OPERATIONAL INSTRUCTIONS

- ENGLISH - ORIGINAL INSTRUCTIONS

Read these instructions carefully before you attempt to use this product. Only qualified engineers/electricians suitably trained should undertake the installation and commissioning of this product.

USE OF PRODUCT

- * Wear eye protectors.
- * This product must only be used for the purpose of pumping/evacuating air.
- * Do not pump or evacuate any other gases or liquids.
- * The performance of the product will be adversely effected at high altitudes.
- * This product must be protected from inclement weather. It is not suitable for exterior use.
- * Do not stay in line with the air stream.
- Do not try to obtain higher pressures or vacuums than those recommended. Refer to technical data sheet supplied.

INSTALLATION

- * Refer to the technical sheet supplied for full technical specification.
- * Only qualified electricians should undertake the wiring of the electric motor.
- * The wiring of the electric motor should be made in accordance with local electrical regulations.
- * Check that the mains supply voltage is correct for the product - see nameplate. Contact the factory immediately if the voltage conditions are different.
- Do not touch the product during and just after operation as all parts of the product get very hot
- * Do not lubricate any part of this product.
- * Do not install with pipes that are smaller than the size at the head ports.
- * Fit a recommended filter/muffler to the inlet/exhaust port.

MOUNTING

* Mount the product in the horizontal plane using anti-vibration mounts. Contact factory for details.

INITIAL STARTING AND PUTTING INTO SERVICE

- Wear eye protectors.
- * Do not stay in line with the air stream.
- * The product will start as soon as the electricity is switched "ON".

SHUTDOWN AND STORAGE

- * Turn the electricity supply "OFF".
- Vent all pressure/vacuum from the product and/or system.
- * Disconnect the product from the pipework.
- * Do not stay in line with the air stream.
- * Turn the electricity supply "ON" and run the product open to atmosphere for approximately 15 minutes.
- * Leave the product to cool down.
- * Turn the electricity supply "OFF" and disconnect the motor from the electrical supply.
- * The unit is now ready for storage.

PRODUCT FAILURE

Should the product fail to operate for any reason:

- Disconnect the electricity supply.
- * Do not attempt to dismantle any part of the product before the electricity is disconnected.
- * Refer to the Trouble Shooting Guide.
- Contact the factory or distributor for further advice.
- * When the fault has been rectified the product will operate as soon as the electricity supply is switched "ON".

MAINTENANCE & SERVICE

- Switch the electricity supply "OFF" and isolate the product.
- Vent all pressure/vacuum from the product.
- * Inspect inlet filter/exhaust muffler elements and replace when necessary.
- * Filters will become blocked quickly in dirty environments. Establish service periods by checking condition after 200 hours.
- * Connect electricity supply and switch "ON".
- * The product will start immediately.

Service kits are available, follow the instructions supplied with the kit. Should the product require more than a maintenance service it is recommended you contact the manufacturer or authorised distributor.

WARRANTY

Techno Takatsuki Co., Ltd. (hereinafter referred to TTC) finished products, when properly installed and operated under normal conditions of use, are warranted by TTC to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase from TTC or Hiblow EU or an authorised TTC Representative or Distributor. In order to obtain performance under this warranty, the buyer must promptly (in no event later than thirty (30) days after discovery of the defect) give written notice of the defect to TTC, 8-16 Hatcho-Nishimachi, Takatsuki, Osaka, 569-0095 Japan or an authorised Service Centre (unless specifically agreed upon in writing signed by both parties or specified in writing as part of a TTC OEM Quotation). Buyer is responsible for freight charges both to and from TTC in all cases.

This warranty does not apply to electric motors, electrical controls, and gasoline engines not supplied by TTC. TTC's warranties also do not extend to any goods or parts which have been subjected to misuse, lack of maintenance, neglect, damage by accident or transit damage.

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Unauthorised extensions of warranties by the customer shall remain the customer's responsibility.

CUSTOMER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF TTC PRODUCTS FOR CUSTOMER'S USE OR RESALE, OR FOR INCORPORATING THEM INTO OBJECTS OR APPLICATIONS WHICH CUSTOMER DESIGNS, ASSEMBLES, CONSTRUCTS OR MANUFACTURES.

This warranty can be modified only by authorised TTC personnel by signing a specific, written description of any modifications.

TROUBLE SHOOTING GUIDE

Effective 01/01/2004

Possible Reason	<u>Low</u> Pressure	<u>Low</u> Vacuum	<u>Will</u> Not Start	Abnormal Sound
Dirty Filter	X			
Damaged Valves	X	X		X
Blocked Line	X	X		
Not Wired Correctly			X	
Hose Leak	X	X		
Damaged Diaphragm				X
Damaged Electrical Wire			X	

