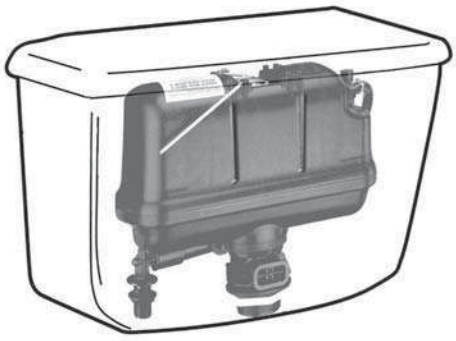
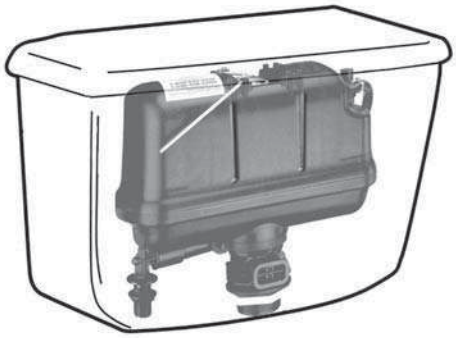
Owner's Operation & Installation Guide

PF1603PAWH



PF1612PA



PF1612PA

Owner's Operation and Installation Guide for PF1612PA Series

Important: Do not return to store where purchased. Please read the entire manual before attempting to make any adjustments or repairs.

WARNING:

- When replacing components on the *FLUSHMATE®* Flushometer-Tank System, make certain that the water supply valve is turned off and the toilet has been flushed to relieve pressure in the *FLUSHMATE®* tank.
- USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS, THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR *FLUSHMATE®* WARRANTY. The exterior of the tank and the entire bowl can be cleaned following the manufacturer's recommendations or in the same fashion as any other toilet.
- *FLUSHMATE®* Flushometer-Tank Systems are designed to be used with a cold water supply only and use of a tempered or hot water supply will void your warranty.

Guía de instalación y operación del propietario para las series PF1612PA

Importante: No lo devuelva a la tienda donde lo adquirió. Lea todo el manual antes de intentar realizar cualquier ajuste o reparación.

ADVERTENCIA:

- *Al reemplazar componentes del sistema de flujómetro-tanque FLUSHMATE®, asegúrese de que la válvula de suministro de aire esté cerrada y el excusado se haya descargado para liberar la presión del tanque FLUSHMATE®.*
- *EL USO DE LUBRICANTES CON BASE DE PETRÓLEO O PRODUCTOS DE LIMPIEZA CORROSIVOS QUE CONTENGAN CLORO, TALES COMO EL BLANQUEADOR CASERO, BLOQUES O TABLETAS PARA EL AGUA O DESINFECTANTES QUE SE APLIQUEN DENTRO DEL TANQUE DE DEPÓSITO DE PORCELANA, ANULARÁN LA GARANTÍA DE SU FLUSHMATE®. La parte exterior del tanque y toda la taza se pueden limpiar siguiendo las recomendaciones del fabricante o del mismo modo que cualquier otro excusado.*
- *Los sistemas flujómetro-tanque FLUSHMATE® están diseñados para usarse con un suministro de agua fría, y el uso de un suministro de agua templada o caliente anulará su garantía.*

Guide d'installation et de fonctionnement des séries PF1612PA

Important : Ne pas retourner le produit au magasin où vous l'avez acheté. Veuillez lire le manuel en entier avant de tenter de faire des réglages ou des réparations.

AVERTISSEMENT :

- Lors du remplacement de composants du système de réservoir à robinet de chasse *FLUSHMATE®*, assurez-vous d'abord de fermer le robinet d'alimentation et de déclencher ensuite la chasse afin d'atténuer la pression dans le réservoir *FLUSHMATE®*.
- L'UTILISATION, À L'INTÉRIEUR DU RÉSERVOIR DE RÉTENTION EN PORCELAINE, DE LUBRIFIANTS À BASE DE PÉTROLE OU DE PRODUITS NETTOYANTS CORROSIFS QUI CONTIENNENT DU CHLORE, COMME LES JAVELLISANTS DOMESTIQUES, LES PASTILLES ET BLOCS NETTOYANTS OU LES DÉSINFECTANTS, ANNULERA VOTRE GARANTIE *FLUSHMATE®*. Vous pouvez nettoyer l'extérieur du réservoir et la cuvette entière selon les recommandations du fabricant ou de la même façon que vous nettoyez toute autre toilette.
- Les systèmes de réservoir à robinet de chasse *FLUSHMATE®* sont conçus pour être utilisés avec une alimentation en eau froide seulement. L'utilisation d'eau tiède ou chaude annulera votre garantie.

Operation

All pressure-assist toilets get their energy from the water supply line. It is important to have sufficient pressure at the supply. The minimum line pressure is 25 psi for 1.0 gpf.

Fig. 1

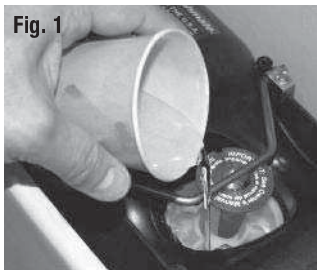


Fig. 2

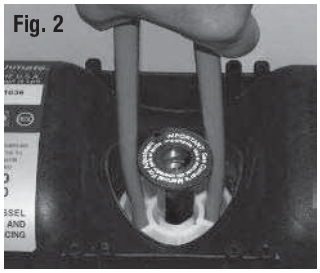


Fig. 3

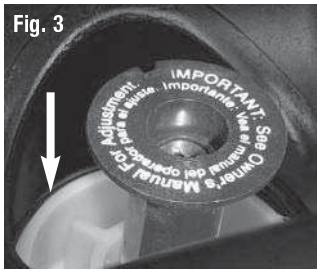


Fig. 4

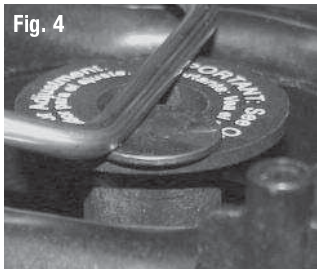
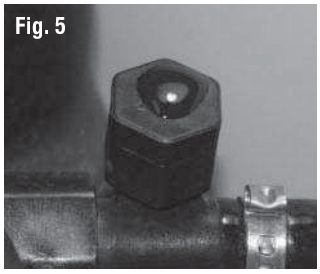


Fig. 5



Step 1. Check Flush Cartridge

A. Turn off water supply and flush toilet.
B. Pour water onto top of cartridge (Fig. 1) and turn on water.
C. Watch for air bubbles. Consistent flow of bubbles indicates cartridge needs to be replaced. No bubbles visible, move on to Step 4.

Step 2. Flush Cartridge Replacement

A. Turn off water and flush the toilet.
B. Use the handle end of pliers (Fig. 2) to unscrew the cartridge from the vessel.
C. Drop in new cartridge and screw in until one female thread (Fig. 3) of vessel is showing.
D. Turn on water. Continue to screw in cartridge slowly, 1/8 to 1/4 turn increments until water stops running into the bowl and tank pressurizes.

Step 3. Actuator Adjustment

A. Start by loosening the setscrew in the center of the actuator. Adjust the height of the actuator by screwing it up or down. There should be a gap (Fig. 4) (about the thickness of a penny) between the rod and actuator when gently lifting the rod. When accomplished tighten the setscrew in the center of the actuator.

Step 4. Check Air Inducer

A. Place several drops of water over hole on top of air inducer and flush toilet (Fig. 5). If drop is vacuumed in, move onto step 6. If not, air inducer needs to be cleaned.

Step 5. Clean Air Inducer

A. Turn off water and flush toilet. Unscrew the cap of the air inducer (the smaller of the two caps) (Fig. 6).
B. Pull the duckbill out from the cap and clean it by gently squeezing it (Fig. 7) between your fingers under a flow of water. Inspect the lips of the duckbill. If they are deformed, the duckbill needs to be replaced.
C. Reassemble, insert the duct bill into the housing (Fig. 8) body and reinstall the cap to hand tight.

Step 6. Clean Inlet Screen

A. Clean the inlet screen by turning off the water supply, disconnecting the water supply line from the supply shank and removing the screen with a paper clip (Fig. 9).
B. Clean screen (Fig. 10) and replace.

Other Points to Remember

1. Pressure-assist toilets get their energy from the water supply.
2. All pressure-assist toilets get their energy from the water supply line. It is important to have sufficient pressure at the supply. The minimum line pressure is 25 psi for a 1.0 gpf system.
3. A blocked bowl or drain will affect the fixture's performance. To check for this, pour 2 to 3 gallons of water into the bowl. If the bowl accumulates water in it, this would indicate that something is blocking the bowl/drain. If you need additional help, please contact the manufacturer of the flushing system, or do a word search on "pressure-assist toilets" on the web.

Fig. 6

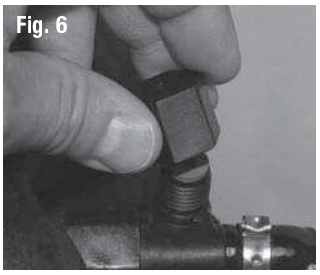


Fig. 7

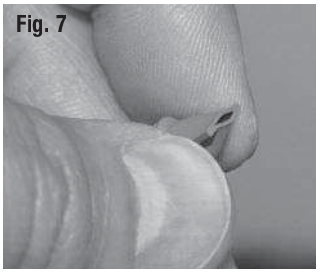


Fig. 8

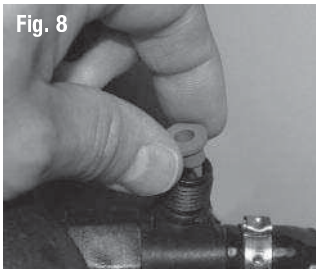


Fig. 9

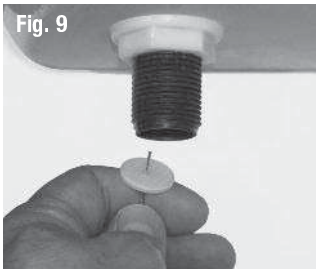


Fig. 10



Operación

Todos los excusados asistidos por presión obtienen su energía de la tubería de suministro de agua. Es importante tener presión suficiente en el suministro. La presión mínima de la tubería de agua para un sistema de 25 psi para un dispositivo de 1.0 gpf.

Fig. 1

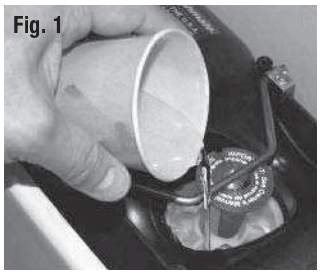


Fig. 2

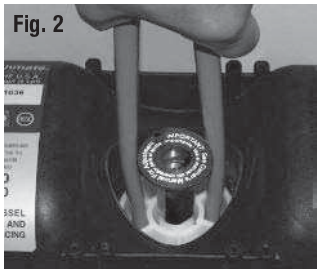


Fig. 3

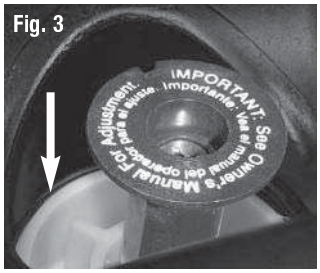


Fig. 4

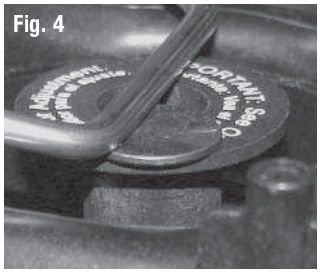
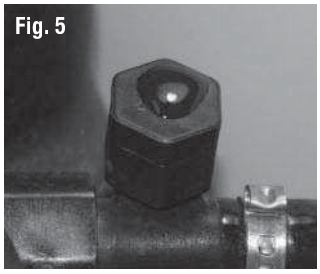


Fig. 5



Paso 1. Compruebe el cartucho de descarga

A. Corte el suministro de agua y descargue el excusado.
B. Vierta agua encima del cartucho (Fig. 1) y abra el agua.
C. Vea si hay burbujas de aire. Un flujo constante de burbujas indica que el cartucho debe sustituirse. Si no hay burbujas visibles, vaya al Paso 4.

Paso 2. Repuesto del cartucho de descarga

A. Cierre el agua y descargue el excusado.
B. Use el extremo del mango de las pinzas (Fig. 2) para desatornillar el cartucho de la vasija.
C. Deje caer un nuevo cartucho y atorníllelo hasta que se esté viendo una vuelta de rosca hembra (Fig. 3) de la vasija.
D. Abra el agua. Siga atornillando el cartucho lentamente, en incrementos de 1/8 a 1/4 de vuelta hasta que el agua deje de correr al lavabo y el tanque se presurice.

Paso 3. Ajuste del accionador

A. Empiece aflojando el tornillo de fijación del centro del accionador. Ajuste la altura del accionador atornillando para que suba o baje. Debe haber un huelgo (Fig. 4) (más o menos el grosor de una moneda pequeña) entre el vástago y el accionador cuando se levanta suavemente el vástago. Cuando termine, apriete el tornillo de fijación del centro del accionador.

Paso 4. Compruebe el inductor de aire

A. Coloque varias gotas de agua sobre el orificio que está en la parte superior del inductor de aire, y descargue el excusado (Fig. 5). Si la caída se absorbe por presión, vaya al Paso 6. Si no, será necesario limpiar el inductor de aire.

Paso 5. Limpie el inductor de aire

A. Corte el agua y descargue el excusado. Desatornille la tapa del inductor de aire (la más pequeña de las dos tapas) (Fig. 6).
B. Saque el pico de pato del tapón y límpielo oprimiéndolo suavemente (Fig. 7) entre los dedos bajo un chorro de agua. Inspeccione los labios del pico de pato. Si están deformados, debe reemplazar el pico de pato.
C. Vuelva a armar, inserte el pico de pato en el cuerpo de la carcasa (Fig. 8) y vuelva a instalar la tapa apretando sólo con la mano.

Paso 6. Limpie la pantalla de admisión

A. Limpie la pantalla de admisión cerrando el suministro de agua, desconectando el tubo de suministro de agua del vástago de suministro y retirando la pantalla con un clip para papeles (Fig. 9).
B. Limpie la pantalla (Fig. 10) y reemplácela.

Otros puntos que debe recordar

1. Los excusados asistidos por presión obtienen su energía del suministro de agua.
2. Todos los excusados asistidos por presión obtienen su energía de la tubería de suministro de agua. Es importante tener presión suficiente en el suministro. La presión mínima de la tubería de agua para un sistema de 25 psi para un dispositivo de 1.0 gpf.
3. Una taza o drenaje bloqueados afectará el desempeño del dispositivo.
   Para comprobar esto, vierta 2 ó 3 galones de agua en la taza. Si la taza acumula agua en su interior, esto indicaría que algo está bloqueando la taza o el drenaje.
   Si necesita más ayuda, comuníquese con el fabricante del sistema de descarga, o haga una búsqueda de las palabras “pressure-assist toilets” en la Web.

Fig. 6

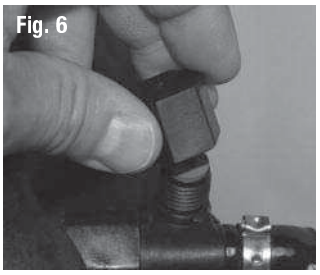


Fig. 7

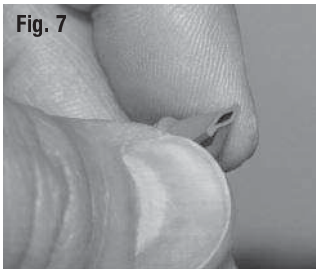


Fig. 8

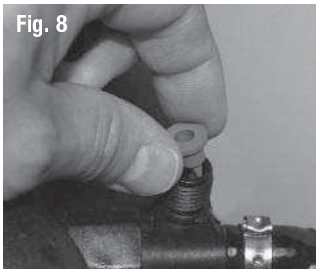


Fig. 9

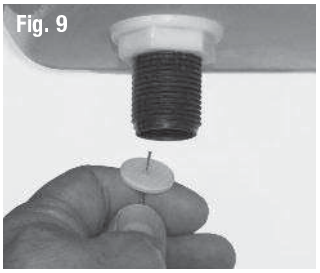


Fig. 10



Fonctionnement

Toutes les toilettes à pression tirent leur énergie du tuyau d'alimentation. Il est donc important d'avoir suffisamment de pression d'alimentation. La pression du tuyau d'alimentation pour un système à d'au moins 25 psi pour 1 gpc.

Fig. 1

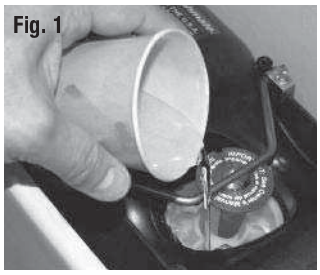


Fig. 2

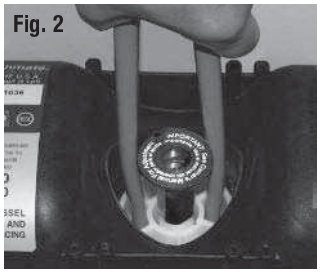


Fig. 3

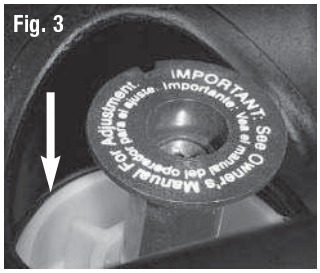


Fig. 4

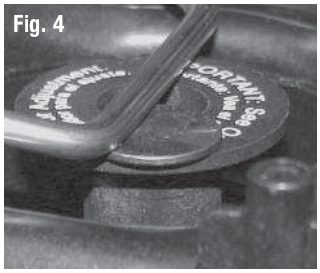
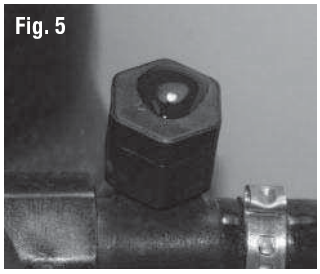


Fig. 5



Étape 1. Vérification de la cartouche de chasse

A. Fermez le robinet d'alimentation en eau, puis déclenchez la chasse.
B. Versez de l'eau sur le dessus de la cartouche (fig. 1), puis ouvrez le robinet d'alimentation en eau.
C. Vérifiez si des bulles d'air se forment. Un écoulement de bulles constant indique que la cartouche doit être remplacée. Si aucune bulle n'apparaît, passez à l'étape 4.

Étape 2. Remplacement de la cartouche de chasse

A. Fermez le robinet d'alimentation en eau, puis déclenchez la chasse.
B. Utilisez l'extrémité des manches d'une pince (fig. 2) pour dévisser la cartouche et la retirer du récipient.
C. Insérez la nouvelle cartouche, puis vissez-la jusqu'à ce qu'un filet femelle (fig. 3) du récipient apparaisse.
D. Ouvrez le robinet d'alimentation en eau. Continuez à visser lentement la cartouche en faisant un huitième ou un quart de tour à la fois, jusqu'à ce que l'eau arrête de s'écouler dans la cuvette et que la pression soit rétablie dans le réservoir.

Étape 3. Réglage de l'actionneur

A. Desserrez d'abord la vis de pression au milieu de l'actionneur. Réglez la hauteur de l'actionneur en le faisant pivoter vers le haut ou vers le bas. Il doit y avoir un espace (fig. 4) (environ de l'épaisseur d'une pièce d'un cent) entre le levier et l'actionneur quand on lève doucement le levier. Une fois le réglage terminé, resserrez la vis de pression au milieu de l'actionneur.

Étape 4. Vérification de la soupape d'entrée d'air

A. Versez plusieurs gouttes d'eau dans le trou sur le dessus de la soupape d'entrée d'air, puis déclenchez la chasse (fig. 5). Si les gouttes sont aspirées, passez à l'étape 6. Sinon, vous devez nettoyer la soupape d'entrée d'air.

Étape 5. Nettoyage de la soupape d'entrée d'air

A. Fermez le robinet d'alimentation en eau, puis déclenchez la chasse. Dévissez le capuchon de la soupape d'entrée d'air (le plus petit des deux capuchons) (fig. 6).
B. Retirez le bec de canard du capuchon, puis nettoyez-le en le pressant délicatement entre vos doigts (fig. 7) sous l'eau courante. Examinez les lèvres du bec de canard. Si elles sont déformées, vous devez remplacer le bec de canard.
C. Montez la soupape à nouveau en insérant le bec de canard dans le corps du boîtier (fig. 8), puis remettez le capuchon et vissez-le fermement à la main.

Étape 6. Nettoyage de la grille d'entrée

A. Pour nettoyer la grille d'entrée, fermez le robinet d'alimentation en eau, débranchez le tuyau d'alimentation en eau de la tige d'alimentation, puis retirez la grille à l'aide d'un trombone (fig. 9).
B. Nettoyez la grille (fig. 10), puis remettez-la en place.

Autres points à ne pas oublier

1. Toutes les toilettes à pression tirent leur énergie du tuyau d'alimentation.
2. Toutes les toilettes à pression tirent leur énergie du tuyau d'alimentation. Il est donc important d'avoir suffisamment de pression d'alimentation. La pression du tuyau d'alimentation pour un système être d'au moins 20 psi, et d'au moins 25 psi pour 1 gpc.
3. Une cuvette bloquée ou un drain bloqué influera sur la performance de l'appareil sanitaire. Pour vérifier s'il y a une obstruction, versez 2 ou 3 gallons d'eau dans la cuvette. Si l'eau s'accumule dans la cuvette, cela signifie que la cuvette ou le drain est bloqué. Si vous désirez obtenir de l'aide supplémentaire, veuillez contacter le fabricant du système de chasse d'eau ou faites une recherche sur Internet à l'aide des mots « toilettes à pression »

Fig. 6

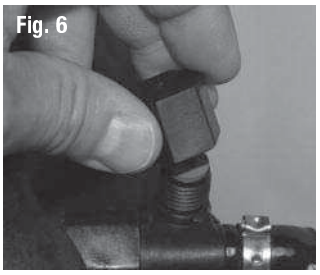


Fig. 7

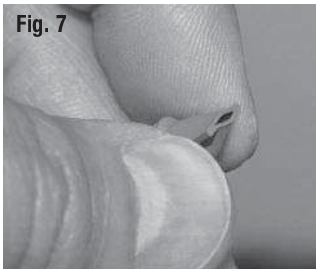


Fig. 8

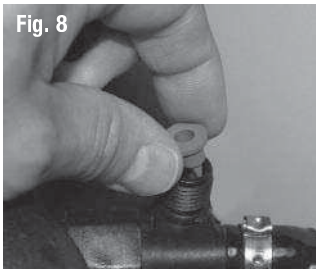


Fig. 9

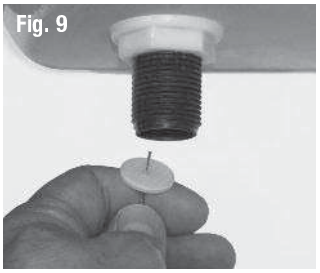


Fig. 10



Installation

Please follow the toilet manufacturer's installations instruction for installing the fixture. Note that the toilet requires a minimum water supply line pressure of 25 psi for a 1 gpf fixture. Before attaching, you should always flush the water supply lines.

After completing the installation, you are required to adjust the Cartridge Actuator (F). To adjust, make sure the water is turned on and the vessel is completely charged. The Actuator needs to be set at the proper clearance, 1/8" from either the Flush Rod or push button. To make this adjustment, hold the Actuator while loosening the Phillips setscrew in the center of the Actuator, and rotate the Actuator up (counterclockwise) or down (clockwise) until the proper clearance is obtained. See Figure 1 for clearance required for flush-handle fixture. Tighten setscrew after adjusting the Actuator.

Additional notes:

- You may be required to initially flush the toilet a few times to properly charge the system.
- Should your fixture develop a leak between the tank and bowl, please refer to the fixture manufacturer's installation instructions.

Instalación

Siga las instrucciones de instalación del fabricante del excusado para instalarlo. Observe que el excusado requiere un suministro de presión de la línea de agua para un dispositivo de 25 psi para un dispositivo de 1 gpf. Antes de instalarlo, siempre debe purgar las líneas de suministro de agua.

Después de finalizar la instalación, debe de ajustar el Accionador del Cartucho (F). Para ajustarlo, asegúrese de que el agua esté activada y la vasija esté totalmente cargada. El accionador tiene que ajustarse al huelgo correspondiente, a 1/8" de la varilla de descarga o del botón. Para hacer este ajuste, sostenga el accionador mientras afloja el tornillo de fijación de cruz del centro del accionador y gire el accionador hacia arriba (en sentido contrario al de las manecillas del reloj) o hacia abajo (en el sentido de las manecillas del reloj) hasta obtener el huelgo correcto. Véase la Figura 1 para conocer el huelgo necesario para el dispositivo de manija de descarga. Apriete el tornillo de fijación después de ajustar el accionador.

Notas adicionales:

- Es posible que sea necesario que primero descargue el excusado varias veces para cargar adecuadamente el sistema.
- Si su dispositivo desarrolla una fuga entre el tanque y la taza, consulte las instrucciones de instalación del fabricante del dispositivo.

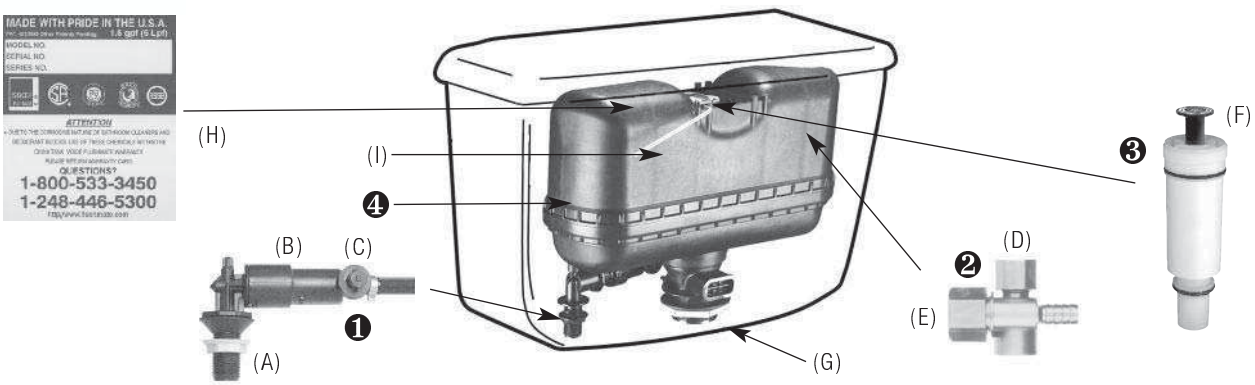
Installation

Veuillez installer l'appareil sanitaire en suivant les instructions d'installation du fabricant de la toilette. Prenez note que la pression du tuyau d'alimentation en eau de la toilette doit être d'au moins pour un appareil de et d'au moins pour un appareil de 1 gpc. Vous devez toujours évacuer l'eau des tuyaux d'alimentation en eau avant de les raccorder.

Une fois l'installation terminée, vous devrez régler l'actionneur de la cartouche (F). Pour le régler, assurez-vous d'avoir ouvert l'alimentation en eau et vérifiez que le récipient est complètement rempli. Pour que l'actionneur soit correctement réglé, l'espacement entre celui-ci et le levier de déclenchement ou le bouton-poussoir doit être de 1/8 po. Pour effectuer ce réglage, tenez l'actionneur tout en desserrant la vis de pression Phillips au centre de l'actionneur, puis faites pivoter l'actionneur vers le haut (sens antihoraire) ou vers le bas (sens horaire) pour obtenir l'espacement adéquat. La figure 1 montre l'espacement nécessaire pour les appareils à manette de chasse. Serrez la vis de pression une fois le réglage de l'actionneur terminé.

Autres remarques:

- Initialement, il est possible que vous deviez déclencher la chasse de la toilette à plusieurs reprises afin de remplir correctement le système.
- En cas de fuite entre le réservoir et la cuvette, veuillez consulter les instructions d'installation du fabricant de l'appareil sanitaire.



Function: Less than 1.0 gpf/3.8 Lpf
Installation Requirements: min. 25 psi static water pressure*

List of Components for 503 and 504 Series:

1. Lower Supply Group w/Hose BL100504-3
(A) Supply Shank w/inlet screen
(B) Pressure Regulator w/Back Check
(C) Relief Valve

2. Upper Supply Group BU100505
(D) Air Inducer Cap w/duckbill
(E) Vacuum Breaker

3. Flush Valve Cartridge Assembly
(F) Actuator w/setscrew

4. *FLUSHMATE*® Tank
(G) Discharge Extension w/Drain
(H) Name Plate w/Serial Number
(I) Flush Rod

*max. 125 psi

Función: Menos de 1.0 gpf/3.8 Lpf
Requisitos de instalación: mín. presión de agua estática de 25 psi*

Lista de componentes para las series 503 y 504:

1. Grupo inferior de suministro con manguera BL100504-3
(A) Vástago de suministro con pantalla de admisión
(B) Regulador de presión con supresión trasera
(C) Válvula de seguridad

2. Grupo de suministro superior BU100505
(D) Tapa inductora de aire con pico de pato
(E) Divisor de vacío

3. Conjunto del cartucho de la válvula de descarga
(F) Accionador con tornillo de fijación

4. Tanque *FLUSHMATE*®
(G) Extensión de descarga con drenaje
(H) Placa de nombre con número de serie
(I) Varilla de descarga

*máx. 125 psi

Fonction : moins de 1,0 gpc/3,8 lpc
Exigences d'installation : 25 psi de pression d'eau statique min.*

Liste des composants des séries 503 et 504 :

1. Groupe d'alimentation inférieur avec flexible BL100504-3
(A) Tige d'alimentation avec grille d'entrée
(B) Régulateur de pression avec dispositif antirefoulement
(C) Soupape de décharge

2. Groupe d'alimentation supérieur BU100505
(D) Soupape d'entrée d'air avec bec de canard
(E) Casse-vide

3. Cartouche du robinet de chasse
(F) Actionneur avec vis de pression

4. Réservoir *FLUSHMATE*®
(G) Rallonge d'évacuation avec drain
(H) Plaque d'identification avec numéro de série
(I) Levier de déclenchement

*125 psi max.

Winterizing

1. Turn off the water supply valve and flush the toilet to relieve the pressure.
2. Place a bucket under the lower Supply Shank (A) and disconnect the water supply line, allowing the water to drain into the bucket.
3. Push down on the Actuator and pull it up momentarily to allow air into the vessel.
4. Follow the fixture manufacturer's instructions for winterizing the bowl.
5. Do not put antifreeze or any other chemical agents in the china holding tank or in the *FLUSHMATE®* Tank.

Points to Remember

- When replacing components on the *FLUSHMATE®* Flushometer-Tank System, make certain that the water supply valve is turned off and the toilet has been flushed to relieve pressure in the *FLUSHMATE®* tank.
- USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR *FLUSHMATE®* WARRANTY.
- *FLUSHMATE®* Flushometer-Tank Systems are designed to be used with cold water.
- The Flush Valve Cartridge can be removed by inserting the handles of a pair of pliers into the top of the Flush Valve Cartridge and turning counterclockwise.
- A small amount of water may be present in the bottom of the china holding tank. The potential for odor can be eliminated by adding a cup of white vinegar to the china holding tank. The white vinegar will act as a natural disinfectant.
- Your water pressure is adequate if your water supply line will yield one or more gallons of water within thirty (30) seconds.
- Replacement parts are readily available by contacting Consumer Services at 800-533-3460 or by visiting the "Where to Buy" section of our website, www.flushmate.com, or purchase online at www.eflushmate.com.

If you would like additional information or require technical assistance, please contact *FLUSHMATE®* Consumer Services at 800-533-3460, or visit our website, www.flushmate.com. For faster service, please be prepared to provide the serial number and date of installation of your *FLUSHMATE®* system.

Preparación para el invierno

1. *Cierre la válvula de suministro de agua y descargue el excusado para liberar la presión.*
2. *Coloque una cubeta bajo el vástago de suministro (A) y desconecte el tubo de suministro de agua, para que ésta se drene en la cubeta.*
3. *Empuje el accionador hacia abajo y tire de él momentáneamente para permitir que entre aire en la vasija.*
4. *Siga las instrucciones del fabricante del aparato para preparar la taza para el invierno.*
5. *No ponga anticongelante ni ningún otro agente químico en el tanque de depósito de porcelana o en el tanque de FLUSHMATE®.*

Puntos que debe recordar

- *Al reemplazar componentes del sistema de flujómetro-tanque FLUSHMATE®, asegúrese de que la válvula de suministro de aire esté cerrada y el excusado se haya descargado para liberar la presión del tanque FLUSHMATE®*
- *EL USO DE LUBRICANTES CON BASE DE PETRÓLEO O PRODUCTOS DE LIMPIEZA CORROSIVOS QUE CONTENGAN CLORO, TALES COMO EL BLANQUEADOR CASERO, BLOQUES O TABLETAS PARA EL AGUA O DESINFECTANTES QUE SE APLIQUEN DENTRO DEL TANQUE DE DEPÓSITO DE PORCELANA, ANULARÁN LA GARANTÍA DE SU FLUSHMATE®.*
- *Los sistemas de flujómetro-tanque FLUSHMATE® están diseñados para usarse con agua fría.*
- *El cartucho de la válvula de descarga se puede quitar insertando los mangos de unas pinzas en la parte superior del cartucho de la válvula de descarga y girando en sentido contrario al de las manecillas del reloj.*
- *Puede estar presente una pequeña cantidad de agua en el fondo del tanque de depósito de porcelana. El potencial de malos olores puede eliminarse añadiendo una taza de vinagre blanco al tanque de almacenamiento de porcelana. El vinagre blanco actuará como un desinfectante natural.*
- *Su presión de agua es adecuada si su línea de suministro rinde uno o más galones de agua en un lapso de treinta (30) segundos.*
- *Hay piezas de repuesto fácilmente disponibles comunicándose con Servicios al Cliente al 800-533-3460 o visitando la sección "Dónde comprar" de nuestro sitio Web www.flushmate.com, o compre en línea en www.eflushmate.com.*

Si desea información adicional o requiere de asistencia técnica, comuníquese con Servicios al Cliente de FLUSHMATE® al 800-533-3460, o visite nuestro sitio Web, www.flushmate.com. Para obtener un servicio más rápido, debe estar preparado para dar el número de serie y fecha de instalación de su sistema FLUSHMATE®.

Préparation pour l'hiver

1. Fermez le robinet d'alimentation en eau, puis déclenchez la chasse pour atténuer la pression.
2. Placez un seau sous la partie inférieure de la tige d'alimentation (A), puis débranchez le tuyau d'alimentation en eau et laissez l'eau s'écouler dans le seau.
3. Appuyez sur l'actionneur, puis tirez-le vers le haut et attendez quelques instants pour laisser l'air pénétrer dans le récipient.
4. Suivez les instructions du fabricant de l'appareil sanitaire quant à la préparation pour l'hiver de la cuvette.
5. Ne versez pas d'antigel ni d'autres agents chimiques dans le réservoir de rétention en porcelaine ni dans le réservoir *FLUSHMATE®*.

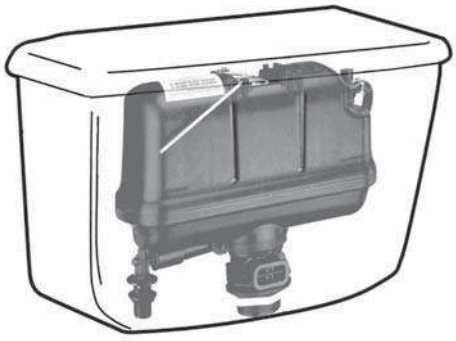
Points à ne pas oublier

- Lors du remplacement de composants du système de réservoir à robinet de chasse *FLUSHMATE®*, assurez-vous d'abord de fermer le robinet d'alimentation et de déclencher ensuite la chasse afin d'atténuer la pression dans le réservoir *FLUSHMATE®*.
- L'UTILISATION, À L'INTÉRIEUR DU RÉSERVOIR DE RÉTENTION EN PORCELAINE, DE LUBRIFIANTS À BASE DE PÉTROLE OU DE PRODUITS NETTOYANTS CORROSIFS QUI CONTIENNENT DU CHLORE, COMME LES JAVELLISANTS DOMESTIQUES, LES PASTILLES ET BLOCS NETTOYANTS OU LES DÉSINFECTANTS, ANNULERA VOTRE GARANTIE *FLUSHMATE®*.
- Les systèmes de réservoir à robinet de chasse *FLUSHMATE®* sont conçus pour être utilisés avec de l'eau froide.
- Pour retirer la cartouche du robinet de chasse, insérez les manches d'une paire de pinces dans le haut de la cartouche du robinet de chasse, puis tournez dans le sens antihoraire.
- Il est possible qu'une petite quantité d'eau reste dans le fond du réservoir de rétention en porcelaine. Vous pouvez éliminer les risques d'odeur en versant une tasse de vinaigre blanc dans le réservoir de rétention en porcelaine. Le vinaigre blanc agira comme un désinfectant naturel.
- Votre pression d'eau est suffisante si le tuyau d'alimentation en eau produit un gallon d'eau ou plus en trente (30) secondes.
- Vous pouvez obtenir des pièces de rechange en contactant le service à la clientèle au 800-533-3460, en visitant la section « Where to Buy » (où acheter) de notre site Web, www.flushmate.com, ou en les achetant en ligne au www.eflushmate.com.

Si vous désirez de plus amples renseignements ou avez besoin d'assistance technique, veuillez communiquer avec le service à la clientèle de *FLUSHMATE®* au 800-533-3460 ou visitez notre site Web, www.flushmate.com. Pour obtenir un service plus rapide, veuillez avoir en main le numéro de série et la date d'installation de votre système *FLUSHMATE®*.

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Tank Service Manual

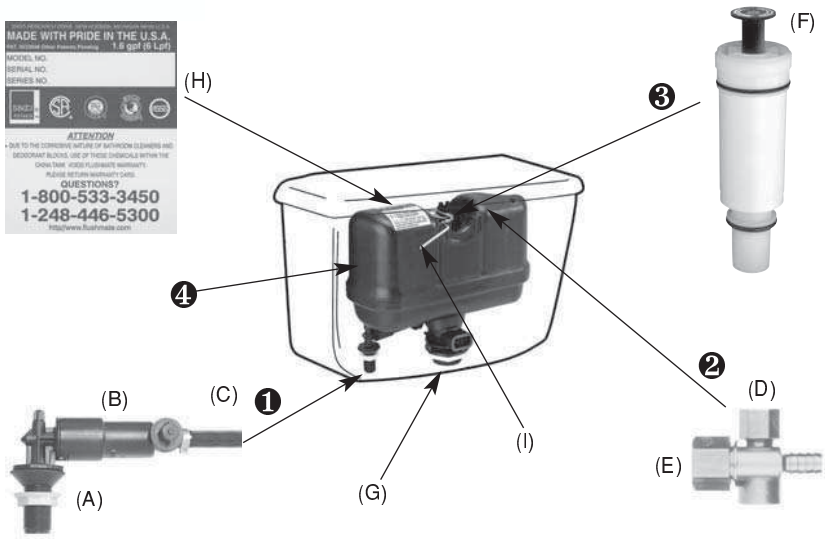


PF1612PA



PF1612 Series
Function: Less than 1.0 gpf/3.8 Lpf
Installation Requirements: min. 25 psi static water pressure*

*max. 125 psi



List of Components for PF1612 Series

1. **Lower Supply Group w/Hose BL100504-3**
   (A) Supply Shank
   (B) Pressure Regulator w/Back Check
   (C) Relief Valve
2. **Upper Supply Group BU100505**
   (D) Air Inducer
   (E) Vacuum Breaker
3. **Flush Valve Cartridge Assembly C-100500**
   (F) Actuator w/setscrew
4. ***FLUSHMATE®* Tank**
   (G) Discharge Extension w/Drain
   (H) Name Plate w/Serial Number
   (I) Flush Rod

INSTALLATION

Please follow the toilet manufacturer's installations instruction for installing the fixture. Note that the toilet requires a minimum water supply line pressure of 20 psi for a 1.6 gpf and 25 psi for a 1 gpf fixture. Before attaching, you should always flush the water supply lines.

After completing the installation, you are required to adjust the Cartridge Actuator (F). To adjust, make sure the water is turned on and the vessel is completely charged. The Actuator needs to be set at the proper clearance, 1/8" from either the Flush Rod or push button. To make this adjustment, hold the Actuator while loosening the Phillips setscrew in the center of the Actuator, and rotate the Actuator up (counterclockwise) or down (clockwise) until the proper clearance is obtained. See Figure 1 for clearance required for flush-handle fixture. Tighten setscrew after adjusting the Actuator.

Additional notes:

- Should your toilet continuously run-on after installing, refer to section #1 under Troubleshooting.
- You may be required to initially flush the toilet a few times to properly charge the system.
- Should your fixture develop a leak between the tank and bowl, please refer to the fixture manufacturer's installation instructions.

PLEASE READ THE ENTIRE MANUAL BEFORE ATTEMPTING TO MAKE ANY ADJUSTMENTS OR REPAIRS.

WARNING:

- **When replacing components on the *FLUSHMATE*® Flushometer-Tank System, make certain that the water supply valve is turned off and the toilet has been flushed to relieve pressure in the *FLUSHMATE*® tank.**
- **USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS, THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR *FLUSHMATE*® WARRANTY. The exterior of the tank and the entire bowl can be cleaned following the manufacturer's recommendations or in the same fashion as any other toilet.**
- ***FLUSHMATE*® Flushometer-Tank Systems are designed to be used with a cold water supply only and use of a tempered or hot water supply will void your warranty.**

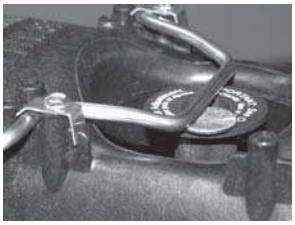


Figure 1



Figure 2

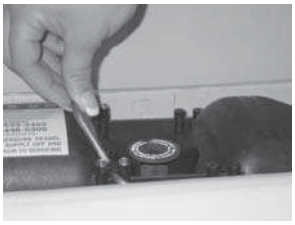


Figure 3



Figure 4

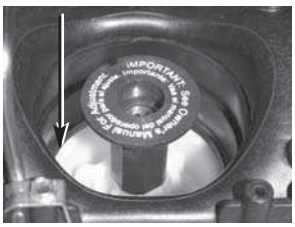


Figure 5

TROUBLESHOOTING

A) Condition: *Water runs and will not shut off*

A run-on condition may be caused by insufficient water pressure, an improperly adjusted Flush Valve Cartridge, or a clogged inlet screen. Refer to "Installation Requirements" for recommended minimum pressure. (See "Points to Remember" for a simple method to determine whether your water pressure is adequate). Check water pressure, marginal pressure can cause any of these conditions. If sufficient water pressure has been verified and the toilet continues to run-on, the following steps may be required:

1. Make sure the water supply valve is fully open.
2. Check the Actuator adjustment. The Flush Rod (I) or push button should not interfere with the Actuator. The proper clearance should be approximately 1/8" when the push button or flush-handle is stationary. On push button type fixtures, loosen the setscrew on the Actuator (see F on the component list) and rotate the Actuator up (counterclockwise) or down (clockwise) until the proper clearance is obtained. For flush-handle fixtures, observe the clearance. *(See Figure 1)* If necessary, adjust the Actuator to allow for proper clearance. When proper clearance is obtained, tighten the setscrew.
3. Check Inlet Screen
   a. Turn off the water supply valve.
   b. Flush the toilet to relieve the pressure.
   c. Disconnect the water supply line from the Supply Shank (A). *(See Figure 6)*
   d. Examine the inlet screen and remove anything that may be blocking the flow of water into the *FLUSHMATE*® tank. The inlet screen can be removed by inserting a small pointed object (such as a large paperclip or the blade of a penknife) into the lower Supply Shank and working the inlet screen loose. *(See Figures 7a, 7b, 7c)* Reinstall the inlet screen by pushing it upward into the Supply Shank with your fingertip. *(See Figure 7d)*
   e. Reattach water supply line and fully open water supply valve. Test setup by flushing toilet.
4. Remove, examine, and reinstall the Flush Valve Cartridge (3).
   a. Turn off the water supply valve and flush the toilet to relieve the pressure.
   b. On flush-handle fixtures, disengage the Flush Rod from the handle linkage and flip it away from the Flush Valve Cartridge. It is not necessary to loosen the retainer clips. *(See Figure 3)* Remove the Flush Valve Cartridge using the handles of a pair of pliers. *(See Figure 2)*. Turn the Flush Valve Cartridge counterclockwise until you can lift it out of the *FLUSHMATE*® tank.



Figure 6



Figure 7a



Figure 7b



Figure 7c



Figure 7d

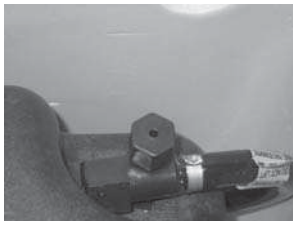


Figure 8



Figure 9

c. Examine the exposed O-rings on the Flush Valve Cartridge for obstruction or damage. If the O-rings are damaged, the Flush Valve Cartridge should be replaced. Clean any debris from the O-ring before re-installing. *(See Figure 4)*

d. Insert the Flush Valve Cartridge into the *FLUSHMATE®* tank and thread it clockwise into place until one (1) black thread (on the *FLUSHMATE®* tank) is showing above the Flush Valve Cartridge. *(See Figure 5)* Fully open the water supply valve and continue to thread the Flush Valve Cartridge clockwise, 1/4 turn at a time, pausing briefly between each 1/4 turn, until the water stops running into the toilet bowl and the *FLUSHMATE®* tank pressurizes.

e. Test setup by flushing toilet. Reinstall Flush Rod and handle linkage.

B) Condition: *Weak, incomplete, sluggish, or no flush*

Inadequate water pressure, an improperly adjusted Flush Valve Cartridge, a clogged inlet screen, or insufficient air draw may cause a weak, sluggish, or no flush condition.

1. Make sure that the water supply valve is fully open.
2. Check for proper actuation adjustment, see Condition A-2, “Water runs and will not shut off.”
3. Turn off the water supply valve.
4. Flush the toilet to relieve the pressure.
5. Disconnect the water supply line from the Supply Shank (A). *(See Figure 6)*
   a. Examine the inlet screen and remove anything that may be blocking the flow of water into the *FLUSHMATE®* tank. The inlet screen can be removed by inserting a pointed object (such as a large paperclip or the blade of a penknife) into the lower Supply Shank and working the inlet screen loose. *(See Figures 7a, 7b, 7c)* The inlet screen easily snaps back into position by pushing it upward into the Supply Shank with your fingertip. *(See Figure 7d)*
6. Examine the Air Inducer (D) for obstruction or damage. *(See Figure 8)*
   a. Make sure the water supply valve is turned off and the toilet has been flushed to relieve the pressure.
   b. Remove the Air Inducer Cap. *(See Figure 9)*
   c. Remove the Duckbill Valve from the Air Inducer Cap. *(See Figure 10)* The flat “lips” of Duckbill Valve should open fully when the square sides are squeezed together. *(See Figure 11)* Rinse any obstruction or mineral deposits from the Duckbill Valve. If the Duckbill Valve is damaged, it must be replaced.
   d. Insert the Duckbill Valve into the Air Inducer housing. *(See Figure 12)*
   e. Put the Air Inducer Cap back on, and tighten finger-tight only. *(See Figure 13)*
   f. Reconnect the water supply line and fully open water supply valve.
7. Check Air Inducer for sufficient air draw. Place a small amount of water (two to three drops) over the hole on top of the Air Inducer Cap *(See Figure 14)* and flush the toilet. If the Air Inducer is working properly, the water will be drawn in. *(See Figure 15)*
8. Check the Flush Valve Cartridge for leaks. Pour a small amount of water into the Cartridge housing area. *(See Figure 16)* If bubbles are coming from the center or the edge of the Flush Valve Cartridge, it should be replaced.



Figure 10



Figure 11



Figure 12



Figure 13



Figure 14

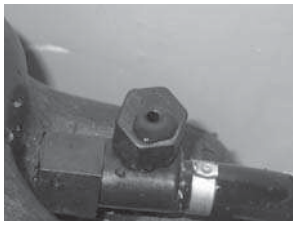


Figure 15



Figure 16

Condition: ***Vacuum Breaker Leaking***

If the Vacuum Breaker (E) is leaking, it is likely that the water pressure is insufficient or that there is insufficient flow due to a plugged inlet screen in the lower Supply Shank. The recommended static pressure for the 503 Series is between 20 psi and 125 psi and for the 504 Series between 25 and 125 psi.

Note:

If the trouble-shooting steps listed in this manual do not resolve your problem, contact *FLUSHMATE®* Consumer Services at 800-533-3460 or email info@flushmate.com. Please be prepared to provide the serial number and date of installation of your *FLUSHMATE®* system.

WINTERIZING

1. Turn off the water supply valve and flush the toilet to relieve the pressure.
2. Place a bucket under the lower Supply Shank (A) and disconnect the water supply line, allowing the water to drain into the bucket.
3. Push down on the Actuator and pull it up momentarily to allow air into the vessel.
4. Follow the fixture manufacturer's instructions for winterizing the bowl.
5. Do not put antifreeze or any other chemical agents in the china holding tank or in the *FLUSHMATE®* Tank.

POINTS TO REMEMBER

- When replacing components on the *FLUSHMATE®* Flushometer-Tank System, make certain that the water supply valve is turned off and the toilet has been flushed to relieve pressure in the *FLUSHMATE®* tank.
- **USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR *FLUSHMATE®* WARRANTY.**
- *FLUSHMATE®* Flushometer-Tank Systems are designed to be used with cold water.
- The Flush Valve Cartridge can be removed by inserting the handles of a pair of pliers into the top of the Flush Valve Cartridge and turning counterclockwise.
- A small amount of water may be present in the bottom of the china holding tank. The potential for odor can be eliminated by adding a cup of white vinegar to the china holding tank. The white vinegar will act as natural disinfectant.
- Your water pressure is adequate if your water supply line will yield one or more gallons of water within thirty (30) seconds.
- Replacement parts are readily available by contacting Consumer Services at 800-533-3460 or by visiting the "Where to Buy" section of our website, www.flushmate.com, or purchase online at www.eflushmate.com.

If you would like additional information or require technical assistance, please contact *FLUSHMATE®* Consumer Services at 800-533-3460, or visit our website, www.flushmate.com. For faster service, please be prepared to provide the serial number and date of installation of your *FLUSHMATE®* system.

ATTENTION OWNER
THESE ARE THE TERMS OF YOUR WARRANTY

Effective August 15, 2004, Sloan *FLUSHMATE®* (the "Company") warrants the *FLUSHMATE®* (flushometer tank) operating system (the "unit") to be free of defects in material and workmanship for a period of ten (10) years from the date of installation on original components and includes a lifetime limited warranty on the *FLUSHMATE®* tank. The Company promises to replace any part of this product that proves, upon our inspection and within ten (10) years from date of installation, to be defective in material or workmanship. All labor and transportation costs or charges incidental to warranty service are to be borne by the purchaser-user.

This warranty is subject to the following:

Specific Conditions to Warranty

1. A warranty registration card has been fully completed and mailed by the purchaser (the "user") to the Company within thirty (30) days of the date of installation. Product may also be registered online at www.flushmate.com or by calling 800-533-3460.
2. The unit has been subject to proper installation, operation and maintenance as outlined in the installation instructions that were supplied with the unit. Note carefully that this warranty is voided if the unit is installed and operated subject to water supply line pressures greater than 125 psi (static) or less than 20 psi (static) for the Series 503 or less than 25 psi (static) for the Series 504.
3. Service and repairs may only be performed by authorized representatives of the Company or by others upon specific approval by the Company. Unauthorized repairs or alterations shall specifically void the warranty.
4. USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR *FLUSHMATE®* WARRANTY.
5. Proof of purchase is required.
6. *FLUSHMATE®* systems manufactured prior to August 15, 2004 have a shorter warranty period based on the serial number. Call *FLUSHMATE®* to verify.

Exclusions

IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, FOR DAMAGES RESULTING FROM IMPROPER INSTALLATION, OR FOR DAMAGES CAUSED BY NEGLECT, ABUSE OR ALTERATION. THE USE OF GENERIC, "KNOCK-OFF" REPLACEMENT PARTS WILL VOID OWNERS WARRANTY. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE LIMITED TO A PERIOD OF TEN (10) YEARS FROM DATE OF INSTALLATION.

Some states do not allow limitations on the duration of an implied warranty and some states do not allow exclusions or limitations regarding incidental or consequential damages so the above limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state.

No person is authorized to change, add to, or create any warranty or obligation other than that set forth herein.

To obtain warranty service, contact Consumer Services toll free (USA & CANADA) 800-533-3460 or write to us at:

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