

Pistol Grip Flow Gun

309739E

EN

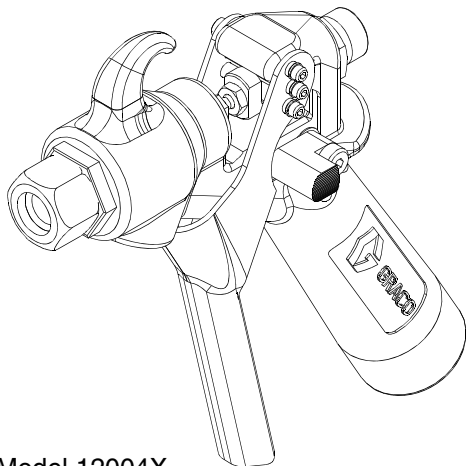
For dispensing ambient temperature sealants and adhesives.



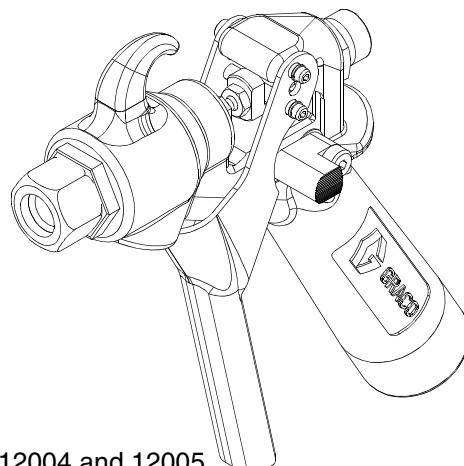
Important Safety Instructions

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

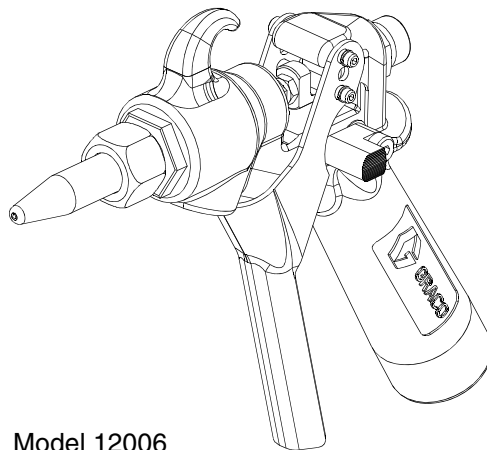
See page 2 for part numbers and maximum working pressure.



Model 12004X



Models 12004 and 12005



Model 12006

Models

Pistol Grip, Base Seal

Part Number	Model	Description
2500 psi (17.2 MPa, 172 bar) maximum working pressure		
C27020	12004	Standard base seal
C27031	12004X	Two stage, easy pull
C27067	12005	Balanced piston

Pistol Grip, Tip Seal

Part Number	Model	Description
2000 psi (13.79 MPa, 137.9 bar) maximum working pressure		
C27078	12006	Pistol Grip, Tip Seal

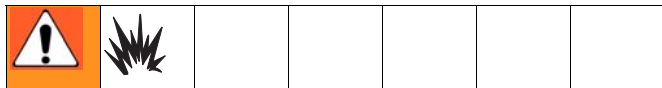
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Warnings

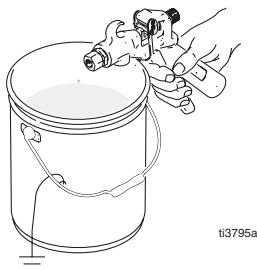
	Warning
	ELECTRIC SHOCK HAZARD Improper grounding, setup, or usage of the system can cause electric shock. • Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations. • Connect only to grounded power source.
	SKIN INJECTION HAZARD High pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment. • Do not point gun at anyone or at any part of the body. • Do not put your hand over the spray tip. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Engage trigger lock when not spraying. • Follow Pressure Relief Procedure on page 5 if the nozzle clogs and before cleaning, checking or servicing equipment.
	TOXIC FLUID HAZARD Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed. • Read MSDS's to know the specific hazards of the fluids you are using. • Store hazardous fluid in approved containers and dispose of it according to applicable guidelines.
	EQUIPMENT MISUSE HAZARD Equipment misuse can cause death or serious injury. • Do not exceed maximum working pressure or temperature rating of lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturers warnings. • Check equipment daily. Repair or replace worn or damaged parts immediately. • Do not alter or modify equipment. • For professional use only. • Use equipment only for its intended purpose. Call your Graco distributor for information. • Route hoses away from traffic areas, sharp edges, moving parts and hot surfaces. • Do not use hoses to pull equipment.

Grounding and Electrical Requirements



The following are minimum requirements for a basic dispensing system. Your system may include other equipment or objects that must be grounded. Check your local electrical code for detailed grounding instructions for your area and type of equipment.

To maintain grounding continuity when flushing or relieving pressure, always hold a metal part of spray gun firmly to side of a grounded metal pail. Then trigger spray gun.



1. **Pump:** connect a ground wire and clamp to a true earth ground as shown in pump manual.
2. **Applicator:** ground through motor cable assembly.
3. **Fluid and air hoses:** only use electrically conductive material and air hoses.
4. **Dispense gun:** ground through connection of hose or cable.
5. **Air compressor:** follow manufacturer's recommendations.
6. **Object being sprayed:** refer to local code.
7. **Fluid supply container:** refer to local code.
8. **Solvent pails used for flushing:** refer to local code.

Installation

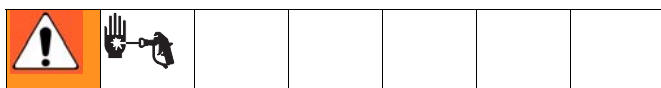
Inspect flow gun for shipping damage. If damage is found notify the carrier immediately.

 If material hose will be suspended by a hanger or tool balancer, route hose through the suspension device before securing each end of material hose.

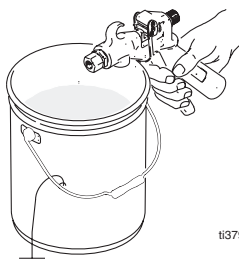
1. Connect flow gun to any standard Graco hose assembly.
2. Connect the opposite end of the heated hose assembly to any fluid supply system. See Model table, page 2 for maximum fluid working pressure for your gun model.
3. Tighten fluid connections.
4. Before operating gun, squeeze and release trigger a few cycles. Observe action of cartridge assembly.

Pressure Relief Procedure

 To help prevent injuries, follow this procedure when you shut off the flow gun and before checking or adjusting any part of gun.



1. Shut off air to pump.
2. Close bleed-type master air valve (required in your system).
3. Hold metal part of spray gun firmly to side of grounded metal pail. Trigger gun to relieve pressure.



4. Open drain valve and/or pump bleeder valve having a container ready to catch the drainage.
5. Leave drain valve open until you are ready to spray/dispense again.

If you suspect the tip/nozzle or hose is completely clogged or that pressure has not been fully relieved after following the above steps, **VERY SLOWLY** loosen the retaining nut or hose end coupling to relieve pressure gradually. Then loosen it completely. Clear tip/nozzle or hose.

Trigger Lock

Always engage trigger lock when you stop dispensing to prevent gun from being triggered accidentally by hand or if dropped or bumped.

To engage trigger lock, release trigger and rotate lock downward. See Fig. 1.

 Do not try to force trigger valve open with trigger lock engaged. This could result in component failure.

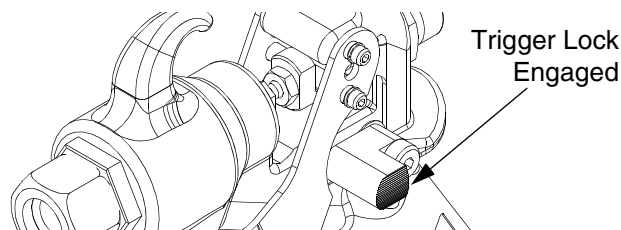


Fig. 1: Trigger Lock Engaged

To disengage trigger lock, rotate it upward. See Fig. 2.

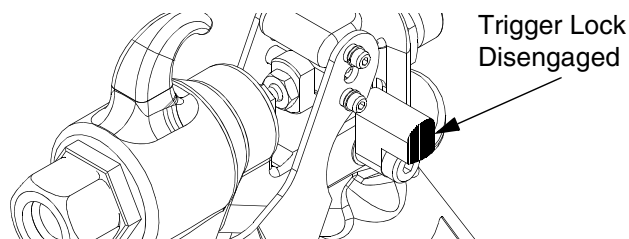


Fig. 2: Trigger Lock Disengaged

Troubleshooting

Problem	Cause	Solution
Gun fails to dispense when trigger is actuated	Material lodged in nozzle	Follow Pressure Relief Procedure , page 5. Clear nozzle of blockage.
	Material supply, hose, passages, clogged	Check material supply settings, hoses, etc. for proper material supply.
		Verify integrity of trigger pin through yoke. Repair or replace cartridge assembly as necessary.
Gun fails to dispense when trigger is engaged	Tension of trigger needs adjustment	Check spring tension adjustment at rear of gun. Spring tension should be adjusted to allow approximately 1/32 in. of free play on trigger.
		Verify integrity of trigger pin through yoke. Repair or replace cartridge assembly as necessary.
	Needle and seat adapter loose or worn	Check that seat adapter is tightened firmly and flush to gun body.
		Needle and seat adapter worn. Replace components as necessary.
Seal leakage	Packing adjustment nut not snug	Follow Pressure Relief Procedure , page 5. Tighten packing adjustment nut.
	Worn seals and packings	Rebuild gun as necessary.
Material leaks from gun inlet swivel	Worn seals	Replace seals.

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Service

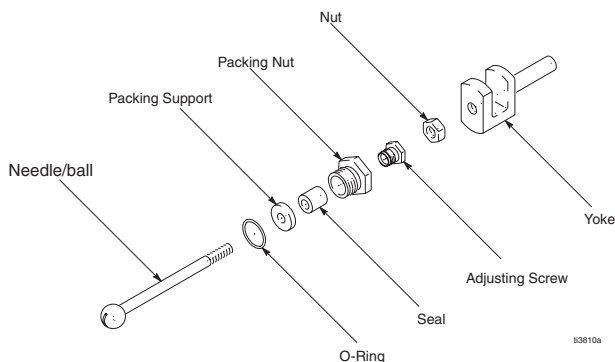
Models 12004, 12004X

Disassembly

1. Actuate gun to purge material and relieve pressure in gun. **Pressure Relief Procedure**, page 5.
2. Disconnect material supply line from gun handle.
3. Hold adapter (9) stationary and unscrew nozzle and collar (16).
4. With trigger depressed, unscrew adapter (9) from gun body (17).
5. Remove o-ring (10) from adapter (9).
6. Loosen lock nut (14).
7. Carefully unscrew and remove spring retainer (15) and spring (13) from the gun body (17).
8. Remove screw (11) and lock washer (23) from side of trigger (18).
9. Pull trigger pins (12) from gun body (17) and remove trigger (18).
10. Unscrew packing nut (5) from gun body (17).
11. Remove cartridge assembly through side of gun handle.

Cartridge Disassembly Procedure

1. Remove o-ring (4) from groove on packing nut (5).
2. Loosen lock nut (14) on cartridge while holding yoke (1) in a soft
3. Separate needle/ball (8) from yoke (1) using the slot in needle/ball to unscrew the yoke.
4. Remove adjusting screw (3) from packing nut (5). Then, separate needle/ball (8) from packing support (7).
5. Push seals (6) out of packing nut (5).

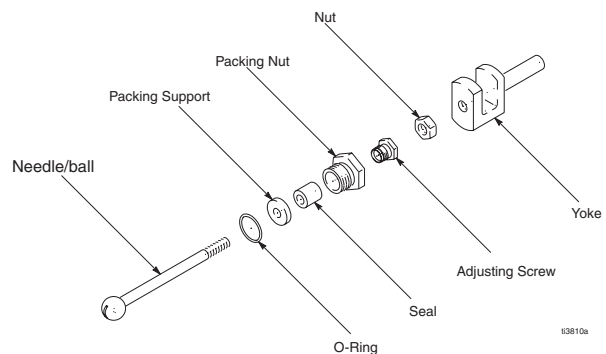


Reassembly

Clean all parts thoroughly before reassembling. Check them carefully for damage or wear, replacing parts as needed. For best results replace the original parts with new parts in repair kits.

Prior to assembly, lubricate all seals and o-rings with PARKER-O-LUBE or an equivalent lubricant.

1. Push seals (6) in the packing nut (5).
2. Screw adjusting screw (3) into packing nut (5). Insert needle/ball (8) into packing support (7).



3. Attach needle/ball (8) to yoke (1) using slot in the yoke to screw needle/ball.
4. Secure yoke in soft jawed vice. Tighten lock nut to cartridge.
5. Install o-ring (4) onto groove in packing nut (5).
6. Insert cartridge assembly through front of gun handle.
7. Screw packing nut (5) in gun body (17).
8. Install trigger (18) and insert trigger pins (12) in gun body (17). Secure using screws (11) and lock washers (23).
9. Install snap rings (11) from top to bottom to secure trigger pins (12).
10. Install spring (13) and spring retainer (15) into the gun body (17). Adjust spring retainer to allow approximately 1/32 in. of free play on trigger.
11. Tighten lock nut (14).
12. Install o-ring (10) to adapter (9).
13. With trigger retracted, screw adapter (9) into gun body (17).

14. Hold adapter (9) stationary and screw nozzle and collar (16) into adapter. Do not over tighten collar.
15. Reconnect flow gun to material supply line.
16. Turn on material supply line.
17. Return flow gun to normal operating condition.

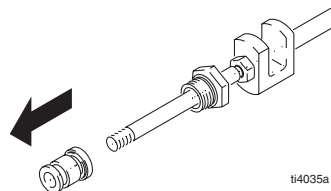
Model 12005

Disassembly

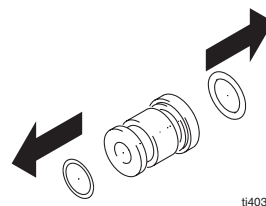
1. Actuate gun to purge material and relieve pressure in gun. **Pressure Relief Procedure**, page 5.
2. Disconnect material supply line from gun handle.
3. Hold adapter (9) stationary and unscrew nozzle and collar (16).
4. With trigger depressed, unscrew adapter (9) from gun body (17).
5. Remove o-ring (10) from adapter (9).
6. Loosen lock nut (14).
7. Carefully unscrew and remove spring retainer (15)
8. Remove screws (11) and lock washers (28) from trigger pins (12).
9. Pull trigger pins (12) from gun body (17) and remove trigger (18).
10. Remove piston valve (20) from front of gun.
11. Unscrew packing nut (5) from gun body (17).
12. Remove cartridge assembly from gun.

Cartridge Disassembly Procedure

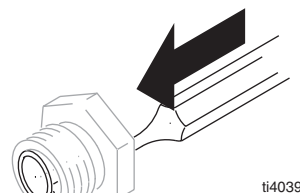
1. Remove guide (22) from needle (8).



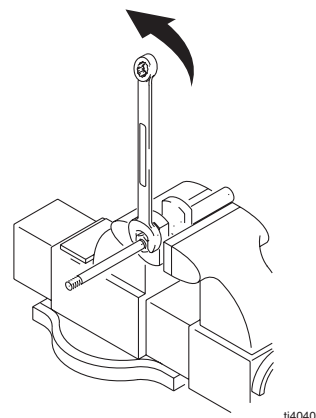
2. Remove two o-rings (23) from guide (22).



3. Unwind spiral PTFE o-ring backup (21) from guide(22).
4. Loosen adjustment screw (3) while holding packing nut (5).
5. Extract needle (8) from packing nut (5).
6. Remove o-ring (4) from groove in packing nut (5).
7. Remove adjustment screw (3).
8. Push three seal-needles (6) out of packing nut (5) with soft rod or dowel.



9. Hold yoke (1) in soft-jawed vice. Unlock stop nut (2).



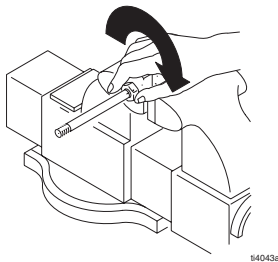
10. Separate needle (8) from yoke (1).

Reassembly

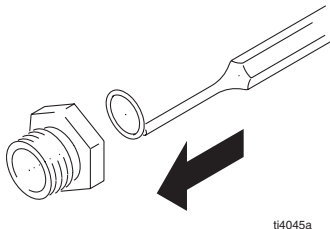
Clean all parts thoroughly before reassembling. Check them carefully for damage or wear, replacing parts as needed. For best results replace the original parts with new parts in repair kits.

Prior to assembly, lubricate all seals and o-rings with PARKER-O-LUBE or an equivalent lubricant.

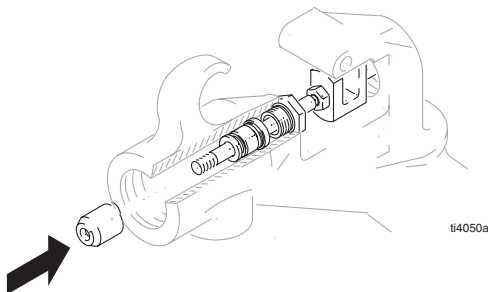
1. Connect needle (8) and stop nut (2) to yoke (1).
2. Secure yoke (1) in soft jawed vise. Lock stop nut (2) against yoke.



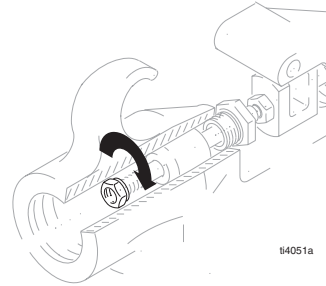
3. Insert needle (8) into packing nut (5).
4. Push three seal needles (6) in packing nut (5) using soft rod or dowel. Orient as shown below



5. Install o-ring (4) on groove of packing nut (5).
6. Install guide (22) on needle (8).
7. Rewind spiral o-ring backup (21) on guide (22).
8. Install two o-rings (23) on guide (22).
9. Insert cartridge assembly in gun body (17) from rear of gun.
10. Screw packing nut (5) into gun body (17).
11. Insert valve (20) through front of gun on needle (8).



12. Tighten nut (19) on needle (8).



13. Adjust screw (3) to tighten packings.
14. Install trigger (18). Align yoke (1) in gun body (17).
15. Press trigger pin (12) into gun body.
16. Secure trigger pins (12) using screws (11) and lock washers (28).
17. Install spring (13) and spring retainer (15) into gun body (17).
18. Adjust spring retainer to allow approximately 1/32 in. of free play on trigger.
19. Tighten stop nut (14).
20. Install o-ring (10) on adapter (9).
21. With trigger retracted screw adapter (9) on gun body (17).
22. While holding adapter (9) stationary, screw collar (16) and nozzle into adapter. Do not over tighten collar.
23. Reconnect flow gun to material supply line.
24. Turn on material supply line to gun.
25. Return flow gun to normal operating condition.

Model 12006

Disassembly

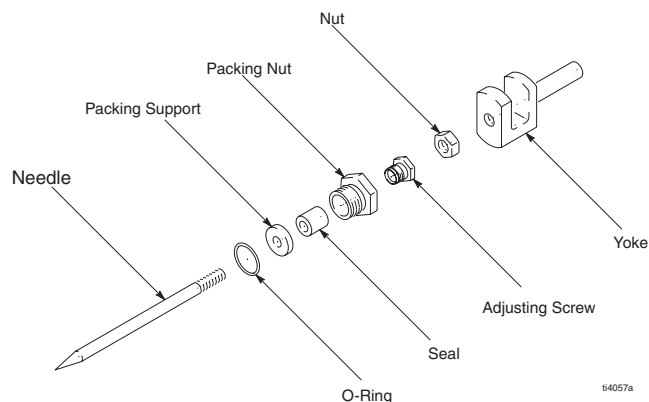
1. With trigger (20) depressed, remove collar (17) securing nozzle (18) to gun.
2. Remove nozzle (18), holding adapter (10) firmly to prevent it from turning.
3. Remove gasket (9). Clean and inspect for damage.
4. Remove adapter (10) from gun body.
5. Remove both screws (12) and lock washers (25) on one side of trigger (20) and push both trigger pins (13) out of body.
6. Loosen lock nut (15) at rear of gun.
7. Unthread spring retainer (16) and remove spring (14).
8. Loosen and remove adjustment screw (6) on packing nut (3) and pull needle assembly from rear of gun. Inspect for damage, replace if needed.
9. Remove packing assembly from gun.
10. Unthread packing nut (3) from body.
11. Remove adjustment screw (6) and o-ring (5) and seals (4).

Reassembly

Clean all parts thoroughly before reassembling. Check them carefully for damage or wear. Replace parts as needed. For best results replace the original parts with new parts in repair kits.

Prior to assembly, lubricate all seals and o-rings with PARKER-O-LUBE or an equivalent lubricant.

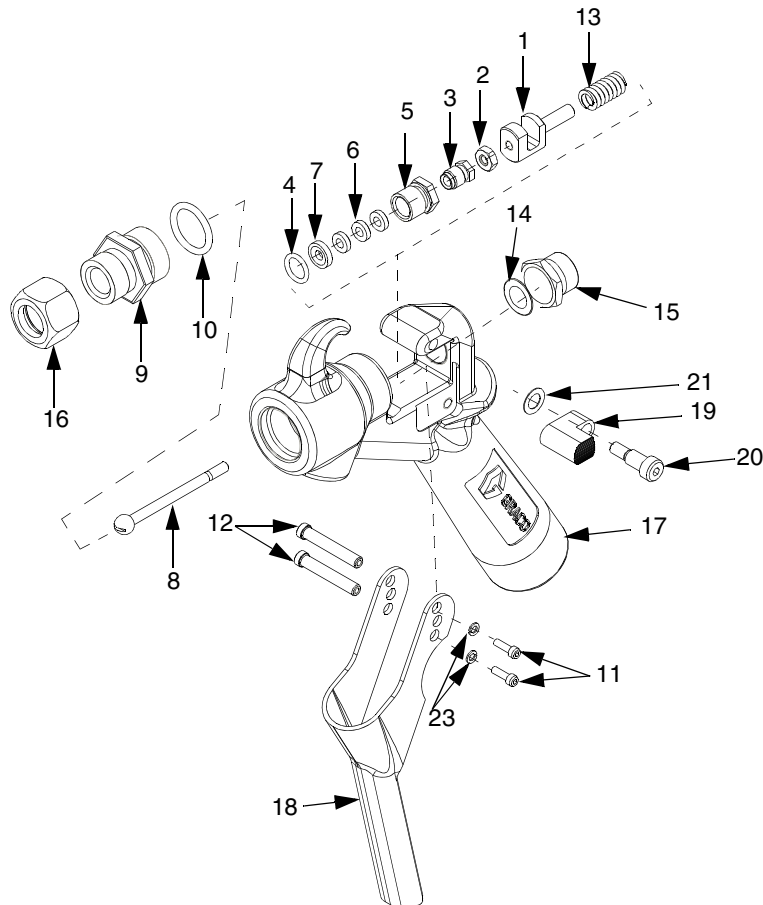
1. Replace o-ring (5) and seals (4) in packing nut (6).



2. Thread packing nut (3) into gun body.
3. Install packing assembly through rear of gun.
4. Install needle assembly through rear of gun.
5. Install spring (14) and spring retainer (16) into gun body. Adjust spring retainer to allow approximately 1/32 in. of free play on trigger.
6. Tighten lock nut (15).
7. Install trigger (20) and insert trigger pins (13) in gun body.
8. Secure trigger pins (13) using screws (12) and lock washers (25).
9. Replace o-ring (11). Lubricate with petroleum jelly to aid in reassembly.
10. With trigger (20) retracted, screw adapter (10) into gun body.
11. Insert gasket (9) in collar (17).
12. While holding adapter stationary, screw collar (17) and nozzle (18) into adapter. Do not overtighten collar.
13. Reconnect flow gun to material supply line.
14. Turn on material supply line.
15. Return flow gun to normal operating condition.

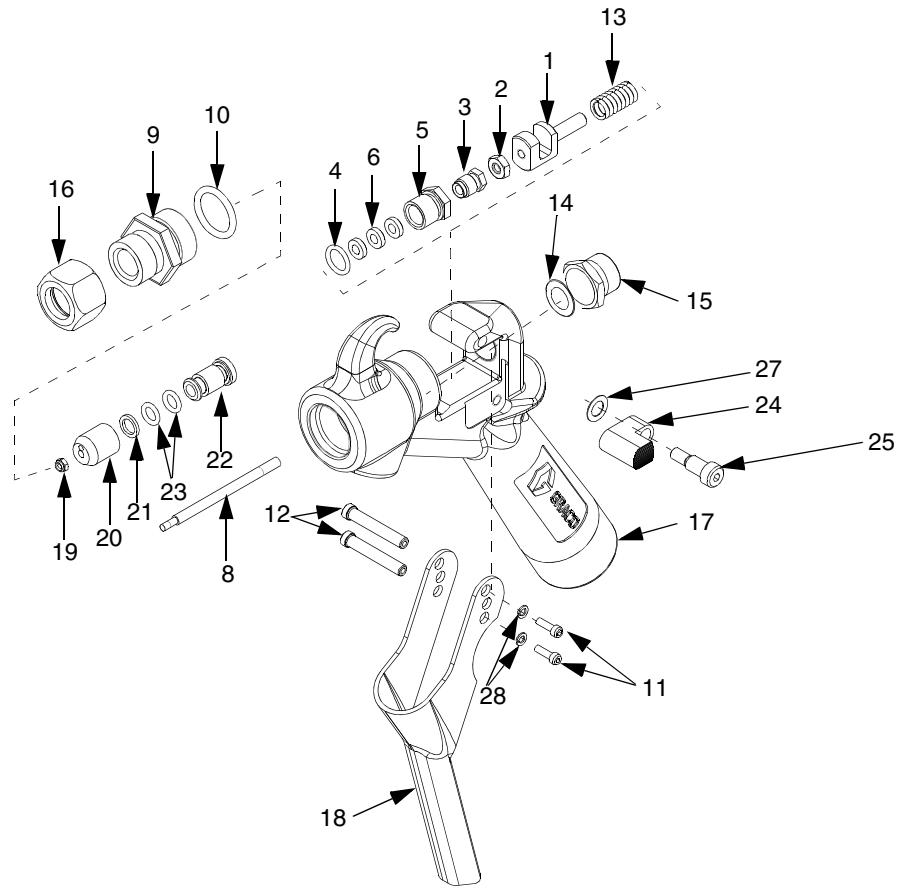
Parts

Models 12004 & 12004X



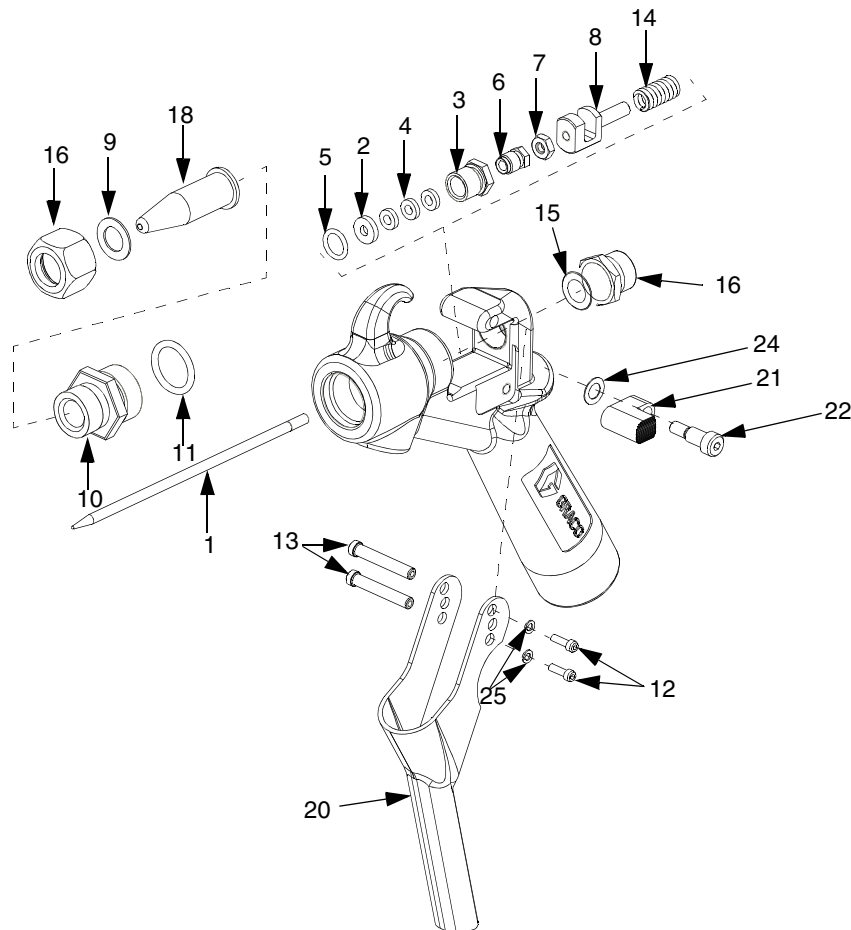
Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	C27052	YOKE	1	13	C00020	SPRING	1
2	100284	NUT, hex (model 12004)	1	14	C27036	NUT, lock	1
	C19284	NUT, hex (model 12004-X)	1	15	C27037	RETAINER, spring	1
3	C27061	SCREW, adjustment	1	16	C00004	COLLAR	1
4	106555	PACKING, o-ring	1	17	C27049	BODY, flow gun	1
5	C27058	PACKING, nut	1	18	C27051	TRIGGER, hot melt	1
6	C27060	SEAL, needle	3	19	C34009	TRIGGER, lock	1
7	C27053	SUPPORT, packing	1	20	108483	SCREW, shoulder, sch	1
8	C27038	NEEDLE	1	21	C20565	WASHER, spring	1
9	C27063	ADAPTER, ball seat	1	22	070269	SEALANT, anaerobic	
10	C20102	PACKING, o-ring	1	23	C19208	LOCKWASHER	
11	C19950	SCREW, cap, sch				(model 12004)	2
		(model 12004)	2			(model 12004-X)	3
		(model 12004-X)	3	24	101369	WRENCH, hex key, 3/32 in.	1
12	15X116	PIN, trigger (model 12004)	2			(not shown)	
		(model 12004-X)	3				

Model 12005



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	C27052	YOKE	1	16	C00004	COLLAR	1
2	C19284	NUT, hex	1	17	C27049	BODY, flow gun	1
3	C27061	SCREW, adjustment	1	18	C27051	TRIGGER, hot melt	1
4	106555	PACKING, o-ring	1	19	C27076	NUT	1
5	C27058	PACKING, nut	1	20	C27072	VALVE, piston	1
6	C27060	SEAL, needle	3	21	C27074	PACKING, PTFE o-ring	1
8	C27071	NEEDLE	1	22	C27075	GUIDE	1
9	C27077	FITTING, adapter	1	23	103337	PACKING, o-ring	2
10	C20102	PACKING, o-ring	1	24	C34009	TRIGGER, lock	1
11	C19950	SCREW, cap	2	25	108483	SCREW, shoulder, sch	1
12	15X116	PIN, trigger	2	26	C20565	WASHER, spring	1
13	C00020	SPRING	1	27	070269	SEALANT, anaerobic	
14	C27036	NUT, lock	1	28	C19208	LOCKWASHER	2
15	C27037	RETAINER, spring	1	29	101369	WRENCH, hex key, 3/32 in. (not shown)	1

Model 12006



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	C27080	NEEDLE	1	11	C20102	PACKING, o-ring	1
2	C27053	SUPPORT, packing	1	12	C19950	SCREW, cap	2
3	C27058	PACKING, nut	1	13	15X116	PIN, trigger	2
4	C27060	SEAL, needle	3	14	C00020	SPRING	1
5	106555	PACKING, o-ring	1	15	C27036	NUT, lock	1
6	C27061	SCREW, adjustment	1	16	C27037	RETAINER, spring	1
7	C19284	NUT, hex	1	17	C00004	COLLAR	1
8	C27052	YOKE	1	18	C27086	NOZZLE	1
9	C02064	GASKET	1	19	C27049	BODY, flow gun	1
10	C27063	ADAPTER, ball seat	1	20	C27051	TRIGGER, hot melt	1
				21	C34009	TRIGGER, lock	1
				22	108483	SCREW, shoulder, sch	1
				23	C20565	WASHER, spring	1
				24	070269	SEALANT, anaerobic	1
				25	C19208	LOCKWASHER	2
				26	101369	WRENCH, hex key, 3/32 in. (not shown)	1

Technical Data

Maximum fluid working pressure	Models 12004X, 12004, and 12005: 2500 psi (17.2 MPa, 172 bar) Model 12006: 2000 psi (13.79 MPa, 137.9 bar)
Inlet port size on gun housing	1/2-14 NPT
Weight	Models 12004X, 12004, and 12005: 1.4 lb (.64 kg) Model 12006: 1.6 lb (.73 kg)
Dimensions.	Height: 7 in. (178 mm) Width: 2 in. (51 mm) Length: Models 12004X, 12004, and 12005: 7 in. (178 mm) Model 12006: 9 in. (229 mm)
Wetted parts	Models 12004 and 12004X: aluminum, fluorocarbon rubber, carbon steel, tool steel, brass, tetrafluoroethylene Model 12005: aluminum, fluorocarbon rubber, carbon steel, brass, fluoroelastomer, stainless steel, PTFE, tetrafluoroethylene Model 12006: aluminum, fluorocarbon rubber, carbon steel, brass, tetrafluoroethylene
CE Approval	Models 12004X, 12004, and 12005: Yes Model 12006: No

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is 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.

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.

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 Information

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6921 **or Toll Free:** 1-800-328-0211, **Fax:** 612-378-3505

*All written and visual data contained in this document reflects the latest product information available at the time of publication.
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For patent information, see www.graco.com/patents.

Original instructions. This manual contains English. MM 309739

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