/4SOW-A or SJ cable) is used for most installations. Solid core wire can be used for rigid conduit installations. The power cable plugs into the main disconnect located on the side of the control cabinet. Set phase order to match direction arrows on the high-pressure pump.

GROUNDING

Proper grounding of your HB Series EDM is extremely important for trouble-free operation. Connect machine ground to a copper ground rod whenever possible.

UNPACKING MACHINE (Customer Responsible)

If the machine is wrapped, carefully remove the outer plastic sheeting. To prevent cutting or damaging machine components, do not cut deeply into sheeting.

LIFTING MACHINE (Customer Responsible)

To remove the machine from its skid, first remove the bolts that attach the machine to the skid. When using a forklift, pick-up the machine from either side, not the rear or front, unless using lifting straps through the casting lift holes. Save all brackets and screws.

LOCATING MACHINE (Customer Responsible)

Avoid locations exposed to sunlight or where there is wide temperature variation, floor vibration or unreasonable concentration of smoke, caustic fumes, dust and graphite dust. For HB800 and HB1200 Models customer is responsible to ensure the floor will adequately support the machine weight.

MACHINE TABLE LOCKS (EPA Service Tech Handles)

Table Locks are Painted in **Red**

Remove all panels from the machine. The four Y-Axis lock brackets are located at the base of the column, front and rear of the gantry and attach to the base of the machine. The X-Axis lock bracket is located between the X-Axis carriage and ways at the lower front part of the machine. The U-axis is inside the upper left U/V carriage and the V-axis is along the right side of the opposite side of the carriage. The Z-axis lock is a small square plate at the top of the Z column on the right side of the machine. There are two wire drum carriage locks at the rear, behind and under the rear access door. Some models vary slightly, please call if you can't find a lock. **ALL AXIS HAVE A LOCK**, Do not turn on machine until all are accounted for and removed! **Save all brackets and screws**

MACHINE LEVELING (EPA Service Tech Handles)

Install machine levelling feet into the bottom of the machine. Place a precision level on the fixed rail worktable mounts, and adjust the leveling bolts to achieve a minimum tolerance of 0.0012"/12" (0.1mm/m) in both X and Y axes.

DIELECTRIC FLUID PUMP (EPA Service Tech Handles)

The 1/4" ID hose from the machine connects to the 1/4" barbed fittings at the rear of the pump. It is not important which to connect to. Tighten the clamps and connect the 4-pin pump power cable from the power supply to the socket at the rear of the pump. Place the tank under the machine drain and lift the magnetic sluice to the drain. Check the filter housing is tightly closed.

MACHINE CABLE CONNECTIONS (EPA Service Tech Handles)

This should be done only by a trained install technician. Connect all cables from the machine base to the controller cabinet. Connect the Console pedestal to the control cabinet. All plugs and receptacles are clearly marked. Connect the green/yellow grounds to the ground plate on the inside lower right of the cabinet.

POWER SUPPLY CIRCUIT BREAKERS (EPA Service Tech Handles)

Circuit breakers are located inside the door of the power supply. Set all breakers to the "ON" position.

DIELECTRIC FLUID

Dielectric fluid (DIC-206) is supplied with the machine, however DI water is not. **Customer must provide either deionized or distilled water.** Roughly 30 gallons are required.

TURNING ON MACHINE POWER (EPA Service Tech Handles)

Electrical connections and mechanical parts can come loose during machine transit. All printed circuit boards and electrical connections must be re-seated and checked prior to turning on machine power. It is recommended that you wait for the installation technician to turn on power. If you must turn on power, please contact EDM Performance for initialization instructions.

1. Turn on the power supply circuit breakers. Close the Power Supply door.
2. To turn ON the machine, turn the main disconnect located on the back of the controller cabinet. Press "Source" on the control pedestal. Once the main screen is on, servo power is turned on by pressing the "Power" button on the control pedestal. Turn OFF the machine by pressing the \ominus located on the controller. Please do not turn main power back on until the "Source" light goes out. All Stop switches are located on the Pedestal, hand pendant and at the rear drum of the machine.

SAFETY PROCEDURES

Personal Safety

Do not wear gloves, neckties or loose fitting clothing when servicing the machine. Restrain long hair. Use approved eye wear protection at all times.

Work Area Safety

Dielectric fluid over-spray or seepage may spill on the floor surrounding the machine. Install a non-slip floor coating or provide rubber floor mats around the machine. Wipe up spills immediately.

SERVICE

Maintenance on this machine is to be performed by qualified personnel only. Do not open the power supply door or remove any electrical enclosure when input power to the machine is turned on. Turn off supply voltage at its source prior to performing maintenance.

Any questions regarding this document should be directed to:

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NOTICE

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