WAG MANAGEMENT SYSTEM
Models:
07-8908646 – EVAC-4
07-8918181 – EVAC-2

User Instructions
This product is specifically designed to be used in veterinary and research applications.

WAG Management System Description
The WAG Management System is a waste gas recovery system all contained in one unit that is simple to set up and operate. It is intended to be used in veterinary applications and research facilities to remove waste anesthesia gas from the facility and, as such, is only recommended for use by individuals who are qualified in common anesthesia and waste gas removal techniques and practices.

USING THE WAG MANAGEMENT SYSTEM:

CAUTION: CHECK ALL CONNECTIONS TO EQUIPMENT TO MAKE SURE THEY ARE SECURE BEFORE STARTING ANY PROCEDURES. OF PARTICULAR NOTE ARE THE CARRIER GAS CONNECTIONS AND THE VAPORIZER FILLER CAPS AS PRESSURES ARE PRESENT IN THESE AREAS.

ATTENTION : vérifiez toutes les connexions à l’appareil pour vous assurer qu’ils sont en sécurité avant de commencer tout procédures. De notera en particulier sont les connexions de gaz porteur et les bouchons de remplissage du vaporisateur, puisque les pressions sont présents dans ces zones.

CAUTION: THIS SYSTEM CAN WEIGH UP TO 35 KG, DEPENDING ON CONFIGURATION. EXTREME CARE SHOULD BE TAKEN WHEN SETTING UP THE SYSTEM AND/OR MOVING TO A DIFFERENT LOCATION. IT IS RECOMMENDED THAT ANY MOVEMENT OF THE SYSTEM BE PERFORMED BY 2 PEOPLE LIFTING FROM OPPOSITE ENDS OF THE SYSTEM.

ATTENTION: Ce système peut peser jusqu’à 35 kg, selon la configuration. grand soin devraient être prises lors de la configuration du système et/ou lors du déplacement à un autre emplacement. IL EST RECOMMANDE QUE TOUT MOUVEMENT DU SYSTÈME ÊTRE EFFECTUÉ PAR 2 PERSONNES soulevant à partir des extrémités opposées du système.
CAUTION: THE SAFETY OF THE INSTALLATION OF THIS EQUIPMENT INTO ANY SYSTEM IS THE RESPONSIBILITY OF THE ASSEMBLER OF THE SYSTEM.

ATTENTION : LA SÉCURITÉ de l'installation de cet équipement dans un système est la RESPONSABILITÉ de L'assembleur du SYSTÈME.

THIS SYSTEM SHOULD BE SET UP IN A CLEAN AND STABLE ENVIRONMENT ONTO A TABLE OR WORK SURFACE CAPABLE OF SAFELY HOLDING THE WEIGHT OF THE SYSTEM AND ALLOWING ACCESS TO ALL OF THE INCLUDED ACCESSORIES FOR US. NO SPECIFIC MOUNTING REQUIREMENTS ARE GIVEN. AN ADEQUATE SPACE AROUND THE PERIMETER OF THE SYSTEM OF APPROXIMATELY 5 CM SHOULD BE ALLOWED FOR PROPER VENTILATION. DO NOT BLOCK THE FAN HOLES ON THE BOTTOM OF THE UNIT THAT ALLOW FOR COOLING OF THE INTERNAL PUMP.

THIS SYSTEM SHOULD BE ROUTINELY CLEANED TO MAINTAIN THE SYSTEM IN PROPER OPERATIONAL ORDER. ALL SURFACES AND ACCESSORIES CAN BE WIPE WITH COMMON CLEANERS OR DISINFECTANTS. PATTERSON RECOMMENDS THAT ACCEL TB DISINFECTANT BE USED. THIS DISINFECTANT IS AVAILABLE FROM PATTERSON AS PART NUMBER 07-8826321.

IN THE BOX-

Please note: Use either 19mm (blue corrugated) EVAC tubing (no adaptors necessary), or ¼” ID Blue EVAC tubing with 6mm Male x 15mm Male adaptors at both ends to connect all fresh gas delivery accessories (Hooded Induction Chamber, PosiVac NRB System, SCOOP, Rat-Taxic) to the EVAC-4. Each Patterson Scientific Fresh Gas Delivery device has an EVAC component that is connected to the EVAC-4. Additional tubing/adapters available at extra cost (see part numbers below).

S'il vous plaît noter: Utilisez soit 19mm (bleu ondulé) tube EVAC (pas d'adaptateurs nécessaires), ou ¼” ID Bleu EVAC tube avec 6mm Homme x 15mm Homme adaptateurs aux deux extrémités pour raccorder tous les
accessoires de livraison de gaz frais (Hooded Induction Chamber, PosiVac NRB System, SCOOP, Rat-Taxic) à l'EVAC-4. Chaque dispositif de livraison de gaz frais de Patterson Scientific a une composante d’EVAC qui est connecté à l’EVAC-4. Tubes / adaptateurs additionel sont disponibles à un coût supplémentaire (voir références ci-dessous).

19mm (blue corrugated) Tubing PN: 07-8914311 (available in any length)
¼” ID Blue EVAC Tubing PN: 07-8914865 (available in any length)
6mm Male X 15mm Male Adapter PN: 07-8007333 (available in any quantity)
Nalgene quick disconnects PN: 07-8915244 (available in any quantity)
Patient elbow adapter PN: 07-8914741 (available in any quantity)

SET UP:

1. Place EVAC-4 on level surface and make sure Main Power Switch, Accessory vacuum Toggles and Full Evac Toggle are in the “OFF” position.
2. If discharging the waste from the EVAC-4 into Patterson’s WAG Activated Charcoal Canisters, connect WAG canister to Discharge Outlet using either 19mm or ¼” ID tubing provided.
   a. The WAG canister does not need to be in close proximity to the EVAC-4.
3. If discharging the waste from the EVAC-4 into a non-recirculating vent, snorkel, downdraft or chemical fume hood, place tubing connected to Discharge Outlet at least 6 inches into vent. Please note that a BSL Safety Cabinet nor Cage Changing Station is not suitable for depositing into and managing WAG’s (Waste Anesthetic Gases).

PLEASE NOTE: IF USING ACTIVATED CHARCOAL CANISTERS TO CAPTURE THE WASTE GAS FROM THE DISCHARGE OF THE EVAC-4, PATTERSON’S WAG CANISTERS ARE THE ONLY ACCEPTABLE ACTIVATED CHARCOAL CANISTER TO USE WITH THE EVAC-4.

S’IL VOUS PLAÎT NOTE: SI VOUS UTILISEZ cartouches de charbon activés pour capturer les gaz de rebut de la décharge de l’EVAC-4, les WAG CANISTERS de Patterson sont les seuls ACCEPTABLEs cartouches de charbon actifs à utiliser AVEC L’EVAC-4.

- No other commercially available activated charcoal canisters have been tested to handle the high vacuum flow rate created by the EVAC-4. Other canisters may allow waste gases to pass directly through the canister and into the environment.

   Pas d'autres cartouches de charbon actifs disponibles dans le commerce ont été testés pour gérer le flux élevé de vide créé par l'EVAC-4. D'autres conteneurs peuvent permettre aux gaz de combustion traversent directement la boîte métallique et dans l'environnement.

4. Make sure EVAC-4 is plugged into an appropriately grounded electrical outlet using ONLY the provided power cord. If this power cord is lost or damaged order part number 07-8905710 from Patterson. The EVAC 4 unit runs on 115VAC, 50/60Hz. If the operating voltage is different at your location you will need
to use ONLY the provided step down transformer with the proper adapter to interface with your local electrical outlet. If these items are lost or damaged contact Patterson to order the proper step down transformer and adapters.

5. Connect hose/tubing from waste gas outlet of Patterson’s Hooded Induction Chamber to the Full Evac Port.

6. Connect hose/tubing from Patterson’s Posi-Vac NRB System, or any other accessory (SCOOP, Rat-Taxic, etc.) to the accessory ports labeled “A”, “B”, and/or “C”.

USE:

1. When ready to anesthetize subject, turn Main Power Switch of EVAC-4 to “ON”- this will turn on the negative flow generating pump inside the EVAC-4. You should hear the pump running.

2. **Before turning on fresh anesthetic gas flow**, place subject into the induction chamber, provide O2 or other carrier gas, and switch the Full Evac Power Toggle to the “ON” position.
   a. This will open the valve and allow vacuum to pull through the “Full Evac” port.
   b. Induction chamber vacuum does not need to be metered nor attenuated - the higher the negative flow (vacuum) the lower the risk of exposure to anesthetic.

3. With the Sliding Top of the Hooded Induction Chamber closed, turn on vaporizer to desired % concentration of anesthetic, and allow fresh anesthetic gas flow to enter the Hooded Induction Chamber.
   a. Maximum fresh gas flow rate for induction chamber is 2 LPM.

4. When ready to move the anesthetized subject from the induction chamber to the nosecone or other accessory, turn the Accessory Power Toggle associated with the accessory you want to use to the “ON” position. Leave the vacuum for the induction chamber “ON”.
   a. This will start vacuum to the accessory port of choice.
   b. Anesthetic gas can be turned “ON” to this accessory before you move the subject as long as the Accessory Power Toggle for that accessory is “ON.”

5. Use the knob on the Vacuum Control Flowmeter associated with the accessory port you are using and adjust the vacuum flow rate to 10-15 LPM.

6. Remove subject from Induction Chamber and place subject on the accessory of choice, and turn “ON” fresh gas flow to that accessory if you have not already done so. FRESH GAS FLOW TO ANY ACCESSORY (except Hooded Induction Chamber) SHOULD NOT EXCEED 1 LPM.

7. Close the lid of the induction chamber.

8. Turn “OFF” fresh gas supply to Hooded Induction Chamber (you may need to re-adjust accessory flowcontrol to compensate)

9. Turn toggle for Full EVAC to Induction Chamber to Off.

10. Keep the Accessory Power Toggle switches in the “ON” position with the Vacuum Control Flowmeters set while any accessories are in use.

11. When finished with procedures, make sure all Toggles and Main Power Switch are in the “OFF” position. You do not need to turn the flowmeters to the “OFF” position, you can leave them in the set positions.
IMPORTANT NOTES AND ADDITIONAL INFORMATION:
NOTES IMPORTANTES ET INFORMATIONS COMPLÉMENTAIRES:

- Only specifically designed Hooded induction chambers, PosiVac nosecones and other accessories are to be used with any active vacuum waste gas system.

  Seulement chambres à induction spécialement conçues à capuchons, cônes de nez de PosiVac et autres accessoires doivent être utilisés avec tout système de gaz d'échappement de vide actif.

- Nosecones/facemasks with diaphragms that seal around a subject's muzzle should not be used with the EVAC-4.

  Cônes de nez / masques avec des diaphrages qui scellent autour du museau d'un sujet ne doit pas être utilisé avec l'EVAC-4.

- Induction chambers that are not Hooded should not be used with the EVAC-4.

  Chambres à induction qui ne sont pas à capuchon ne doivent pas être utilisés avec l'EVAC-4.

- Use of incorrect accessories could result in injury to the subject, inferior anesthetic quality, and/or WAG’s could potentially be released into the workplace.

  L'utilisation d'accessoires incorrects peut entraîner des blessures au sujet, anesthésique de qualité inférieure, et / ou WAG pourrait être lâchés dans le milieu de travail.

Note: For effective waste gas removal, the “Full EVAC” port used with the induction chamber can only be used in conjunction with ONE Accessory Power Toggle and Port turned “ON” at the same time. Adding any more Accessory Ports while the “Full EVAC” is on will potentially allow waste gases to escape into the environment.

  Pour une élimination efficace des gaz d'échappement, le port “Full EVAC” utilisé avec la chambre à induction ne peut être utilisé en conjonction avec UNE Accessoire électricité bascule et port réglé sur "ON" dans le même temps

- Minimum negative flow rates for nosecones and other accessories is 10 LPM negative flow. The negative flow is adjusted with the Vacuum Control Flowmeters.

  Le débits d'écoulement négatifs minimales pour pointes coniques et autres accessoires est 10 LPM flux negatif. Le flux négatif est ajustée avec les débitmètres de contrôle du vide

- Less than 10 LPM may allow waste gases to escape into the environment.
Moins de 10 LPM peut permettre à des gaz résiduaires d'échapper dans l'environnement.

**Note:** All three Accessory Ports (10 – 15 LPM negative flow for each port) can be used simultaneously with low risk of exposure as long as the Full Vacuum for the Induction Chamber is not being used.

**Remarque:** Tous les trois ports d'accessoire (10 - 15 LPM flux négatif pour chaque port) peuvent être utilisés simultanément avec un faible risque d'exposition tant que le vide total pour la chambre à induction n'est pas utilisés.

If you have additional questions and/or concerns, please visit Patterson’s website:  
[www.pattersonscientific.com](http://www.pattersonscientific.com) or call 800-877-8989
Specifications:

System Specifications:
- Operating Temperature Range: 15° - 35° C
- Operating Humidity Range: 5% - 60% RH non-condensing
- Operating Altitude: Sea Level to 3000m ASL
- Voltage: 115VAC
- Frequency: 50/60Hz
- Amperage: 2A Max
- Fuse: Fuse GMA Fast Acting 2A 250V 5mm x 20mm
- IP Rating: IP22
- Weight: 22 lbs. (10 kg.)
- Dimensions: 8” (20cm) W, 14” (35.5cm) H, 11” (28cm) D