



GRACO

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quality counts.™

Rev. D  
Supersedes Rev. C



This manual contains important  
warnings and information.  
**READ AND KEEP FOR REFERENCE.**

INSTRUCTIONS

Low Pressure, High Volume

## “Red Alert” Filters

*300 psi (2.1 MPa, 21 bar) Maximum Working Pressure*

20 gpm (76 liter/min) Flow Capacity

225 in.<sup>2</sup> (1450 cm<sup>2</sup>) Filtering Area

### **Model 213-062**

With 30 mesh (590 micron) element

### **Model 213-063**

With 60 mesh (250 micron) element

### **Model 213-064**

With 100 mesh (149 micron) element

### **Model 213-065**

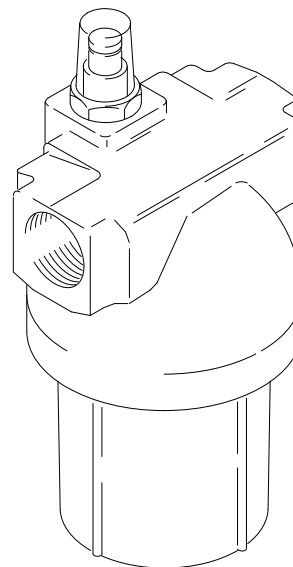
With 150 mesh (95 micron) element

### **Model 213-066**

With 200 mesh (74 micron) element

### **Model 214-002**

Less element – See **Parts** on page 6 for element  
numbers.



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# Symbols

## Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

## Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the corresponding instructions.

# ! WARNING



INSTRUCTIONS

## EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about usage, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check the equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. This equipment has a **300 psi (2.1 MPa, 21 bar) maximum working pressure**.
- Route the hoses away from the traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 180°F (82°C) or below -40°F (-40°C).
- Use fluids or solvents that are compatible with the equipment wetted parts. See the **Technical Data** section of all the equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.



## PRESSURIZED EQUIPMENT HAZARD

Spray from the gun, hose leaks, or ruptured components can splash fluid in the eyes or on the skin and cause serious injury.

- Relieve the pressure before removing, cleaning, or servicing the equipment.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Tighten all the fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn, damaged, or loose parts immediately. Permanently coupled hoses cannot be repaired; replace the entire hose.

# Notes

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# Installation

## Notes:

- To clean or service the filter without shutting down the system, install a dual filter or a filter bypass as explained below.
- The numbers and letters in parenthesis refer to the Figures and the Parts Drawing.
- Be sure to allow 4 in. (102 mm) minimum clearance below the filter for easier removal of the bowl (9).

## Dual Filter System

This setup enables you to redirect the fluid to another filter while one filter is cleaned or serviced.

Install two filters as shown in Fig. 1. Both filters must have an adapter (A) and drain valve (B) in the filter bowl (9) to relieve fluid pressure and drain the filter before removing the bowl. Install four suitable shutoff valves (D), one at each filter inlet and outlet, to redirect the fluid and isolate the filter when not in use.

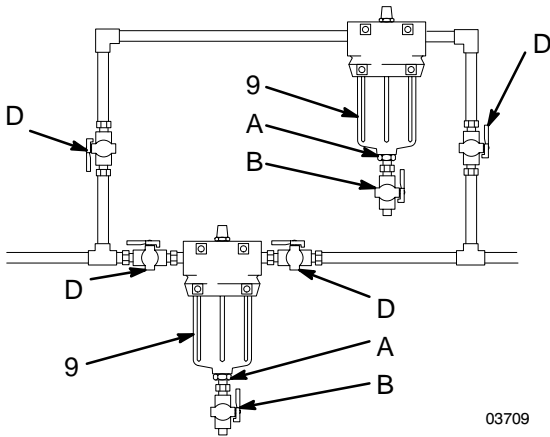


Fig. 1

## Filter Bypass System

This setup enables you to redirect fluid through pipes which bypass the filter, while cleaning or servicing the filter.

Install the filter and bypass pipes as shown in Fig. 2. An adapter (A) and drain valve (B) must be installed in the filter bowl (9) to relieve fluid pressure and drain the filter before removing the bowl. Install four suitable shutoff valves (D), one at the filter inlet; the filter outlet; the bypass pipe inlet; and the bypass pipe outlet, to redirect the fluid and isolate the filter while cleaning and servicing.

## ! WARNING

To reduce the risk of component rupture and serious injury, do not exceed the 300 psi (2.1 MPa, 21 bar) maximum working pressure of this filter, or the maximum working pressure of any other accessory or component in your system. Be sure that all components and accessories are rated to withstand the maximum working pressure of your pump.

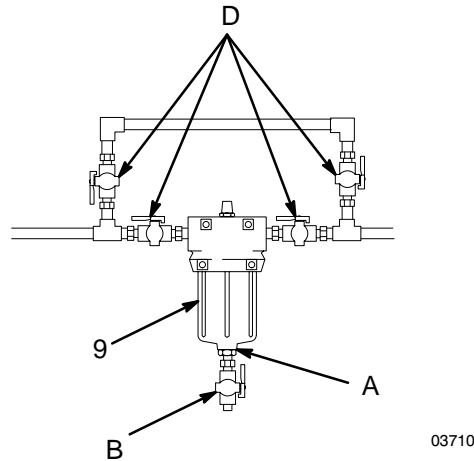


Fig. 2

# Service

## WARNING

### **PRESSURIZED EQUIPMENT HAZARD**

Before removing, cleaning, or servicing the filter, close the inlet and outlet ball valves (D, Fig. 1) and open the fluid drain valve (B) to relieve pressure.

## CAUTION

If the filter will not be used for awhile, thoroughly clean all the parts in solvent and blow them dry before the paint dries and clogs the filter. To help prevent damaging the parts, do not clean them with a wire brush or sharp object.

### **Indicator**

The indicator provides gradual warning of a dirty element. When the indicator shows 3/4 red, clean the element. If not cleaned promptly, the filter bypass valve opens and fluid will not be filtered.

Replace the indicator assembly (1) if the indicator is not working correctly (it is always red, or never red).

### **Bypass Valve**

The valve opens when a dirty element causes the filter's outlet pressure to drop 15 psi (100 kPa, 1 bar) below the inlet pressure. This keeps the system pressure steady and prevents the element from collapsing.

Replace the bypass valve (2) if it is damaged or worn.

### **Viton O-Ring**

The o-ring seals the bowl (9) to the housing (3). If material leaks around the bowl, replace the o-ring (6).

Remove the bowl and o-ring. Clean the parts in a compatible solvent. Be careful not to damage the o-ring or sealing surfaces of the bowl and housing. Before assembling, lubricate the parts with No. 2 grease.

### **Bowl, Element, and Spring**

Graco recommends keeping a spare bowl (9), element (7), and spring (8) on hand. Before removing the bowl, direct the fluid through the bypass valve (2) or shut down the system. Relieve fluid pressure by opening the drain valve (B).

Holding the bowl with a wrench to keep it from turning, screw the drain plug (10) out. After the fluid has drained out, remove the bowl, element, and spring. Replace immediately with the spare bowl, element, and spring to keep the paint from drying on the housing (3) and other parts. Install the element with the dome end up. Lubricate the threads of the bowl before screwing it into the housing; tighten it securely.

Clean the bowl, element, and spring you removed with a compatible solvent before the paint dries. Do not use a wire brush or sharp object to clean. Store until needed.

**Note:** Clean the filter element (7) with a small paint brush. Blow out lodged particles with air, and inspect for damage. Replace if ruptured.

# Parts

## Model 213-062 to 213-066

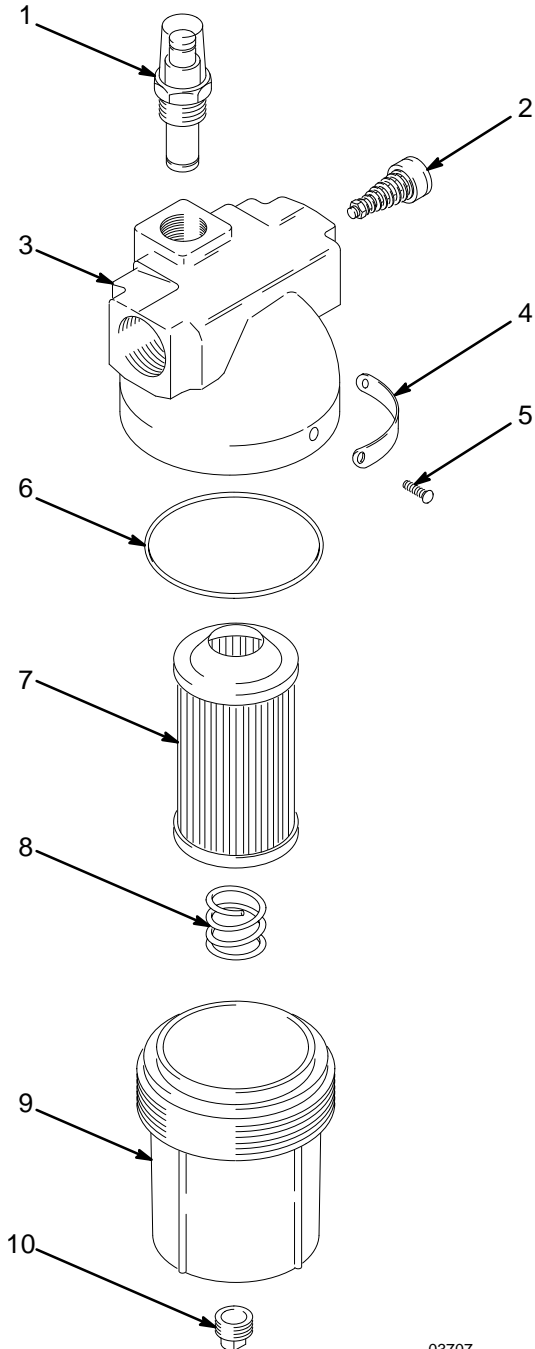
Include Items 1-10

## Model 214-002

Include Items 1-6, 8-10

**Note:** Model 214-002 includes items 1-6 and 8-10, but does not include a filter element as standard. Select the desired filter element from those listed under Ref. No. 7.

**Note:** All other models are the same as 214-002, but do include a filter element as standard, as listed under Ref. No. 7.



Ref. No.	Part No.	Description	Qty.
1	104-125	INDICATOR, filter	1
2	102-694	VALVE, bypass	1
3	172-741	HOUSING, filter	1
4	175-000	PLATE, instruction	1
5	100-055	SCREW, drive; type "u", no. 6 x 1/4	2
6*	104-712	O-RING; Viton®	1
7*	108-111	ELEMENT, filter (Model 213-062 only)	1
	108-112	ELEMENT, filter (Model 213-063 only)	1
	108-113	ELEMENT, filter (Model 213-064 only)	1
	108-115	ELEMENT, filter (Model 213-065 only)	1
	108-114	ELEMENT, filter (Model 213-066 only)	1
8*	102-691	SPRING, element	1
9*	172-745	BOWL, filter	1
10	104-663	PLUG, pipe; 3/4 npt(f)	1

\* Recommended "tool box" spare parts. Keep these parts on hand to reduce down time.

Order parts by the name and the series letter of the assembly for which you are ordering.

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# Technical Data

Category	Data
Dimensions	6.06" (154 mm) Wide; 5.5" (140 mm) Deep; 11" (280 mm) High
Weight	7 lb (3.2 kg)
Maximum Working Pressure	300 psi (2.1 MPa, 21 bar)
Flow Capacity	20 gpm (76 liters/min)
Filter Area	225 in. <sup>2</sup> (1450 mm <sup>2</sup> )
Wetted Parts	Anodized Aluminum, Viton <sup>®</sup> ; 300 Series Stainless Steel, PTFE, Plated Steel

Viton<sup>®</sup> is a registered trademark of the Du Pont Corporation.

# The Graco Warranty and Disclaimers

Graco warrants all equipment listed in this manual which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special extended or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

**GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.** These items sold, but not manufactured by Graco (such as electric motors, gas engines, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

## **FOR GRACO CANADA CUSTOMERS**

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

## Graco Phone Number

**TO PLACE AN ORDER**, contact your Graco distributor, or call this number to identify the distributor closest to you:  
**1-800-367-4023 Toll Free.**

*All written and visual data contained in this document reflects the latest product information available at the time of publication.  
Graco reserves the right to make changes at any time without notice.*

**Sales Offices:** Minneapolis, Detroit, Los Angeles  
**Foreign Offices:** Belgium, Canada, England, Korea, France, Germany, Hong Kong, Japan

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