

INSTRUCTIONS-PARTS LIST



306-788



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

INSTRUCTIONS

*First choice when
quality counts.™*

Rev. G
Supersedes Rev. F

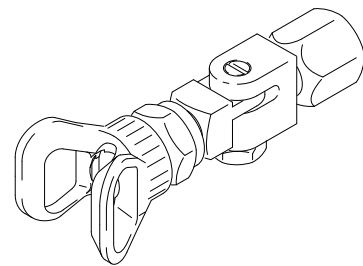
DIRECTIONAL

Spray Nozzle Adapters

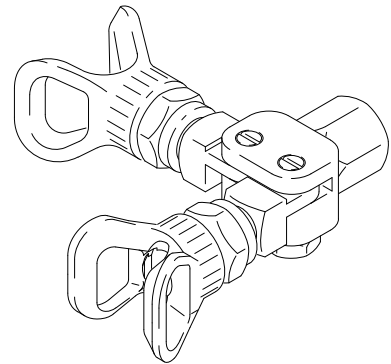
3000 psi (21.0 MPa) (210 bar) Maximum Working Pressure

Fits Automatic and Hand-held Hydra-Spray®, Airless Spray Guns

* Spray tip not included. Order separately.



**Model 206-235, Series F
Single Nozzle***



**Model 206-236, Series F
Dual Nozzle***

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

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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 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 not sure, call your Graco distributor.
- Do not alter or modify this equipment.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure stated for your equipment. Do not exceed the maximum working pressure of the lowest rated component in your system.
- Handle hoses carefully. Do not pull on hoses to move equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 66°C (150°F) or below -40°C (-40°F).
- Wear hearing protection when operating this equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

WARNING



INJECTION HAZARD

Spray from the gun, leaks or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin is a serious injury. The injury may look like just a cut, but it is a serious injury. Get immediate medical attention.
- Do not point the gun at anyone or at any part of the body.
- Do not put your hand or fingers over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Always have the tip guard and the trigger guard on the gun when spraying.
- Be sure the gun trigger safety operates before spraying.
- Lock the gun trigger safety when you stop spraying.
- Follow the **Pressure Relief Procedure** on page 6 if the spray tip clogs and before cleaning, checking or servicing the equipment.
- Tighten all fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn, damaged, or loose parts immediately.

WARNING



FIRE AND EXPLOSION HAZARD

Improper grounding, poor ventilation, open flames or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

- Ground the equipment and the object being sprayed. Refer to **Grounding** in your separate equipment manuals.
- If there is any static sparking or you feel an electric shock while using this equipment, **stop spraying immediately**. Do not use the equipment until you identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Before operating this equipment, electrically disconnect all equipment in the spray area.
- Before operating this equipment, extinguish all open flames or pilot lights in the spray area.
- Do not smoke in the spray area.
- Do not turn on or off any light switch in the spray area while spraying or while operating if fumes are present.
- Do not operate a gasoline engine in the spray area.



TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed.

- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Always wear protective eyewear, gloves, clothing and respirator as recommended by the fluid and solvent manufacturer.

Installation

General Information

WARNING

To reduce the risk of serious injury, always follow the **Pressure Relief Procedure** on page 6 whenever you are instructed to relieve the pressure.

NOTE: Always use Genuine Graco Parts and Accessories, available from your Graco distributor.

WARNING

Be sure your system has a bleed-type master air valve and a fluid drain valve. These two accessories help reduce the risk of serious bodily injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, if you are adjusting or repairing the pump or gun.

- The bleed-type master air valve relieves air trapped between this valve and the pump after the air regulator is shut off. Trapped air can cause the pump to cycle unexpectedly.
- The fluid drain valve Assists in relieving fluid pressure in the displacement pump, hose, and gun; triggering the gun to relieve pressure may not be sufficient.

1. Install the gasket (7) and then screw the swivel body (11 or 13) firmly onto the gun. Don't install the spray tip yet. See Fig. 1.
2. Flush and then prime the pump or sprayer according to the instructions supplied with it.
3. **Relieve the Pressure.**
4. Install an appropriate spray tip (A) in the tip guard (12). Be sure the tip filter (9) is in place, and then screw on the tip guard tightly. See Fig. 1.

CAUTION

Failure to install the tip filter (9) and the gasket (7) will result in leaking at the nozzle.

5. Adjust the nozzle for the desired spray pattern angle. Loosen the pivot screw (8) and move the swivel nozzle (5) as needed. Tighten the pivot screw. Refer to Fig. 2 for examples of different angles.

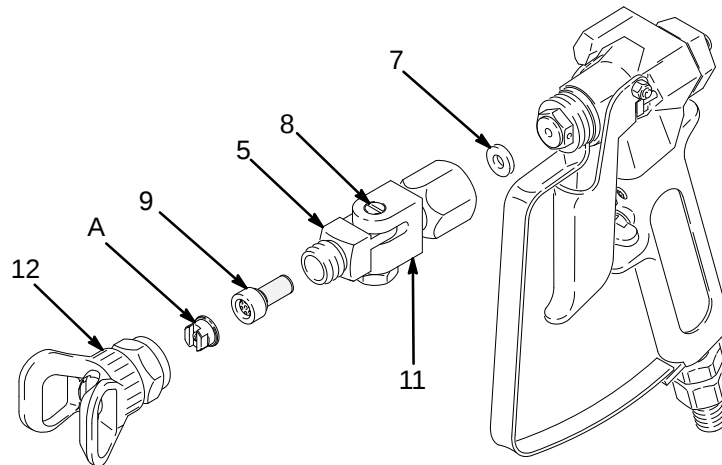
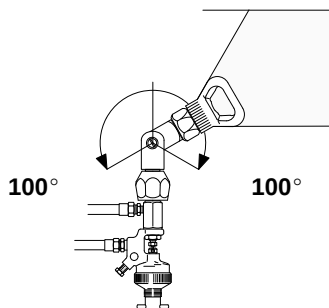


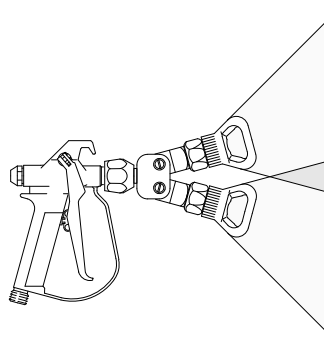
Fig. 1

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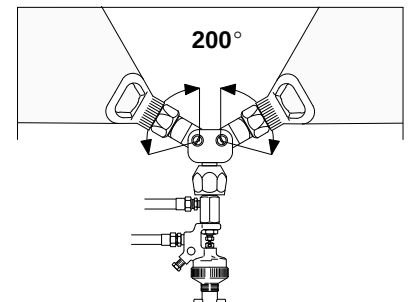


Directs pattern 100° to either side of center.

Fig. 2



Overlaps patterns for wider coverage in one pass.



Directs patterns up to 200° in different directions.

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Operation

Pressure Relief Procedure

WARNING



INJECTION HAZARD

To reduce the risk of serious injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts or electric shock, always follow this procedure whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- install or clean the spray tips,
- or shut off the pump.

1. Shut off the pump and unplug it.
2. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun into the paint pail to relieve pressure.
3. Engage the gun safety device.
4. Open your pump's or sprayer's pressure relief valve or drain valve.

*If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, **very slowly** loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip or hose.*

Operation

WARNING

To reduce the risk of a fluid injection injury, never operate the gun with the tip guard(s) removed.

WARNING

To reduce the risk of serious injury, always follow the **Pressure Relief Procedure** on page 6 whenever you are instructed to relieve the pressure.

Whenever you stop spraying for a moment, engage the gun safety latch.

Adjust the Spray Pattern

1. **Relieve the Pressure.**
2. To adjust the spray pattern direction, engage the safety knob and loosen the tip guard retaining nut. Turn the spray tip so that the groove is horizontal for a horizontal spray pattern, and vertical for a vertical spray pattern.
3. The spray tip orifice size and spray angle determines the coverage and size of the pattern. When more coverage is needed, use a larger spray tip rather than increasing the fluid pressure.
4. If adjusting the pressure does not give a good spray pattern, try another tip size. Be sure to **Relieve the Pressure** completely before changing tips.

CAUTION

Openings in the tip guard are designed to reduce paint buildup on the guard while spraying. Any damage to the sharp edges of the openings causes paint to collect in that area. To reduce the risk of damage, never hang the gun by the tip guard.

Cleaning and Clearing the Spray Tip

WARNING

To reduce the risk of fluid injection or splashing in the eyes or on the skin, do not hold your hand, body, or a rag in front of the spray tip when cleaning or checking a clogged tip. Always point the gun toward the ground or into a waste container when checking to see if the spray tip is cleared.

Do not try to “blow back” paint; this is not an air spray gun.

Do not wipe fluid buildup off the gun or spray tip until pressure is relieved. See the **Pressure Relief Procedure** on page 6.

Clean off the front of the tip frequently during the day's operation and at the end of the work day. Remove and clean the tip and filter (9) at least twice daily. See Fig. 6. Always follow the **Pressure Relief Procedure** on page 6. Use a solvent soaked brush to clean the spray tip and to keep fluid buildup from drying and clogging the spray tip.

If the spray tip clogs while spraying, release the spray gun trigger, engage the trigger safety, shut off the pump and **Relieve the Pressure**. Remove the spray tip and tip filter (9) and blow out the obstruction with air from the front of the spray tip, or let the spray tip and gun nozzle soak long enough to dissolve the obstruction. If the obstruction will not dissolve, jar it out by tapping the back of the spray tip against a flat surface.

CAUTION

Never soak the entire gun in solvent. Prolonged exposure to solvent can ruin the packings.

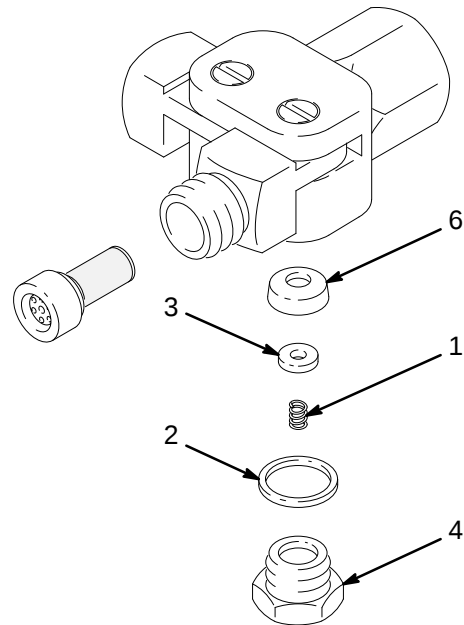
When not in use, keep the nozzles immersed in clean, compatible solvent.

Maintenance

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

1. **Relieve the Pressure**
2. Disconnect the hose from the gun. Remove the tip guards, tips and filters, and soak in a clean, compatible solvent.
3. If the fluid leaks around the swivel, check the tightness of the access plug (4). See Fig. 3.
4. If leakage continues, remove the nozzle adapter from the gun. Unscrew the access plug (4). Remove the spring (1), washer (3), seal (6), and gasket. See Fig 3.
5. Clean and inspect all parts. Replace damaged or worn parts as necessary and reassemble.



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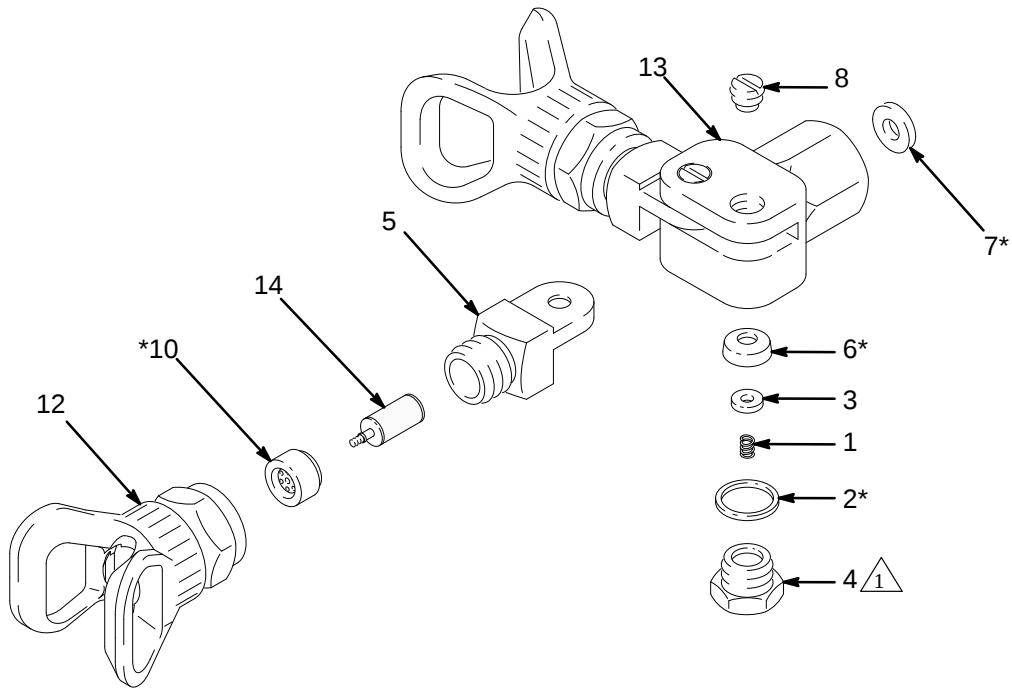
Fig. 3

[illegible]

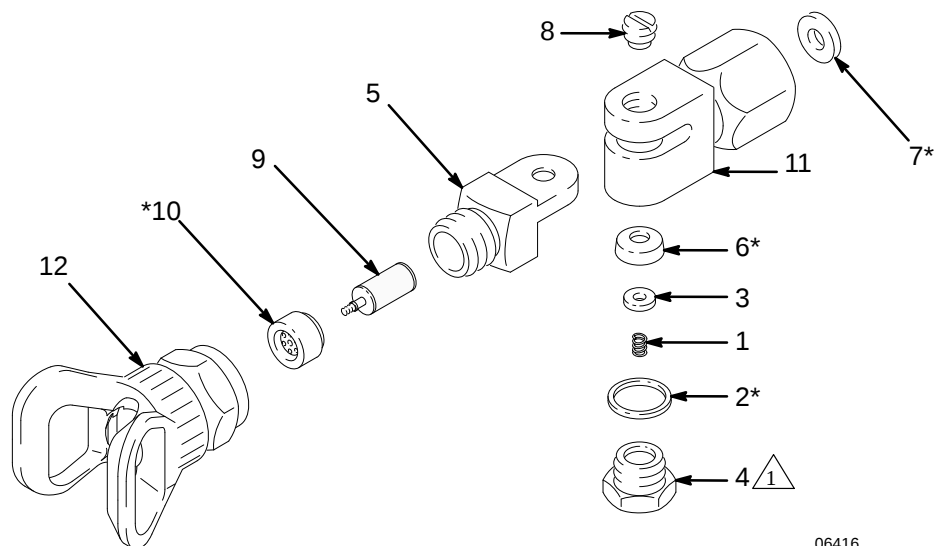
Parts

 Torque to 22–23 ft-lb (30–31 N•m)

Model 206–235, Series F NOZZLE ADAPTER; single Includes items 1–12



Model 206–236, Series F NOZZLE ADAPTER; dual Includes items 1–13



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Parts

Model 206–235, Series F NOZZLE ADAPTER; single

Ref. No.	Part No.	Description	Qty.
1	150–081	SPRING, compression	1
2*	150–451	GASKET, copper	1
3	151–395	WASHER	1
4	162–617	PLUG, seal access	1
5	162–618	NOZZLE, swivel	1
6*	176–238	SEAL, Teflon [®] cup	1
7*	166–969	GASKET, Delrin [®]	1
8	205–032	SCREW, nozzle pivot	1
9	205–265	TIP FILTER Assy, edge type; 0.009" (0.23mm) spacing; includes replaceable part Ref. No. 10	1
10*	164–075	. HEAD, filter	1
11	206–304	BODY, swivel; single nozzle	1
12	220–218	GUARD, tip	1
14	724–195	ELEMENT	1

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

Model 206–236, Series F NOZZLE ADAPTER; dual

Ref. No.	Part No.	Description	Qty.
1	150–081	SPRING, compression	2
2*	150–451	GASKET, copper	2
3	151–395	WASHER	2
4	162–617	PLUG, seal access	2
5	162–618	NOZZLE, swivel	2
6*	176–238	SEAL, Teflon [®] cup	2
7*	166–969	GASKET, Delrin [®]	1
8	205–032	SCREW, nozzle pivot	2
9	205–265	TIP FILTER Assy, edge type; 0.009" (0.23mm) spacing; includes replaceable part Ref. No. 10	2
10*	164–075	. HEAD, filter	2
12	220–218	GUARD, tip	2
13	206–305	BODY, swivel; double nozzle	
14	724–195	ELEMENT	1

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

Manual Change Summary

This manual has been updated electronically.

The Graco Warranty and Disclaimers

WARRANTY

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. 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.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

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, 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.

For Sales to Canadian Customers:

Except as expressly stated herein, Graco makes no representations, warranties or conditions, express, implied or collateral, concerning any goods or services sold, and **GRACO SHALL NOT BE LIABLE IN ANY MANNER FOR** any other representation, warranty or condition of any kind, whether arising by operation of law or otherwise, including but not limited to, **WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

LIMITATION OF LIABILITY

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or for 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.

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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