

Instructions – Parts List



STAINLESS STEEL, ONE QUART (ONE LITER)

Air Regulated Pressure Cups

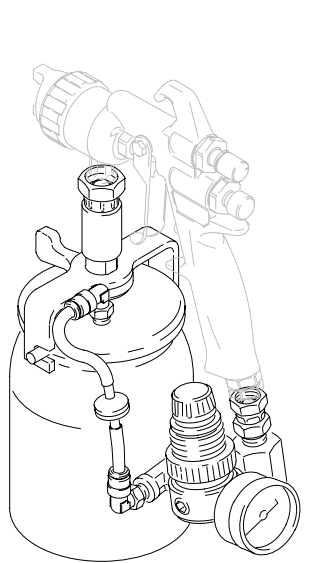
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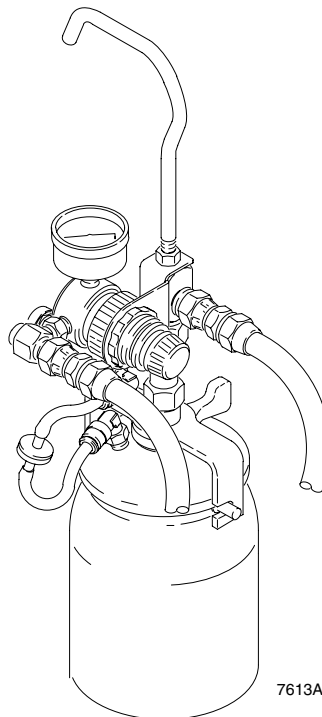
Important Safety Instructions

Read all warnings and instructions in this manual.
Save these instructions.

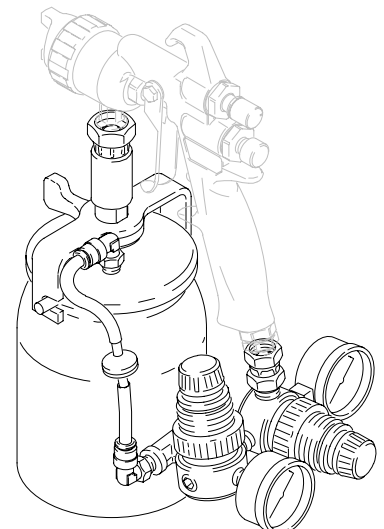
See page 10 for model numbers and maximum
working pressures.



**Single Air Regulator
Pressure Cup Kit**
Part No. 239802 and 245181



**Remote Single Air Regulator
Pressure Cup Kit**
Part No. 239804



**Double Air Regulator
Pressure Cup Kit**
Part No. 239803

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Setup

NOTE: Tighten all fittings securely.

Install the Elbow Fitting and Tubing

Push the tubing (3), with the check valve (13), firmly into the cup's elbow fitting (D). See Fig. 2 or 3. The tapered side of the check valve must face towards the cup's elbow fitting.

NOTE: To disconnect the tubing, push down on the fitting's outer ring and pull on the tubing.

Part No. 239802, 239803, and 245181: Install the Gun on the Cup

1. Tighten the cup swivel fitting (E) onto the gun fluid inlet. See Fig. 2.
2. Tighten the air fitting (F) onto the gun air inlet.

Part No. 239804: Assemble the Remote Single Air Regulator Pressure Cup Kit

1. Tighten the cup swivel fitting (E) onto the fluid outlet fitting (4) of the air regulator assembly. See Fig. 3.
2. Tighten the air supply line (G) onto the air inlet fitting (19).
3. Tighten the air line (H) onto the gun air inlet.
4. Tighten the fluid line (J) onto the gun fluid inlet.

Fill the Pressure Cup

1. Push the clamp lever (A) fully to the unclamped position, against the yoke (B). See Fig. 1.
2. Twist the cup lid (101) counterclockwise to disengage the yoke hook from the cup extended pins (C).
3. Remove the cup lid (101) and fill the cup with fluid.
4. Twist the cup lid (101) clockwise to engage the yoke (B) hook, then push the clamp lever (A) fully to the clamped position. Use your thumb to force the clamp lever into position; do not use wrenches or tools to move it.

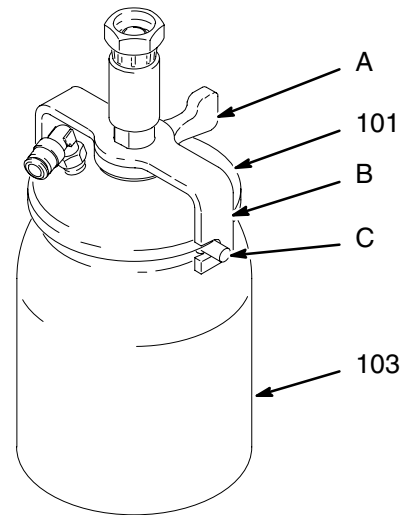
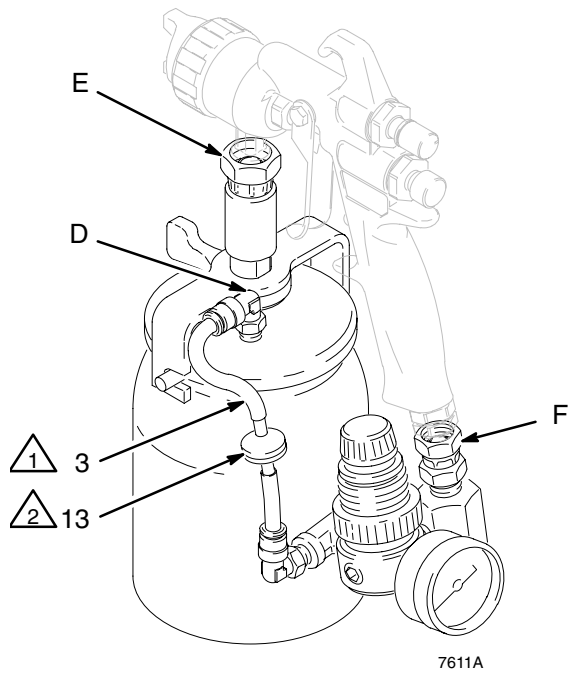


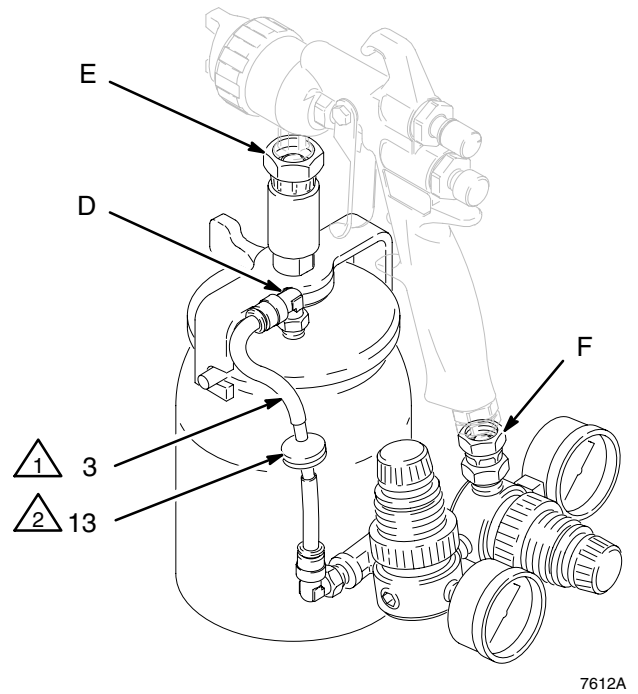
Fig. 1 _____ 01961A

Setup

- △ 1 Push tube (3) fully into elbow fitting (D)
- △ 2 Tapered side of the check valve must face towards the cup's elbow fitting



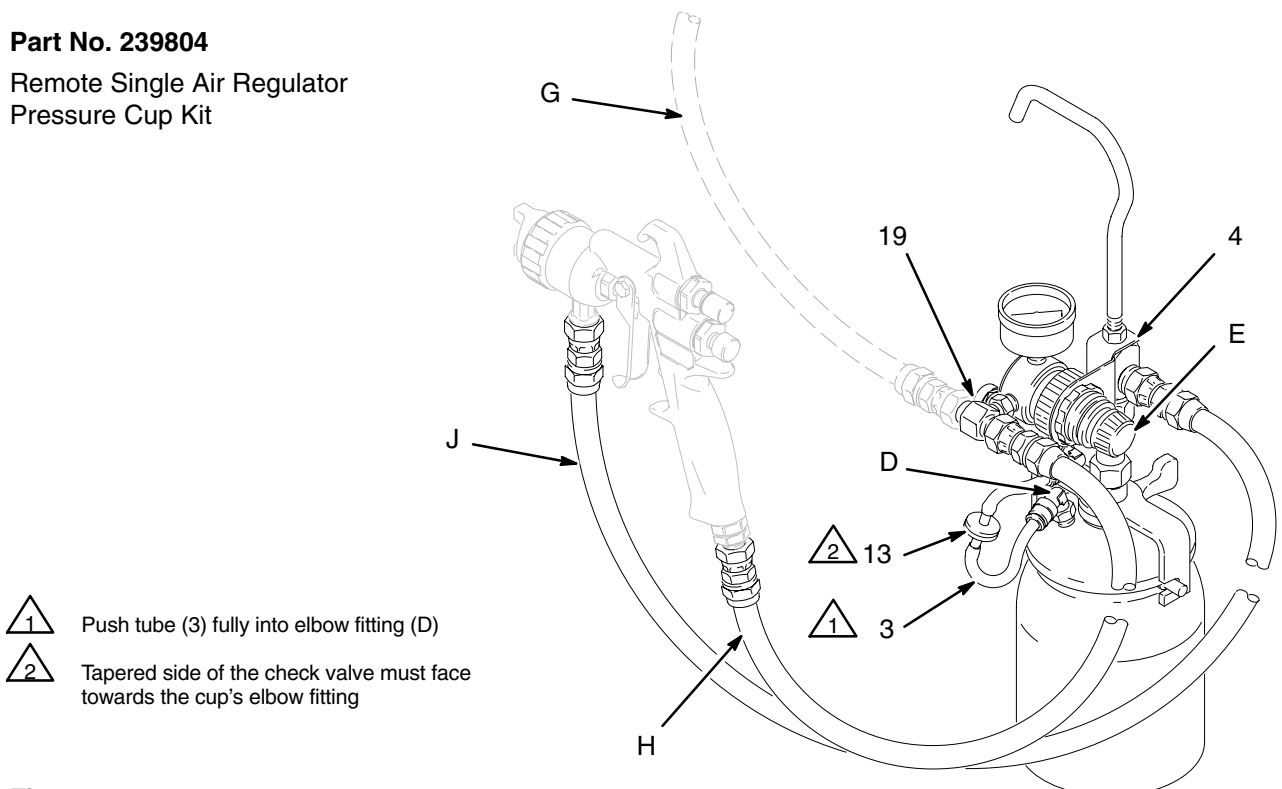
Part No. 239802 and 245181
Single Air Regulator Pressure Cup Kit



Part No. 239803
Double Air Regulator Pressure Cup Kit

Fig. 2

Part No. 239804
Remote Single Air Regulator
Pressure Cup Kit



- △ 1 Push tube (3) fully into elbow fitting (D)
- △ 2 Tapered side of the check valve must face towards the cup's elbow fitting

Fig. 3

Operation

⚠ WARNING

Never exceed 20 psi (1.4 bar) static air pressure to the cup. Exceeding the maximum working pressure of the cup or any other system component could cause component rupture, which could result in serious injury and property damage.

⚠ WARNING

Pressure Relief Procedure

To reduce the risk of serious injury, including splashing in the eyes or on the skin, always follow this procedure after you stop spraying, when checking or servicing any part of the spray system, before disconnecting the gun, air regulator, or pressure cup and when removing a pressure cup for refilling or cleaning.

1. Turn off the air supply to the gun.
2. Trigger the gun into a grounded metal waste container to relieve fluid pressure.
3. Place the cup on a table and slowly release the clamp (A) to bleed-off any residual pressure in the cup. See Fig. 4. Be sure to push the clamp lever fully to the clamped position before turning on the air supply to the gun again.

Setting the Cup Air Pressure

1. Pull up the cup regulator adjustment knob lock-ring (L); this allows the knob (K) to turn. See Fig. 4.
2. Set the cup pressure at zero by turning the adjustment knob (K) fully counterclockwise.
3. Slowly turn the adjustment knob (K) clockwise to increase the air pressure to the cup.
4. Push the adjustment knob lock-ring (L) down to lock the cup pressure setting.

Setting the Gun Air Pressure

NOTE: Installing the gun air inlet regulator adds a pressure drop that could limit the air cap pressure.

Set the gun air pressure regulator for the minimum pressure needed to atomize your fluid. See your gun manual for recommended settings.

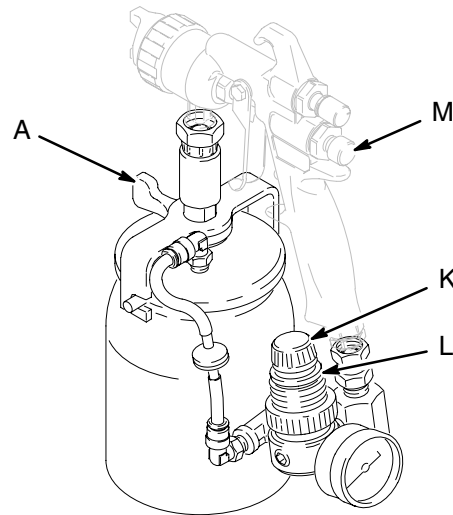


Fig. 4

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Spraying Tips

The regulator is not self relieving so if the regulated air pressure setting is causing excessive fluid flow, follow these steps.

1. Pull up the cup regulator adjustment knob lock-ring (L). See Fig. 4.
2. Turn the adjustment knob (K) counterclockwise.
3. Trigger the gun into a grounded metal waste container until cup pressure is lowered.
4. Turn the adjustment knob (K) clockwise until you obtain the desired lower pressure setting.
5. Push down the adjustment knob lock-ring (L).

⚠ CAUTION

Do not restrict the fluid flow by continuously spraying with the gun's fluid adjustment knob (M) turned in (clockwise) as this will cause excessive abrasive wear on the fluid needle and trigger/air valve shaft.

To restrict the fluid flow, lower the cup pressure or use a smaller size needle/nozzle set and air cap combination.

If the cup pressure must be below 1.0 psi (0.07 bar) to achieve the desired fluid flow, a smaller needle/nozzle size is recommended.

Operation

Optional Gun Air Regulator 235119

NOTE:

- Installing the gun air inlet regulator adds a pressure drop that could limit the air cap pressure.
 - See **Accessories** on page 11 for air regulator replacement parts.
1. Pull up the gun regulator adjustment knob lock-ring (L); this allows the knob to turn. See Fig. 5.
 2. Set the gun air pressure at zero by turning the regulator adjustment knob (K) fully counterclockwise.
 3. Turn on the air supply to the gun.
 4. Turn the regulator adjustment knob (K) clockwise to increase the air pressure to the gun.



WARNING

Never exceed 100 psi (7 bar) *Maximum Working Air Pressure* to the gun. Exceeding the maximum working pressure of the gun or any other system component could cause component rupture, which could result in serious injury and property damage.

5. Push the adjustment knob lock-ring (L) down to hold the pressure setting.

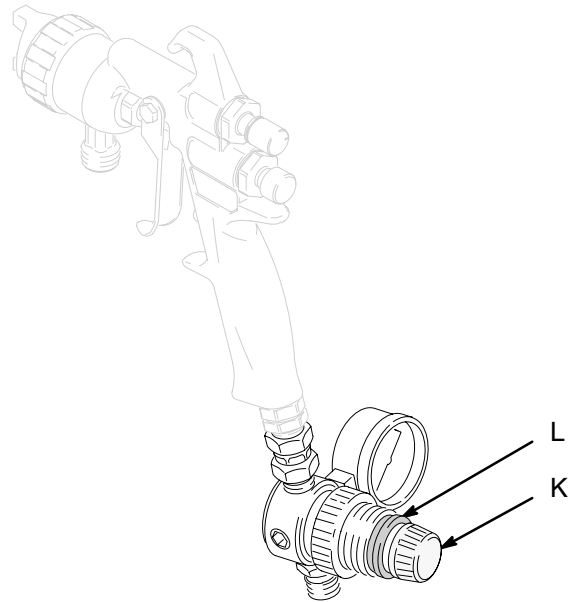


Fig. 5

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Maintenance

Disconnect the Gun and Air Regulator from the Cup

1. Follow the **Pressure Relief Procedure Warning** on page 4.
2. To disengage the tube grip, push down on the outer ring of the lid elbow fitting (N), then pull the tubing (3) out of the fitting. See Fig. 6.
3. Holding a wrench on the gun fluid inlet fitting, disconnect the pressure cup swivel nut fitting (E).
4. Disconnect the air regulator fitting from the gun air inlet.
5. Clean the gun as instructed in the gun manual.
5. If any fluid is in the lid elbow fitting (N), flush it with solvent but do not soak it in solvent for an extended period.
6. If fluid is in the tubing (3) or check valve (13), replace them. See the parts list for your cup assembly to order parts.

⚠ CAUTION

Do not clean the air regulators in a gun washer as it will damage the regulator diaphragm. Do not use any cleaning method that allows solvent to enter the regulator internally.

Remove the Cup Lid

1. Push the clamp lever (A) fully to the unclamped position, against the yoke (B). See Fig. 6.
2. Twist the cup lid (101) counterclockwise to disengage the yoke hook from the cup extended pins (C).
3. Remove the cup lid (101).
4. Clean the cup lid (101) and cup (103).

⚠ CAUTION

When cleaning the pressure cup lid (101), avoid prolonged exposure of the gasket (102) to solvent as this will cause it to swell.

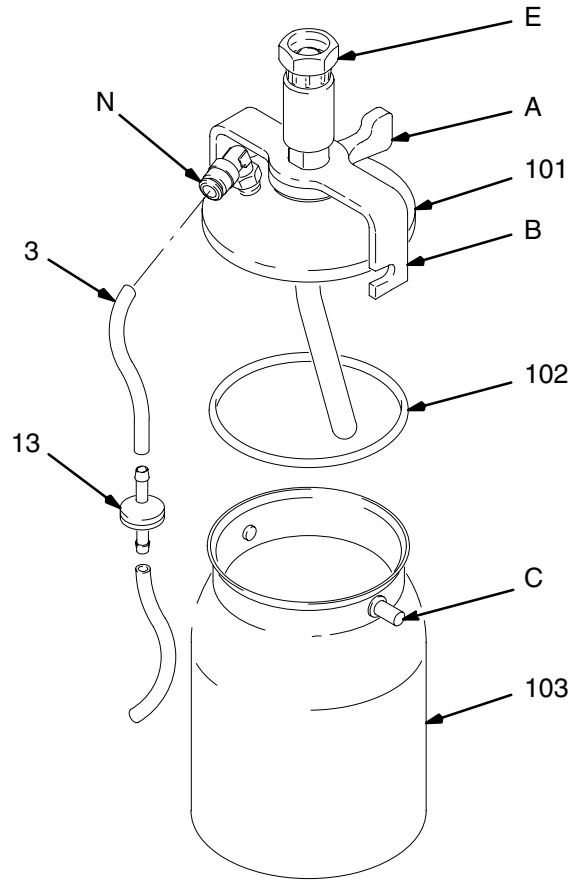


Fig. 6

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Parts

Use Only Genuine Graco Parts and Accessories

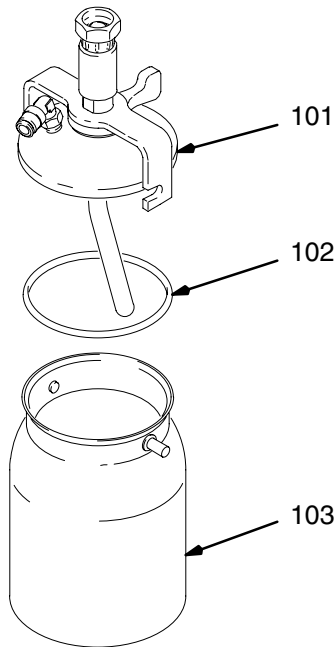
One Quart Pressure Cup

Part No. 239801

Includes the following parts:

| Ref. No. | Part No. | Description | Qty. |
|----------|----------|--------------------------------------|------|
| 101 | 236908 | LID, pressure cup; Includes item 102 | 1 |
| 102 | 189883 | GASKET | 1 |
| 103 | 239727 | CUP, 1 quart (1 liter) | 1 |

NOTE: See the **Technical Data**, page 10, for a list of pressure cup materials.



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Single Air Regulator Pressure Cup Kit

Part No. 239802

Includes the following parts:

| Part No. | Description | Qty. |
|----------|---|------|
| 235375 | Single Air Regulator Assembly <i>See parts list at right</i> | 1 |
| 239801 | Pressure Cup Assembly <i>See parts list above</i> | 1 |
| 195065 | Air Inlet Fitting | |

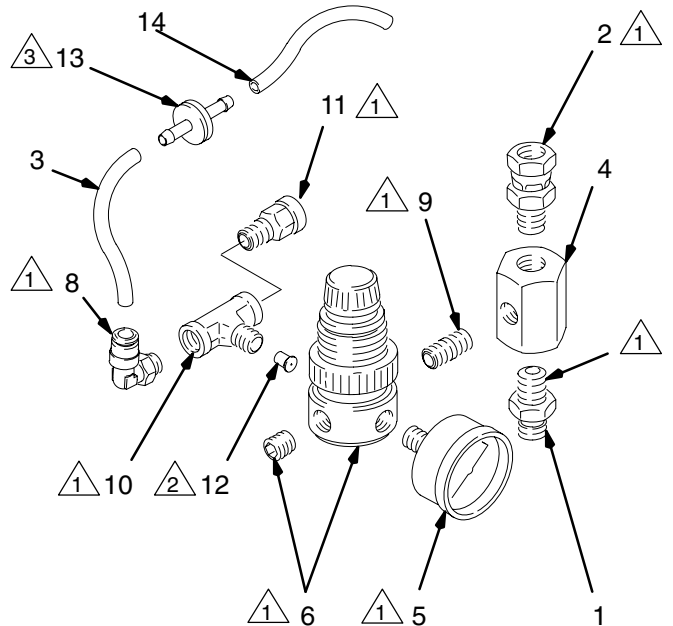
Single Air Regulator Assembly

Part No. 235375, Series B




Part No. 245192

Includes the following parts:

| Ref. No. | Part No. | Description | Qty. |
|----------|----------|--|------|
| 1 | 162453 | NIPPLE | 1 |
| 2 | 156823 | SWIVEL FITTING | 1 |
| 3 | 112699 | TUBE; 1/4 in. OD X 2.38 in. | 1 |
| 4 | 187410 | AIR FITTING | 1 |
| 5 | 111500 | GAUGE; 0-15 psi (0-1 bar) range | 1 |
| 6 | 111501 | REGULATOR; 0-12 psi (0-0.8 bar) range | 1 |
| 8 | 112698 | ELBOW FITTING; 90° swivel; for 1/4 in. OD tube | 1 |
| 9 | 100168 | NIPPLE | 1 |
| 10 | 110440 | TEE FITTING | 1 |
| 11 | 112059 | PRESSURE RELIEF VALVE | 1 |
| 12 | 189557 | AIR RESTRICTOR | 1 |
| 13 | M71256 | CHECK VALVE1 | 1 |
| 14 | 112699 | TUBE, 1/4 in. OD X 2.38 in. (235735) | 1 |
| | 198527 | TUBE 1/4 in. OD X 6.00 in. (245192) | 1 |



01728

-  Apply anaerobic pipe sealant (*white*) to external threads
-  Press fit tightly into tee (10)
-  Tapered side of the check valve must face towards the cup's elbow fitting

Parts

Use Only Genuine Graco Parts and Accessories

Double Air Regulator Pressure Cup Kit

Part No. 239803

Includes the following parts:

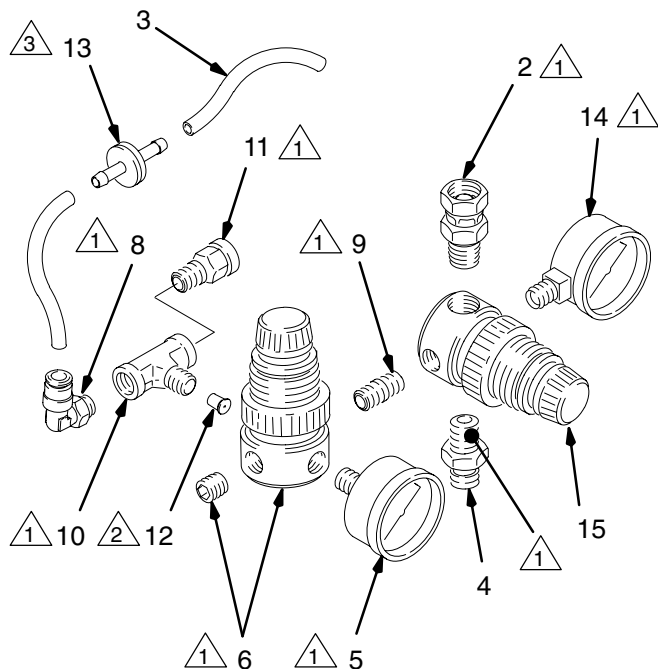
| Part No. | Description | Qty. |
|----------|--|------|
| 235376 | Double Air Regulator Assembly <i>See parts list below</i> | 1 |
| 239801 | Pressure Cup Assembly <i>See parts list, page 7</i> | 1 |
| 195065 | Air Inlet Fitting | 1 |

Double Air Regulator Assembly




Part No. 235376, Series B

Includes the following parts:

| Ref. No. | Part No. | Description | Qty. |
|----------|----------|--|------|
| 2 | 156823 | SWIVEL FITTING | 1 |
| 3 | 112699 | TUBE; nylon; 1/4 in. OD | 2 |
| 4 | 162453 | NIPPLE | 1 |
| 5 | 111500 | GAUGE; 0-15 psi (0-1 bar) range | 1 |
| 6 | 111501 | REGULATOR; 0-12 psi (0-0.8 bar) range | 1 |
| 8 | 112698 | ELBOW FITTING; 90° swivel; for 1/4 in. OD tube | 1 |
| 9 | 100168 | NIPPLE | 1 |
| 10 | 110440 | TEE FITTING | 1 |
| 11 | 112059 | PRESSURE RELIEF VALVE | 1 |
| 12 | 189557 | AIR RESTRICTOR | 1 |
| 13 | M71256 | CHECK VALVE | 1 |
| 14 | 110436 | GAUGE; 0-100 psi (0-7 bar) range | 1 |
| 15 | 110438 | REGULATOR; 0-100 psi (0-7 bar) range | 1 |



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-  Apply anaerobic pipe sealant (*white*) to external threads
-  Press fit tightly into tee (10)
-  Tapered side of the check valve must face towards the cup's elbow fitting

Parts

Use Only Genuine Graco Parts and Accessories

Remote Single Air Regulator Pressure Cup Kit

Part No. 239804

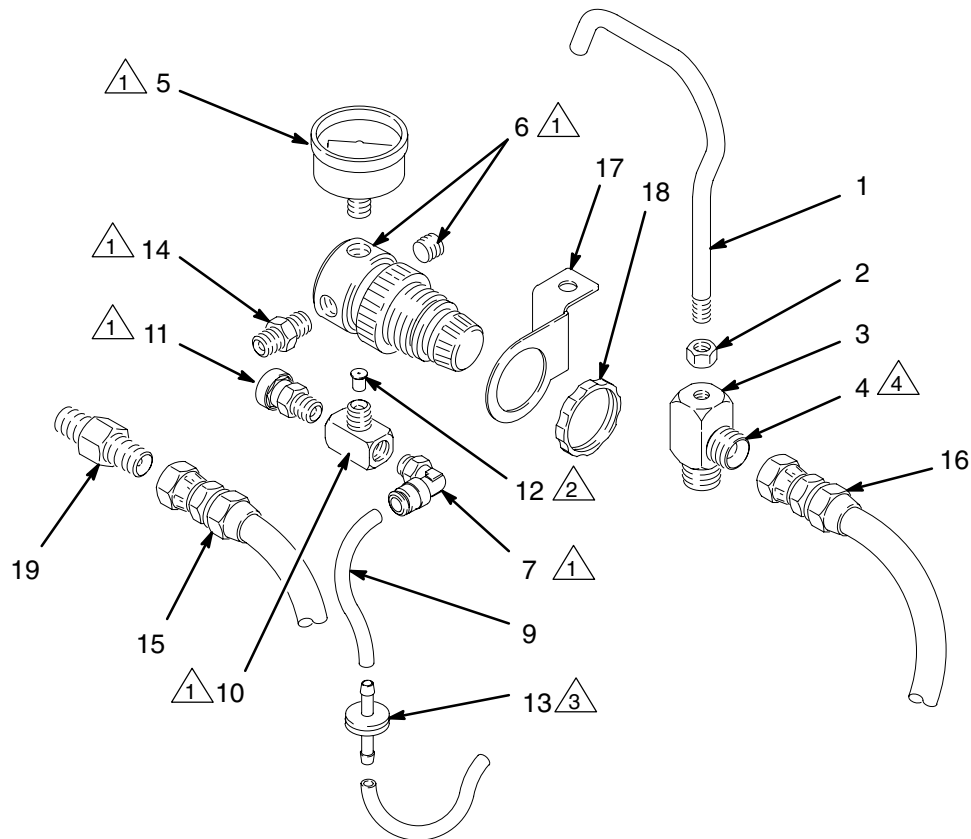
Includes the following parts:

| Part No. | Description | Qty. | Ref. No. | Part No. | Description | Qty. |
|----------|--|------|----------|----------|--|------|
| | | | 3 | 172680 | ELBOW FITTING | 1 |
| | | | 4 | 172682 | HOSE ADAPTER | 1 |
| | | | 5 | 111500 | GAUGE; 0-15 psi (0-1 bar) range | 1 |
| | | | 6 | 111501 | REGULATOR; 0-12 psi (0-0.8 bar) range | 1 |
| 236142 | Remote Air Regulator Assembly <i>See parts list below</i> | 1 | 7 | 112698 | CONNECTOR; for 1/4 in. OD tube | 1 |
| 239801 | Pressure Cup Assembly <i>See parts list, page 7</i> | 1 | 9 | 112699 | TUBE; nylon; 1/4 in. OD | 2 |
| | | | 10 | 110440 | TEE FITTING | 1 |
| | | | 11 | 112059 | PRESSURE RELIEF VALVE | 1 |
| | | | 12 | 189557 | AIR RESTRICTOR | 1 |
| | | | 13 | M71256 | CHECK VALVE | 1 |
| | | | 14 | 103656 | HEX NIPPLE | 1 |
| | | | 15 | 212005 | AIR HOSE; buna-n; 1/4 npsm; 6 ft. (1.83 m) long | 1 |
| | | | 16 | 212006 | FLUID HOSE; nylon; 3/8 npsm; 6.5 ft. (1.98 m) long | 1 |
| | | | 17 | 188770 | MOUNTING BRACKET | 1 |
| | | | 18 | 112308 | PANEL NUT | 1 |
| | | | 19 | 183696 | TEE FITTING | 1 |

Remote Air Regulator Assembly Part No. 236142, Series B

Includes the following parts:

| Ref. No. | Part No. | Description | Qty. |
|----------|----------|-------------|------|
| 1 | 172620 | HOOK | 1 |
| 2 | 100188 | HEX NUT | 1 |



1 Apply anaerobic pipe sealant (white) to external threads

2 Press fit tightly into tee (10)

3 Tapered side of the check valve must face towards the cup's elbow fitting

4 Apply high strength anaerobic pipe sealant (green) to external threads.

01963A

Technical Data

Single Air Regulator Pressure Cup Kit, Part No. 239802 and 245181

| | |
|-------------------------------|------------------|
| Maximum Outlet Pressure | 12 psi (0.8 bar) |
| Maximum Inlet Pressure | 100 psi (7 bar) |

Double Air Regulator Pressure Cup Kit, Part No. 239803

| | |
|---|------------------|
| Cup Regulator Maximum Outlet Pressure | 12 psi (0.8 bar) |
| Gun Regulator Maximum Outlet Pressure | 100 psi (7 bar) |
| Maximum Inlet Pressure | 100 psi (7 bar) |

Remote Single Air Regulator Pressure Cup Kit, Part No. 239804

| | |
|-------------------------------|------------------|
| Maximum Outlet Pressure | 12 psi (0.8 bar) |
| Maximum Inlet Pressure | 100 psi (7 bar) |

One Quart Pressure Cup, Part No. 239801

| | |
|---------------------------------------|------------------------------------|
| Maximum Working Pressure | 20 psi (1.4 bar) |
| Size | 1 quart (1 liter) |
| Material | |
| <i>Cup, Tube, Seat, and Nut</i> | 304 Stainless Steel |
| <i>Lid</i> | Glass-Filled Nylon |
| <i>Sleeve, Clamp Arm</i> | Electroless Nickel Plated Aluminum |
| <i>Yoke</i> | Electroless Nickel Plated Steel |
| <i>Cup Gasket</i> | Polyethylene Foam |

Cup Fluid Nut Thread 3/8–18 npsm; R3/8–19 compound thread

Regulator Swivel Nut Thread 1/4–18 npsm; R1/4–19 compound thread

Weight

| | |
|---|----------------------|
| Pressure Cup Only | 1 lb. 7 oz. (646 g) |
| Cup with Single Air Regulator* | 2 lb. 4 oz. (1007 g) |
| Cup with Double Air Regulator* | 2 lb. 8 oz. (1113 g) |
| Remote Cup with Air Regulator Assembly* | 2 lb. 9 oz. (1130 g) |
| Remote Cup with Air Regulator Assembly and Hoses* | 4 lb. 1 oz. (1816 g) |
| Gun Air Regulator* | 8 oz. (224 g) |

* *Weight without gun*

Accessories

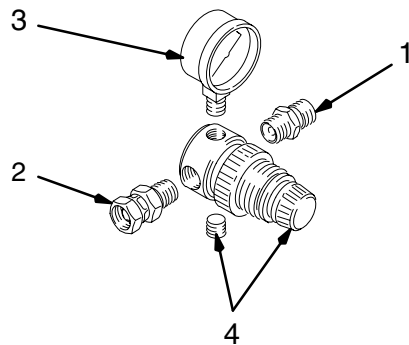
Spray Gun Air Regulator Assembly 235119

100 psi (7 bar) Maximum Outlet Pressure
150 psi (10 bar) Maximum Inlet Pressure

For use on a spray gun with a 1/4–18 npsm air fitting.
Includes the following parts:

| Ref. No. | Part No. | Description | Qty. |
|----------|----------|--------------------------------------|------|
| 1 | 162453 | NIPPLE; 1/4 npt x 1/4 npsm | 1 |
| 2 | 156823 | SWIVEL UNION; 1/4 npt | 1 |
| 3 | 110436 | GAUGE; 0-100 psi (0-7 bar) range | 1 |
| 4 | 110438 | REGULATOR; 0-100 psi (0-7 bar) range | 1 |

NOTE: Installing the gun air inlet regulator adds a pressure drop that could limit the air cap pressure.



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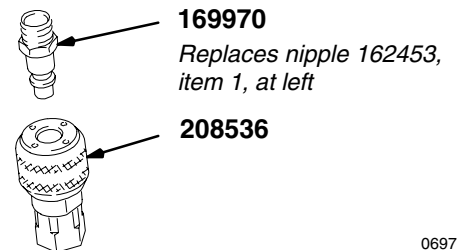
Quick Disconnect Coupler 208536

1/4 npt(f), zinc-plated brass

NOTE: Installing the coupler adds a pressure drop that could limit the air cap pressure.

Quick Disconnect Pin 169970

1/4 npt(m), zinc-plated steel



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One Quart Pressure Cup Liners 112490

Box of 20 special blend polyethylene liners.
Use to line cup for easy clean-up. Graco Standard Warranty

Graco Standard Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale 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.

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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, 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.

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1-800-328-0211 Toll Free

612-623-6921

612-378-3505 Fax

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MM 308791

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International Offices: Belgium, China, Japan Korea

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

<http://www.graco.com>

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