

**SHIPPING DOCUMENT
FOR
GAS-VAK J-302W**

REQUIRED	ITEM	SHIPPED
1	Motor Housing	
2	Atmospheric Equalizers	
2	Wall Mount Balancing Valves	
1	Exhaust Kit 2"	
1	Flow Meter	
1	Hardware Kit: (Consists of):	
	4 Mounting Screws 6 x 3/4"	
	4 Anchors (Blue)	
	2 Set Screws (Self-tapping)	
	2 Clamps (for Atmospheric Equalizers)	
	2 Adapters (22mm x 19mm)	
6'	Tubing (19mm) Blue – AE to pop off valve	
15'	Tubing (22mm) White – AE to Balancing Valve	
1	Set of Instructions	
1	Warranty Card	

Packed By: _____ Date Packed: _____ Serial Number: _____

PLEASE RETURN WARRANTY CARD FOR VALIDATION

Have any questions please contact:

**GAS-VAK
54514 ROSA ROAD
BANDON, OR 97411
541-347-5414**

GAS-VAK
54514 ROSA ROAD
BANDON, OREGON 97411
(541) 347-5414

IMPORTANT NOTICE

To Whom It May Concern:

RE: J-302 exhaust direction

If it is necessary to change the direction of the exhaust of the J-302 motor housing, that normally exits straight out the back, follow these simple directions.

Mount the motor housing away from the wall exposing the exhaust adapter so a two inch 90 degree fitting can be installed. This fitting then may be moved in any direction.

The unit may be mounted on shelf brackets to allow access to the rear of the unit. The unit may be screwed to the bracket using sheet metal screws. Care should be taken to avoid drilling or screwing into the wiring harness.

Your Gas-Vak scavenger system is a closed system, therefore, the power unit may be mounted in any direction other than up-right.

If you have any questions give us a call at the above number.

Thanks

John D. Kight
Chief Engineer

**INSTALLATION AND OPERATING
INSTRUCTIONS
FOR
GAS-VAK® MODEL J-302W**

Before installation is started it is advisable to check all local building and electrical codes. Your **GAS-VAK®** system operates from standard household electrical power. This current can still cause serious damage and injury if not installed properly. Whenever servicing you **GAS-VAK®** equipment, be sure electrical power is turned **OFF**.

MOTOR HOUSING

In **GAS-VAK®** Model J-302W we provide one attractive housing for the motor and fan. The unit is protected by a one-amp fuse (little fuse 3AG) located on the control panel, along with an on/off switch. A pilot lamp is also located on the control panel to indicate system operation.

The motor housing is designed to be mounted on the inside of an outside wall with the exhaust passed directly through the wall to the outside from the rear of the unit. If the power unit cannot be mounted on an outside wall the exhaust may be extended up to 100 feet in any direction to reach the outside. Several drawings are provided to assist you in mounting the unit, with specific instructions on drilling an exhaust hole through your wall. This housing is provided with a six-foot electrical cable for easy connection to a convenient outlet. A switchable outlet may be installed to service the power unit. The switch with a pilot lamp can be located in a convenient area for remote on/off operation. **GAS-VAK®** provides equipment for remote operation of your power unit. For further information please contact our customer service dept.

For installing motor housing on a wall. First, remove the six screws from the front panel. Now let the front panel hang by the cable harness while you secure the cabinet to the wall with the screws and anchors provided. Next, align the holes in the front panel with the holes in the cabinet and install all the screws. **CAUTION; DO NOT PICK UP UNIT BY FRONT PANEL WHILE REMOVED FROM CABINET.**

Care should be exercised when selecting a location for the **GAS-VAK®** motor housing. Our equipment is quite capable of operating in moderate temperature, but an unventilated area in the summertime can reach temperature that is excessive and unacceptable. **EXTREME CAUTION** should be considered before any decision is made to mount the unit in the attic.

EXHAUST

GAS-VAK® provides a two-inch PVC exhaust kit with each system consisting of one 90-degree ell with a screen installed. For installation of the exhaust plumbing, refer to drawing "B". First, **PRESS FIT ONLY (DO NOT CEMENT)** a 2-inch PVC coupling onto the exhaust flange at the rear of the motor housing. Next, measure, cut and **CEMENT** a short length of PVC pipe into this coupling, the outside end should extend one inch beyond the outside surface of the building. Last, **CEMET** the 90-degree fitting onto the pipe and caulk around the pipe with a material for exterior use and one that ill receive paint.

Wherever you decide to vent you system, care should be taken not to vent the gas in an area where there are openings back into the building. In some states and counties, the building code requires the exhaust be extended above the roofline. Please check with your building department if you are not sure of the regulation.

INPUT PLUMBING AND EXHAUST PLUMBING

All input plumbing is standard 1 ½ inch PVC schedule 120 or 40. However, any schedule pipe may be used. The exhaust plumbing is standard 2 inch PVC pipe. **GAS-VAK®** does not supple this material, as it is readily available at your local hardware store. However, we do provide a list of material that will help you install you **GAS-VAK®** system. This list of material is sufficient for most installation of our basic system, but additional material will be required for more sophisticated installations. When installing the 1 ½" PVC input plumbing, be advised that his input pipe may be installed in any direction, and runs of up to 300 feet are possible. It is imperative that you **DO NOT** cement this input pipe to the motor housing. Again, (**DO NOT CEMENT**). If for some reason the motor should ever need service it would be next to impossible to remove it from the wall if you cemented the input and exhaust connections. Also, special instructions are included for the installation of fitting that will secure the balancing valve, as one or both ends may not require cementing. A setscrew is provided for securing and fitting to the pipe after proper alignment of the balancing valve is made. For installations where the building codes require copper pipe, it is recommended that 1 ¼" type "M" pipe be used. It is not necessary to solder each joint together as there is no pressure or vacuum present in the system. Just apply a liberal amount of GE sealant to the joint then press the pipe into the fitting, then install a self-tapping setscrew.

BALANCING VALVE WALL MOUNT

The **GAS-VAK** wall mount balancing valve should be mounted as close to the anesthetic machine as possible; and should be mounted at a convenient height from floor to allow operation.

Extend the 1½-inch PVC main input pipe to a spot over the wall where the balancing valve will be located. Next, extend a ¾ inch PVC pipe down the inside of the wall, and after cutting a 6" square hole in your drywall, enlarge the center of the upper edge to facilitate cementing the ¾ inch pipe to the discharge connector on the box. **NOW**--connect the ¾ inch pipe to the 1½-inch main line. Mounting flanges are provided, and after the installation is complete, install the finished flange.

BALANCING PROCEDURES.

It is important to balance the entire system after installation is complete. This is a one-time procedure. When balancing the system using our flow meter connect it to the 22mm connector marked "Input" keep the flow meter in the up-right position and adjust the valve handle until the little ball reads mid-scale, or 20 LPM. Repeat this procedure on each balancing valve down the line.

GAS-VAK® ATMOSPHERIC EQUALIZER

Your **GAS-VAK®** Atmospheric Equalizer is designed to be mounted on your anesthetic machine, at any location as long as it is in the up right position, see drawing (C). One stainless steel clamp is provided for this purpose. For anesthetic machines with a standard 19mm pop off valve proceed as follows. Using the three-foot length of 19mm hose provided, connect the gas input on the **GAS-VAK®** Atmospheric Equalizer (the top port) to your pop-off valve of the anesthetic machine or the scavenger output on the non-rebreathing circuit. Next connect the discharge on the Atmospheric Equalizer (the bottom port) to the **GAS-VAK®** Balancing Valve, a seven-foot length of 22mm tubing is provided for this purpose. For anesthetic machines with the old pop-off valves, it may be necessary to contact the individual who regularly works on your anesthetic machines to provide assistance or contact Bickford Veterinary Anesthesia Equipment at (716)-652-1590. Also contact MedTec at (800) 348-1997 for new pop-off valves for older machines. You may wish to contact GAS-VAK for further technical assistance.

The patient vacuum control, located at the top of the **GAS-VAK®** Atmospheric Equalizer, controls the amount of vacuum present in the system. This Atmospheric Equalizer isolates the patient from the vacuum equipment. This equipment is calibrated at the factory to provide adequate scavenging without emptying the breathing bag, with an airflow rate of approximately 20 LPM at .25 Hg. measured at the input to the control balancing valve. This column of air passing over the waste gas input port creates a siphoning action to the pop-off valve. This is controlled by the amount of ambient air entering the top of the Atmospheric Equalizer. This ambient dry air purges the system and prevents the growth of algae and/or cultures in your evacuation system.

When utilizing the equipment for the first time after installation and balancing of the system, it is best to start with the patient vacuum control in the LO position. For 99 percent of all your medical procedures this control will be in this position. Even with the control in this position your Atmospheric Equalizer will provide less than 100 MLPM of air movement through the system. This small quantity of air movement is quite sufficient to insure proper evacuation of your waste gases. However, experience with the equipment will dictate the proper setting.

**INSTALLATION SUPPLIES FOR
MODEL J-302W**

QTY	ITEM
80'	1 ½" PVC pipe Schedule 120 or 40
12	90 degree bends 1 ½" PVC slip/slip
2	PVC T 1 ½" slip/slip
1	Cap 1 ½" PVS slip DO NOT CEMENT
8	Couplings 1 ½" x ¾" PVC slip/slip
2	Bushings 1 ½" x ¾" PVC slip/slip
6	Clamps Pipe 1 ½"
25'	Wire 16 gauge Black plumbers
1	Can of cement
8	Sheet metal screws #6 self-tapping
1	Box patching plaster
1	Tube exterior caulking
1'	2" PVC pipe schedule 40 (exhaust cut to fit)
1	2" PVC coupling slip/slip

TOOLS REQUIRED – READ INSTRUCTIONS

½" Drill with drill index
 ¾" Rotary Hammer (for Concrete Wall)
 5/8" Drill carbide tip at least 10" long
 ¼" Drill carbide tip 6" long
 Screw driver set (Phillips and Slot)
 Pliers (Lineman) wire cutters
 Hammer 16 oz.
 Drills (Flat wood and drywall)
 Hacksaw (Medium blade)
 Small Level
 Tri-square
 Drill Motor portable with screwdriver blade
 Misc. screws sheet metal various lengths
 Work light and extension cord
 Measuring Tape
 Wire crimper pliers and Knife

It is not necessary to cement all joints together, just tap the fitting with a hammer for snug fit, align, and then insert setscrew.

DO NOT CEMENT the input or exhaust plumbing into the motor housing, press fit only.

If you have any questions please call **GAS-VAK®** at 541-347-5414.

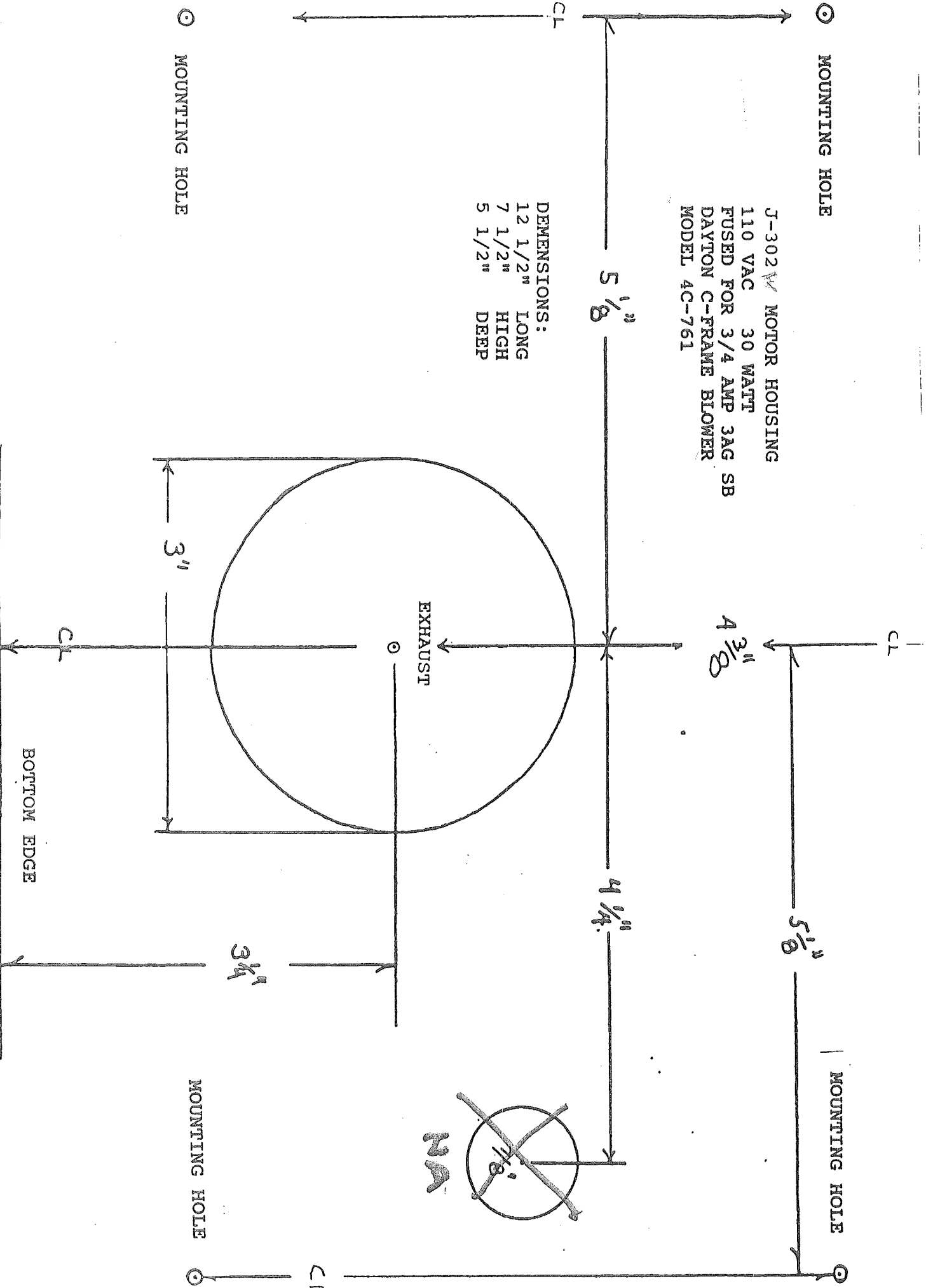
○ MOUNTING HOLE

J-302 ^W MOTOR HOUSING
110 VAC 30 WATT
FUSED FOR 3/4 AMP 3AG SB
DAYTON C-FRAME BLOWER
MODEL 4C-761

DEMENSIONS:
12 1/2" LONG
7 1/2" HIGH
5 1/2" DEEP

○ MOUNTING HOLE

MOTOR HOUSING
MOUNTING TEMPLATE



REAR OF BOX AS SEEN FROM INSIDE