

ROBINAIR®

Operating Instructions



Model 17580
Air Conditioning Component Flusher

SAFETY DEFINITIONS: Follow all WARNING, CAUTION, and NOTE messages in this manual. These messages are defined as follows: WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury; CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury, and / or property damage; and NOTEs provide clarity and helpful tips. These messages cover situations ROBINAIR is aware of. ROBINAIR cannot know, evaluate, and advise you regarding all possible hazards. You must ensure conditions and procedures do not jeopardize your personal safety.

COPYRIGHT: No part of this manual may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopy, recorded, or otherwise) without the prior written permission of ROBINAIR.

DISCLAIMER: All information, illustrations, and specifications contained in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without obligation to notify any person or organization of such revisions or changes. Further, ROBINAIR shall not be liable for errors contained herein or for incidental or consequential damages (including lost profits) in connection with the furnishing, performance, or use of this material. If necessary, obtain additional health and safety information from the appropriate government agencies and the vehicle, refrigerant, and lubricant manufacturers.

WARNINGS



- Study, understand, and follow all warnings in the operator's manual before operating this unit. If the operator cannot read these instructions, operating instructions and safety precautions must be read and discussed in the operator's native language.

Si el operador no puede leer el inglés, las instrucciones de operación y las precauciones de seguridad deberán leerse y comentarse en el idioma nativo del operador.

Si l'utilisateur ne peut lire l'anglais, les instructions et les consignes de sécurité doivent lui être expliquées dans sa langue maternelle.



- This unit must be operated by qualified personnel who are familiar with air conditioning and refrigeration systems, solvents, and the danger of pressurized components.
- Wear eye protection and protective clothing when working with solvents. Contact with solvent may cause personal injury. Even while wearing protective goggles, do not look into a component to observe airflow.



- To prevent an electrical shock or an explosion, first ground the flusher to the vehicle by attaching the ground clamp to the negative battery terminal or other source of ground on the vehicle.



- Do not operate this equipment near an open flame.
- Operate the unit in a well-ventilated area. Ensure there is adequate ventilation in the vehicle servicing area.



- DO NOT breathe solvent vapor or mist. Exposure may irritate eyes, nose, and throat. If accidental system discharge occurs, ventilate work area before resuming service.



- Use only Robinair No. 17565 Power Flush Solvent. The use of unapproved solvents may cause damage to the A/C system or equipment and be hazardous to the operator.
- Disconnect the unit from the air pressure source before beginning service work.
- Avoid solvent spillage on painted areas. Solvents can peel paint from a vehicle. Read warnings on solvent containers.
- Follow solvent manufacturer's recommendations for handling and disposing solvents. Use only approved solvents.

Introduction.....	2
Component Location	3
Initial Setup	4
Operating Guidelines.....	4
Operating Instructions	5
Flushing a component	6
Purging a component.....	7
Maintenance.....	7
Solvent Replacement	7
Solvent Filter Replacement.....	7
Charcoal Filter Element Replacement	7
Coalescent Filter Element Replacement	7
Accessories.....	8
Replacement Part Numbers	8
Plumbing Diagram.....	9

Introduction

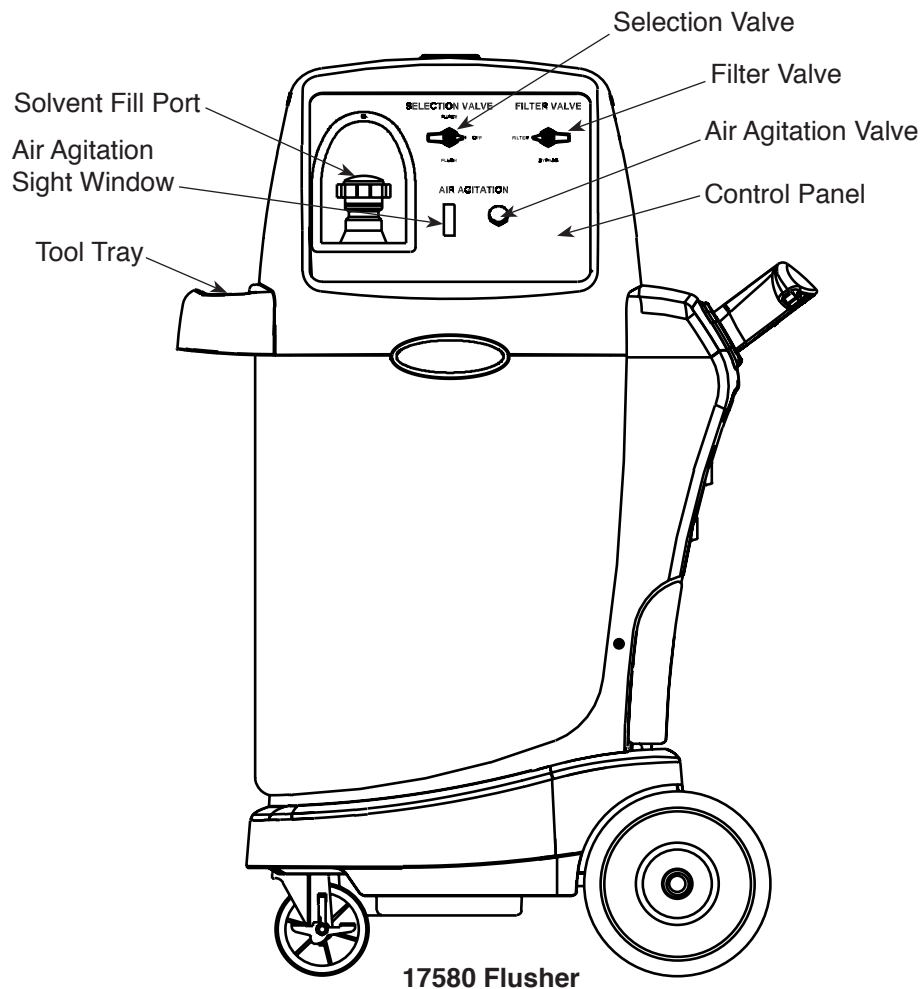
Use the 17580 Air Conditioning Component Flusher to clean unwanted oil, residue, and contaminants from inside A/C condensers and evaporators. The flusher uses a pulsating action to circulate solvent through components to loosen and dissolve unwanted material inside the components. The air-agitation feature allows the user to control the flow of bubbles through the solvent for further agitation inside the components. The flusher then evaporates solvent from components after flushing by circulating dry air through the components at a high rate. The 17580 Flusher comes equipped with a carbon filter to reduce solvent odors.

The 17580 Flusher has been factory tested and meets Robinair's stringent quality standards. This unit* will provide you with years of reliable service with minimal maintenance.

Read and understand all warnings and cautions before using the flusher.

* "Unit" describes the 17580 Flusher throughout this manual.

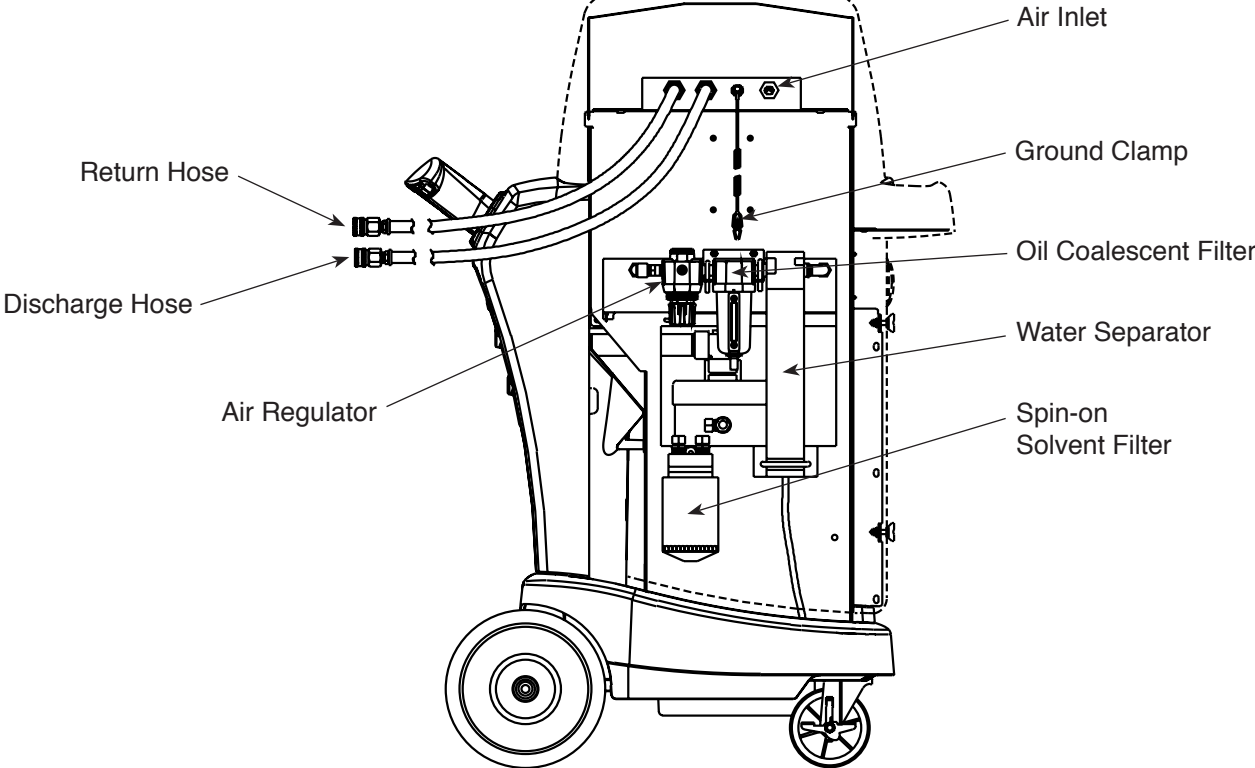
Front View



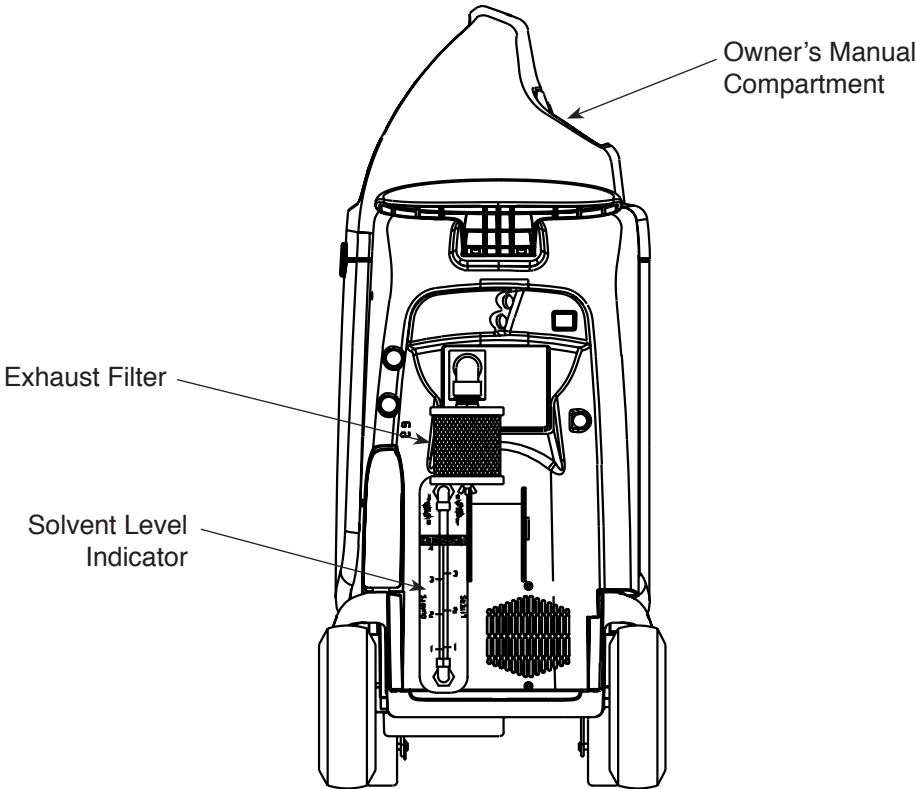
INST0991

Component Location

Inside Back View



Side View



Initial Setup

Connect a 1/4 in. external air fitting (not included) to the air inlet located on the unit's rear panel.

WARNING!



Wear eye protection and protective clothing when working with solvents. Contact with solvent may cause personal injury.



DO NOT breathe solvent vapor or mist. Exposure may irritate eyes, nose, and throat. If accidental system discharge occurs, ventilate work area before resuming service.

Operating Guidelines

Before operating this unit, read and follow the instructions and warnings in this manual. Verify all safety devices are functioning correctly before beginning a procedure.

Required: One gallon of solvent is needed for the flushing procedure. Use only Robinair 17565 Power Flush Solvent. Other solvents may not be effective, may be hazardous, and may damage the equipment and void the warranty. Also, an adapter fitting kit may be necessary for connecting to some flusher service couplers. See ACCESSORIES.

Fill to Mark: Do not overfill the flushing tank. Fill to only the full mark on the solvent level indicator.

Solvent Reuse: Follow solvent manufacturer's suggestions regarding the number of times solvent may be used before replacement. The flusher will perform its functions even if the solvent is too diluted to remove contaminants from the A/C system. See REPLACEMENT PARTS.

Filter Replacement: The flusher is equipped with a replaceable particle filter to clean the solvent during the flush operation. The particle filter is a non-bypass filter and must be replaced every time fresh solvent is installed in the flusher. See REPLACEMENT PARTS.

Activated Carbon Filter: This unit contains an activated carbon filter that limits emissions and odors during the flushing and purging operations. The filter element can be replaced if odors become noticeably stronger during operation of the unit. See REPLACEMENT PARTS.

⚠ WARNING!



To prevent eye injury, do not look into a component to observe airflow even while wearing protective goggles.

Operating Instructions

Use the following steps to operate the flusher:

1. Turn the selection valve on the control panel to the OFF position.
2. Ground the flusher to the vehicle by attaching the ground clamp to the negative battery terminal or other source of ground on the vehicle.
3. Add one gallon of flush solvent to the fill port.
4. Connect shop air to the unit's air inlet (80–150 psi).
5. Install A/C component flush adapters as required to the vehicle A/C components to be flushed. Connect the flusher discharge hose to the inlet / outlet of the component being flushed.

Recommended Flush/Backflush Procedure:

When flushing a condenser and/or high pressure liquid lines, flush from the outlet end of unit first; then backflush in the opposite direction.

When flushing an evaporator, flush from the inlet side of the unit to the outlet first; then backflush in the opposite direction.

This sequencing will ensure the maximum flushing action is obtained. Solvent purges from the system faster after the flushing operations are completed.

6. Connect the return hose to the remaining adapter.

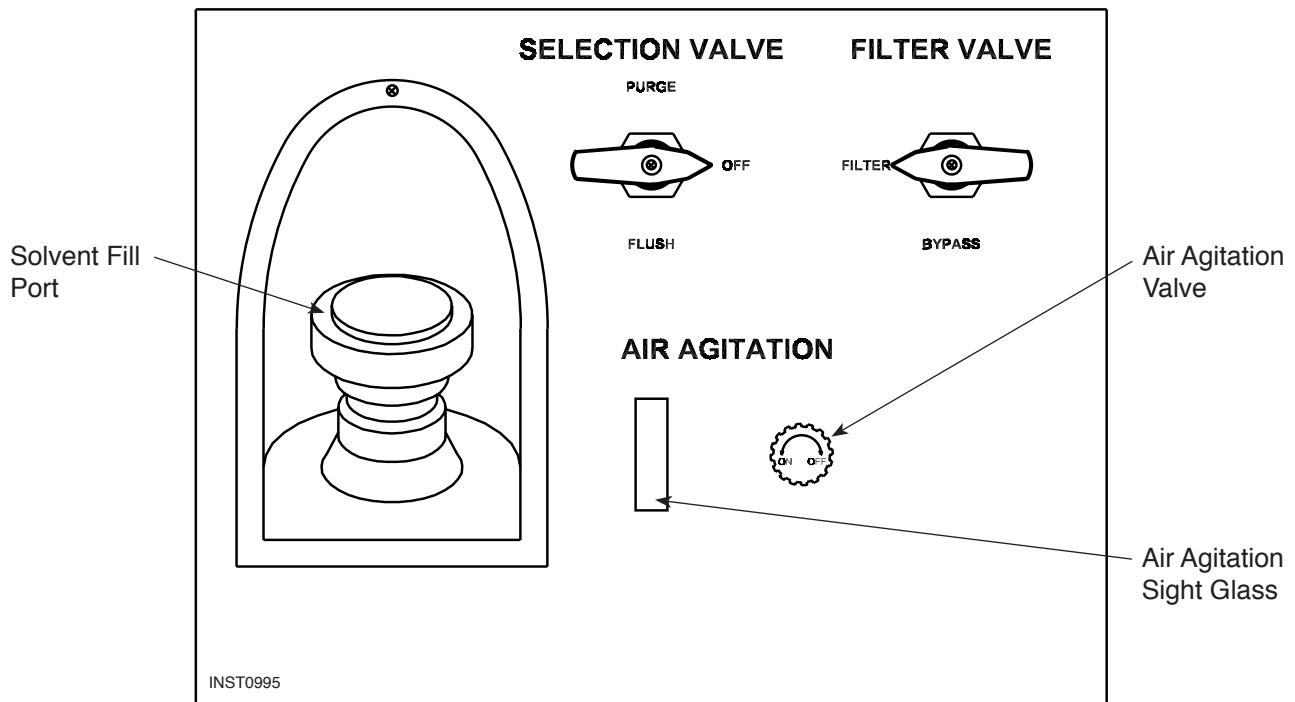
⚠ CAUTION:

To prevent an electrical shock or an explosion, ground the flusher to the vehicle before use by attaching the ground clamp to the negative battery terminal or other source of ground on the vehicle.

Avoid solvent spillage on painted areas. Solvents can peel paint from a vehicle. Read all warnings on solvent containers.

This manual contains important safety procedures concerning the operation, use, and maintenance of this product. Failure to follow the instructions contained in this manual may result in serious injury. If you are unable to understand any of the contents of this manual, please bring it to the attention of your supervisor. Do not operate this equipment unless you have read and understand the contents of this manual.

Operating Instructions



Control Panel

Flushing a Component

Use the following steps to flush a component:

1. Turn the filter valve to **FILTER**.
2. Turn the selection valve to **FLUSH**.
3. The **AIR AGITATION** valve can be opened during the flush cycle to control the amount of air bubbles being injected into the solvent. The intensity of the air agitation can be viewed through the sight glass on the control panel.
4. After flushing for 20 minutes, turn the selection valve to **OFF**.

Purging a Component

Use the following steps to purge the solvent from a component:

1. Open the selection valve slightly (toward **PURGE**) until most liquid solvent has been purged from the inlet and discharge hoses.
2. Turn the filter valve to **BYPASS**.
3. **Slowly** turn the selection valve all the way to **PURGE**.

*Note: Slowly opening the selection valve to **PURGE** reduces solvent odors and extends the life of the carbon filter element.*

4. Purge the system for a minimum of 30 minutes to completely evacuate any traces of flushing solvent from the component.
5. Turn the selection valve to **OFF**.

Maintenance

Solvent Replacement

To avoid excessive foaming and potential contaminant carry-over, it is recommended the solvent be changed after each job. It is strongly recommended that the used solvent be removed from the machine immediately after a FLUSH/PURGE cycle.

1. Place the end of the discharge hose in a suitable waste container.
2. Verify the selection valve is OFF and shop air is connected.
3. Turn the selection valve to FLUSH.
4. Turn the selection valve to OFF when the solvent is evacuated from the machine.

Solvent Filter Replacement

Replace the solvent filter each time the solvent is replaced. A non-bypass filter, such as Motorcraft FL1A, Purolator L30001, Champ PH-8-A, or equivalent, should be used.

1. Open the back door of the unit's protective covering.
Note: To unlock the door, turn the two screws 1/4 turn counterclockwise.
2. Remove the filter by turning it counterclockwise.
3. Hand tighten the new filter in a clockwise direction.

Carbon Filter Element Replacement

The carbon filter element should be replaced when odors become noticeably stronger during the purge cycle.

1. Remove the filter retaining plate by removing the wing nut on the filter housing.
2. Remove and replace the filter element.
3. Replace the filter retaining plate and wing nut.

Coalescent Filter Element Replacement

If oil is visible in the coalescing filter bowl, it can be drained by toggling the valve on the bottom of the bowl.

The coalescent filter element can be replaced as follows:

1. Open the back door of the unit's protective covering.
Note: To unlock the door, turn the two screws 1/4 turn counterclockwise.
2. Push up on the filter bowl, and turn the bowl 1/8 turn counterclockwise to disengage the bowl from the filter housing.
3. Remove the filter element by unscrewing the nut on the bottom of the filter.
4. Install the new filter element, followed by the filter bowl.

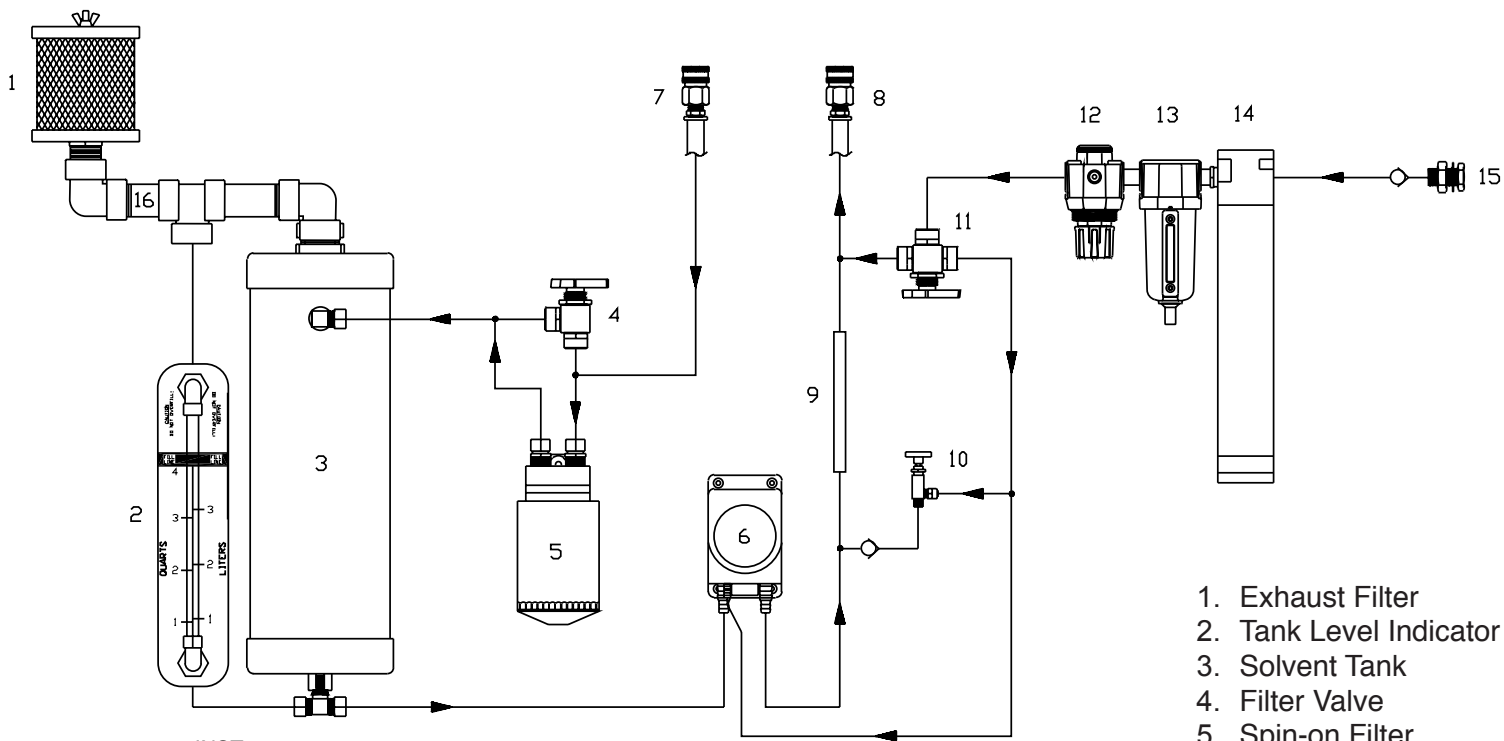
Accessories

Part No.	Description
17607	Universal Flushing Adapter Kit
17581	Adapter Fitting (included; use to adapt hoses to 17607 Flushing Adapter Kit)

Replacement Part Numbers

Part No.	Description
17565	Power Flush Solvent (gallon; six per carton)
17609	Power Flush Solvent (quart; six per carton)
17586	Solvent Filter
17577	Activated Carbon Filter Element
17518	Coalescent Filter Element
540649	Fill Tube

Plumbing Diagram



1. Exhaust Filter
2. Tank Level Indicator
3. Solvent Tank
4. Filter Valve
5. Spin-on Filter
6. Liquid Pump
7. Return Hose
8. Discharge Hose
9. Air Agitation Sight Glass
10. Air Agitation Valve
11. Selection Valve
12. Air Regulator
13. Coalescing Filter
14. Water Separator
15. Compressed Air Supply
16. Internal Exhaust Filter