

Instructions



240 Volt

309161

Hot Melt Dispensing Gun

Rev.H

Model 245197 Bottom Feed

Model 245198 Bottom Feed with Trigger Switch

Model 245200 Top Feed

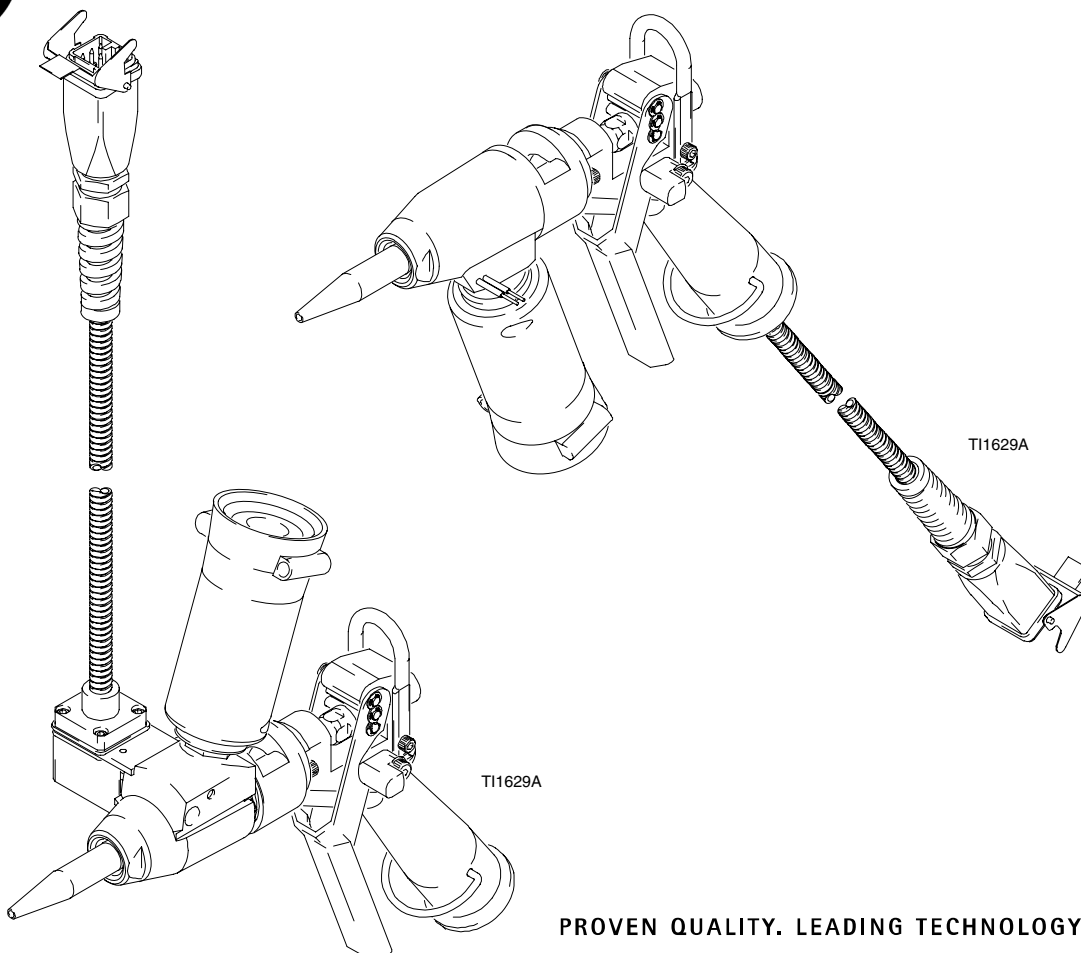
Model 245199 Top Feed with Trigger Switch

3500 psi (24.1 MPa, 241 bar) Maximum Working Pressure



Important Safety Instructions

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



PROVEN QUALITY. LEADING TECHNOLOGY.

Table of Contents

Symbols	2	Service	12
Warning	2	Parts	16
Installation	5	Technical Data	21
Operation	9	Graco Warranty and Limitation of Liability	22
Troubleshooting	11	Graco Information	22

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



INJECTION HAZARD

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

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate surgical treatment.**
- Do not point the gun at anyone or at any part of the body.
- Do not put hand or fingers over the gun nozzle.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Be sure the gun trigger safety operates before dispensing.
- Lock the gun trigger safety when you stop dispensing.
- If the nozzle clogs while dispensing, fully release the trigger immediately
- Follow the **Pressure Relief Procedure** on page 9 whenever you: are instructed to relieve pressure; stop dispensing; clean, check, or service the equipment; and install or clean the nozzle.
- 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.



TOXIC FLUID HAZARD

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

- Know the specific hazards of the fluid you are using. Read the fluid manufacturer's warnings.
- Store hazardous fluid in an approved container. Dispose of the hazardous fluid according to all local, state, and national guidelines.
- Wear appropriate protective clothing, gloves, eyewear, and respirator.



HOT SURFACE AND FLUID HAZARD

Heated fluid can cause severe burns and can cause equipment surfaces to become very hot.

- Wear protective gloves and clothing when operating this equipment in a heated system.
- Do not touch the metal heat sink when the surface is hot.
- Allow the equipment to cool thoroughly before servicing.

Some heated systems are designed to dispense Polyurethane (PUR) heated materials. PUR systems are supplied with ventilation hoods, and require proper ventilation and specially designed system components.

⚠ WARNING



FIRE AND EXPLOSION HAZARD

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

- Do not use this equipment in a hazardous area, as defined in Article 500 of the National Electrical Code (USA).
- Ground the equipment and the object. See **Ground the System** on page 8.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvent or the fluid being dispensed.
- Extinguish all the open flames or pilot lights in the dispense area.
- Keep the dispense area free of debris, including solvent, rags, and gasoline.
- Do not turn on or off any light switch in the dispense area while operating or if fumes are present.
- Do not smoke in the dispense area.
- Do not operate a gasoline engine in the dispense area.
- If there is any static sparking while using the equipment, **stop dispensing immediately**. Identify and correct the problem.
- Keep a fire extinguisher in the work area.



INSTRUCTIONS



EQUIPMENT MISUSE HAZARD

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

- This equipment is for professional use only.
- Read all the 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. See the front cover or the **Technical Data** for the maximum working pressure of your gun model.
- Route the hoses away from the traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or overbend hoses or use the hoses to pull the equipment.
- Use only Graco approved hoses. Do not remove hose spring guards, which help protect the hose from rupture caused by kinks or bends near the couplings.
- 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.
- Do not use 1,1, 1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents with guns. Such use could result in a serious chemical reaction with the gun's aluminum parts, with the possibility of an explosion.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.

WARNING



ELECTRIC SHOCK HAZARD

To reduce the risk of electric shock

- Keep display panels fastened during operation
- Never cut or puncture a hose cover.
- Disconnect power source before servicing
- Install according to local electric code.
- Ground all equipment.
- Connect to grounded outlet. Do not expose to rain. Store indoors.

Installation

Install the gun as follows:

- connect material hose
- connect the electrical cable
- make sure the gun is grounded

Attaching Heated Hose to Heated Gun

Connecting the Hose to the Gun

1. Apply PTFE tape to npt side of appropriate adapter (see table below). Screw the adapter onto the gun swivel (C57733), and tighten securely. See Fig. 1.

Part No.	Adapter	Hose Size
116704	1/4 npt x 9/16–18 JIC	–6
116703	1/4 npt x 3/4–16 JIC	–8
116702	1/4 npt x 7/8–14 JIC	–10
116712	1/4 npt x 1 1/16–12 JIC	–12
116765	3/8 npt x 7/8–14 JIC	
116766	3/8 npt x 1 1/16–12 JIC	
117832	3/8 npt x 9/16–18 JIC	
117833	3/8 npt x 3/4–16 JIC	

2. Securely connect the hose to the gun swivel.
3. Wrap the joint between the swivel and the hose with fiberglass insulation C33037. Secure connection with fiberglass tape C34137. See Fig. 3.

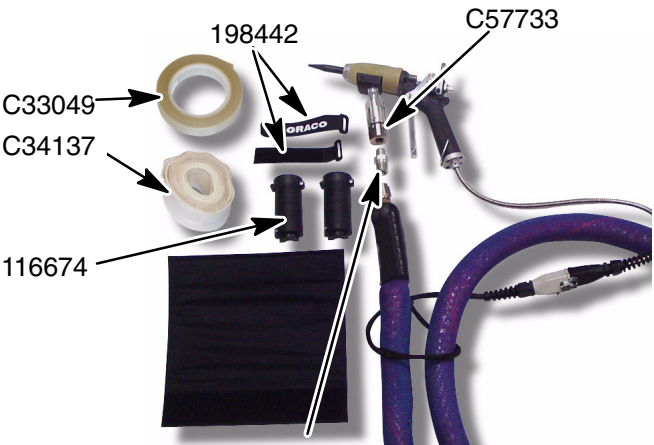


Fig. 1

4. Using a 7/64 in. allen wrench, screw the two halves of the plastic protective cover (116674) together over the swivel using the four screws. See Fig. 3.



Fig. 2



Fig. 3

Connecting the Electrical Cable

1. Wrap the hose cable around the hose one time. Connect the electrical cable from the hose to the gun cable; lock the metal clip on the top of the connector. See Fig. 4.
2. Place the flat side of the cable connection against the hose, making sure the metal clip faces away from the hose. This will prevent damage to the hose from the clip rubbing against it. See Fig. 5.
3. Fasten the Velcro insulation wrap (198422) snugly around the hose. Secure the wrap with two Velcro straps (198442) on the ends of the wrap. See Fig. 6.
4. Fig. 7 shows the completed assembly.



Fig. 4

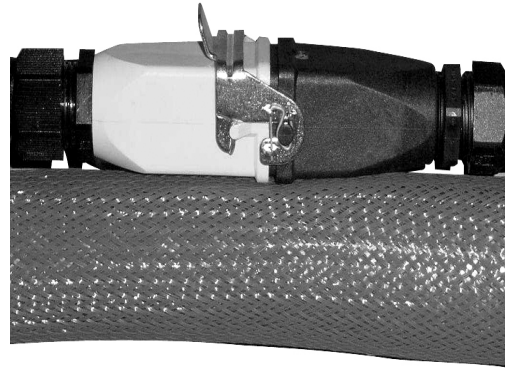


Fig. 5



Fig. 6



Fig. 7

Grounding the System

WARNING



FIRE AND EXPLOSION HAZARD

To reduce the risk of a fire, explosion, and serious injury, proper electrical grounding of every part of your system is essential. Read the warning section, **FIRE AND EXPLOSION HAZARD**, on page 4 and follow the grounding instructions below.

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

1. **Fluid hoses:** use only grounded fluid hoses with a maximum of 25 feet (7.5 m) combined hose length to ensure grounding continuity. Check the electrical resistance of your fluid hoses at least once a week. If your hose does not have a tag on it which specifies the maximum electrical resistance, contact the hose supplier or manufacturer for the maximum resistance limits. If the hose resistance exceeds the recommended limits, replace it immediately.
2. **Gun:** The gun is grounded by connecting it to the properly grounded fluid hose and by a ground wire in the cable. Check ground continuity between the gun body and the heat control ground lug.
3. **Fluid supply container:** ground according to the local code.
4. **Flammable liquids in the dispense area:** must be kept in approved, grounded containers. Do not store more than the quantity needed for one shift.
5. **All solvent pails used when flushing:** ground according to local code. Use only metal pails, which are conductive. Do not place the pail on a non-conductive surface, such as paper or cardboard, which interrupts the grounding continuity.
6. **To maintain grounding continuity when flushing or relieving pressure:** hold a metal part of the gun firmly to the side of a grounded metal pail, then trigger the gun.

Operation

Relieving Pressure

WARNING



INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or dispensing accidentally. Fluid under high pressure can be injected through the skin and cause a serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Relieving Pressure Procedure** on page 9 whenever you:

- are instructed to relieve the pressure,
- stop dispensing,
- check or service any of the system equipment,
- install or clean the nozzle.

1. Fully release the gun trigger and lock the gun trigger safety by rotating the safety downward (Fig. 8).
2. Shut off the fluid supply pump.
3. Hold a metal part of the gun firmly to the side of a grounded metal waste container. Unlock the gun trigger safety by rotating the safety upward (Fig. 9). Trigger the gun to relieve fluid pressure.
4. Fully release the gun trigger and lock the gun trigger safety by rotating the safety downward.
5. Open the pump drain valve to help relieve fluid pressure in the pump, hose, and gun. Triggering the gun to relieve pressure may not be sufficient. Have a container ready to catch the drainage.
6. Leave the drain valve open until you are ready to dispense again.
7. If you think that the gun nozzle or fluid hose is completely clogged or that pressure has not been fully relieved after following the steps above, very slowly loosen the hose end coupling and relieve pressure gradually, then loosen the coupling completely. Clear the nozzle or hose obstruction.

Gun Trigger Safety

WARNING



INJECTION HAZARD

To prevent accidental triggering of the gun and reduce the risk of a serious injury, including fluid injection or splashing in the eyes or on skin, lock the gun trigger safety when you stop dispensing.

To lock the gun safety, release the trigger and rotate the safety downward as shown in Fig. 8.

NOTE: Do not try to force the trigger valve open with the safety engaged. This could result in component failure.

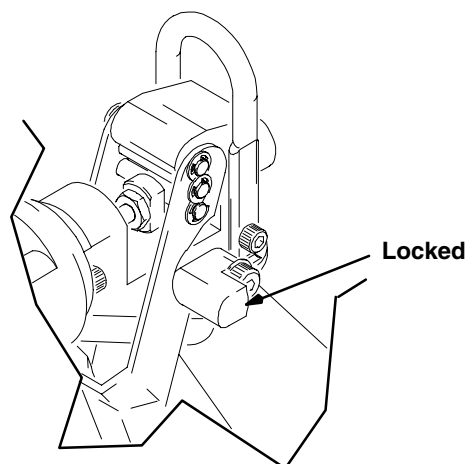


Fig. 8

TI0372

To unlock the trigger safety, rotate the safety upward as shown in Fig. 9.

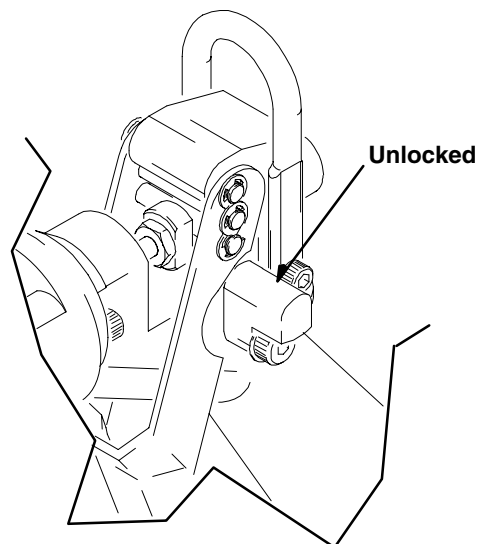


Fig. 9

TI0372

Heating Up the Gun and System

WARNING



PRESSURE RUPTURE HAZARD

Heating fluid expands, causing a rise in pressure in a closed system.

- Be sure pressure is relieved before heating up the equipment. Follow the pressure **Relieving Pressure Procedure** on page 9.
- Engage trigger retainer to hold dispense gun open to prevent excessive pressure build-up from fluid expansion

1. Be sure pump is off.
2. Engage the dispense gun trigger retainer to hold the valve open.
3. Activate the heat controls.
4. After pump, hose, and gun are up to temperature, disengage gun trigger retainer to close the valve. Engage the gun trigger safety to prevent accidental dispense of high pressure heated fluid.

Dispensing

1. Start the fluid supply pump.
2. The fluid flow rate is controlled at the pump. Adjust the pump pressure to obtain the desired flow rate. It is recommended that you use the lowest pressure necessary to dispense the fluid. The pressure adjustment will depend on the hose length, the viscosity of the fluid, and the gun nozzle size.

3. Unlock the gun trigger safety.
4. Squeeze the trigger in all the way. Fluid flow begins with the slightest pressure on the trigger and stops when the trigger is released.

Flushing Safety

WARNING



FIRE AND EXPLOSION HAZARD

To reduce the risk of a fire, explosion, or serious injury,



- Be sure the entire system and flushing pails are properly grounded before flushing the gun or system.

Read **Grounding the System**, on page 8.

- Use the lowest possible fluid pressure and maintain firm metal-to-metal contact between the gun and the grounded metal pail during flushing.
- Heat controls must be off during flushing if solvents are used to flush.

Shutting Down

1. Turn off all heat at the controller.
2. Turn off fluid pump.
3. Trigger gun to relieve pressure while system is still hot.
4. With gun over a waste container, engage gun trigger retainer to hold valve open for next heat-up cycle.

Troubleshooting

Some solutions require disassembling the gun. Always relieve system pressure and disconnect the electrical cable before performing these procedures.

WARNING



To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 9.

See PARTS section (pages 16-19) for the parts that need to be serviced.

Problem	Cause(s)	Solution(s)
Material leaks from front of gun	Seat or packing is worn	Replace seat (18) or packing (20).
	Obstruction inside gun	Remove seat (18). Check and replace if necessary.
	Worn needle	Check and replace needle (15a), if necessary.
Material leaks from back of gun	Needle seal or packing is worn	Replace seals (15c) or packing (15d).
Gun does not shut off	Needle or adapter is worn	Replace needle (15a) or adapter (19).
	Spring broken or not installed correctly	Check and replace, if necessary, spring (16).
	Obstruction inside gun	Remove seat (18). Check and replace if necessary.
Gun does not heat material	Loose heater wires	Check and reconnect wire connections.
	Loose sensor wires	Check and reconnect wire connections.
	Heater unit failed	Replace heater.
	Sensor failed	Replace sensor.
	Temperature controller failed	Replace temperature controller.
	No power to heating circuitry	Apply power to heating circuitry.

Service

WARNING



INJECTION HAZARD

To reduce the risk of a serious injury, including fluid injection,

- Follow the **Pressure Relief Procedure** on page 9 when you stop dispensing, before servicing the gun, and whenever you are instructed to relieve the pressure.
- After adjusting or servicing the gun, make sure the fluid will not trigger on when the trigger safety is locked. If fluid does flow, the gun is not assembled properly or the trigger safety is damaged. Reassemble the gun or return it to your nearest Graco distributor. Do not use the gun until the problem is corrected.

SERVICE NOTES:

WARNING



INJECTION HAZARD

To reduce the risk of a serious injury, including fluid injection, if fluid continues to flow after the trigger is released, service the gun immediately as instructed below. Do not use the gun until the problem is corrected.

NOTE: Items in () refer to items in the PARTS list.

1. If the fluid continues to flow after the trigger is released, the gun valve may need adjustment, be obstructed or damaged, or the needle assembly (15) or seat (18) may be worn or damaged.
 - a. Adjust the spring tension as instructed on page 15.
 - b. Replace the needle assembly (15) or seat (18) as instructed on page 15.
2. Follow the torque, sealant and lubrication notes for your gun model number.
3. The following repair kit is available:

Repair Kit	Gun Model
C32002	Manual Hot-Melt Guns 245197, 245198, 245199, and 245200

Installing new heater unit, RTD sensor, or switch

1. Open the connector (24) by removing the screw on the side and pulling out insert (25).
2. For Therm-O-Flow Plus 8 pin assemblies, removal and replacement of the heaters and RTD require a pin extraction tool, new connector pins, and a pin crimping tool. These tools meet spec MIL-C-22520 (Ref. Daniels AF8 crimp tool) or equivalent, available at your local industrial electrical supply warehouse. Soldering the new leads is an acceptable alternative as long as new pins (27) are used.
3. Remove the faulty sensor or heater by cutting the leads at the connector and pulling the wires back through the conduit and out of the gun.
4. Use the pin extraction tool to punch out the old pins.
5. Coat heater or sensor with heat sink compound.
6. Gently slide new heater or sensor into appropriate hole.
7. Feed the new wires through the conduit to the connector. On bottom entry models, be sure to use protective sleeve (31) over wires where they pass through needle area.
8. Cut and strip the wires to the appropriate length.
9. Slide 1/8" diameter heat shrink tubing over the wires.
10. Crimp or solder the wires to the appropriate new connector pin as shown in Fig. 10.

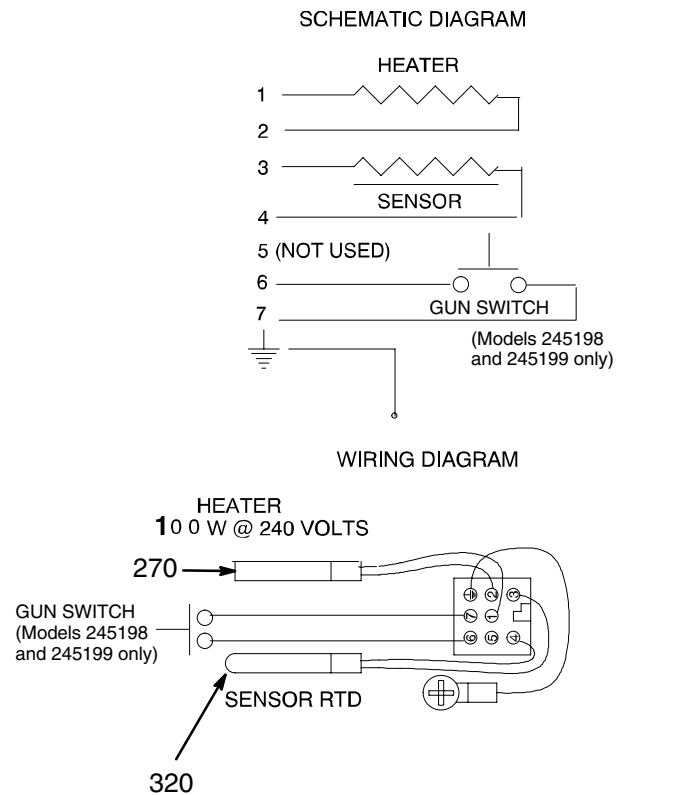


Fig. 10 **8 Pin 240 Volt Shown**

11. Slide the heat shrink tubing into place and thoroughly shrink it so that it grabs onto the connector pin and wire insulation.
12. Use an ohm meter to check:
 - a. heater pins 1 to 2 576 Ω +58-29
 - b. RTD sensor pin 3 to 4 108 Ω +/- 1 ohm at 70°F.
 - c. Continuity to the gun body from pin 8
 - d. No continuity from pins 1-7 to gun body or connector shell.

Inspection Frequency

Dispense Valve

Inspect dispense valve at every use for leakage or other visible damage.

Heater

Every two weeks, check heater for proper resistance. Resistance should be approximately 576 ohms (+58/–29) for the 240 volt valves. Replace heater if necessary.

Also inspect heater when performing regular maintenance procedures.

Sensor

Every two weeks, check sensor resistance. Resistance should be 108 ohms at 21° C (70° F). Replace sensor if necessary.

Also inspect sensor when performing regular maintenance procedures.

Adjusting the Needle Assembly

The trigger travel and corresponding valve opening are factory set. To adjust this setting, follow the procedure below.

 WARNING	
	INJECTION HAZARD To reduce the risk of a serious injury, including fluid injection, follow the Pressure Relief Procedure on page 9 whenever you are instructed to relieve the pressure.

NOTE: Items in () refer to items in the PARTS list (pages 16-19).

1. Relieve the pressure in the system.
2. Disconnect the gun from the hose.
3. Using a 1/2 in. and 11/32 in. wrench, loosen hex nut (15m).
4. Remove nozzle (19), cap (5) and shield (4).
5. Trigger gun and, using a screwdriver in the slot of the needle, turn the needle (15a) clockwise several turns.
6. Release the trigger, turn the needle counterclockwise until it contacts the seat
7. Trigger the gun, and turn the needle one additional turn counterclockwise.
8. Tighten the hex nut (15m) to set the adjustment.
9. Reassemble shield (4), cap (5), and nozzle (19).

Adjusting the Spring Tension

WARNING



INJECTION HAZARD

To reduce the risk of a serious injury, including fluid injection, follow the **Pressure Relief Procedure** on page 9 whenever you are instructed to relieve the pressure.

NOTE: Items in () refer to items in the PARTS list (pages 16-19).

1. Relieve the pressure in the system.

NOTE: For models with switch (42); cover (43) must be removed and the switch must be removed.

2. Loosen lock nut (13).
3. Adjust the spring retainer (39) to the desired trigger pull force.
4. Tighten lock nut (13) to secure spring tension adjustment.

Servicing Valve Stem and Seal

If fluid leaks past seal (15c), the seal or needle (15a) may be worn or damaged. To replace the seal or valve stem, follow the procedure below.

WARNING



INJECTION HAZARD

To reduce the risk of a serious injury, including fluid injection, follow the **Pressure Relief Procedure** on page 9 whenever you are instructed to relieve the pressure.

1. Relieve the pressure in the system.
2. Disconnect the gun from the hose.

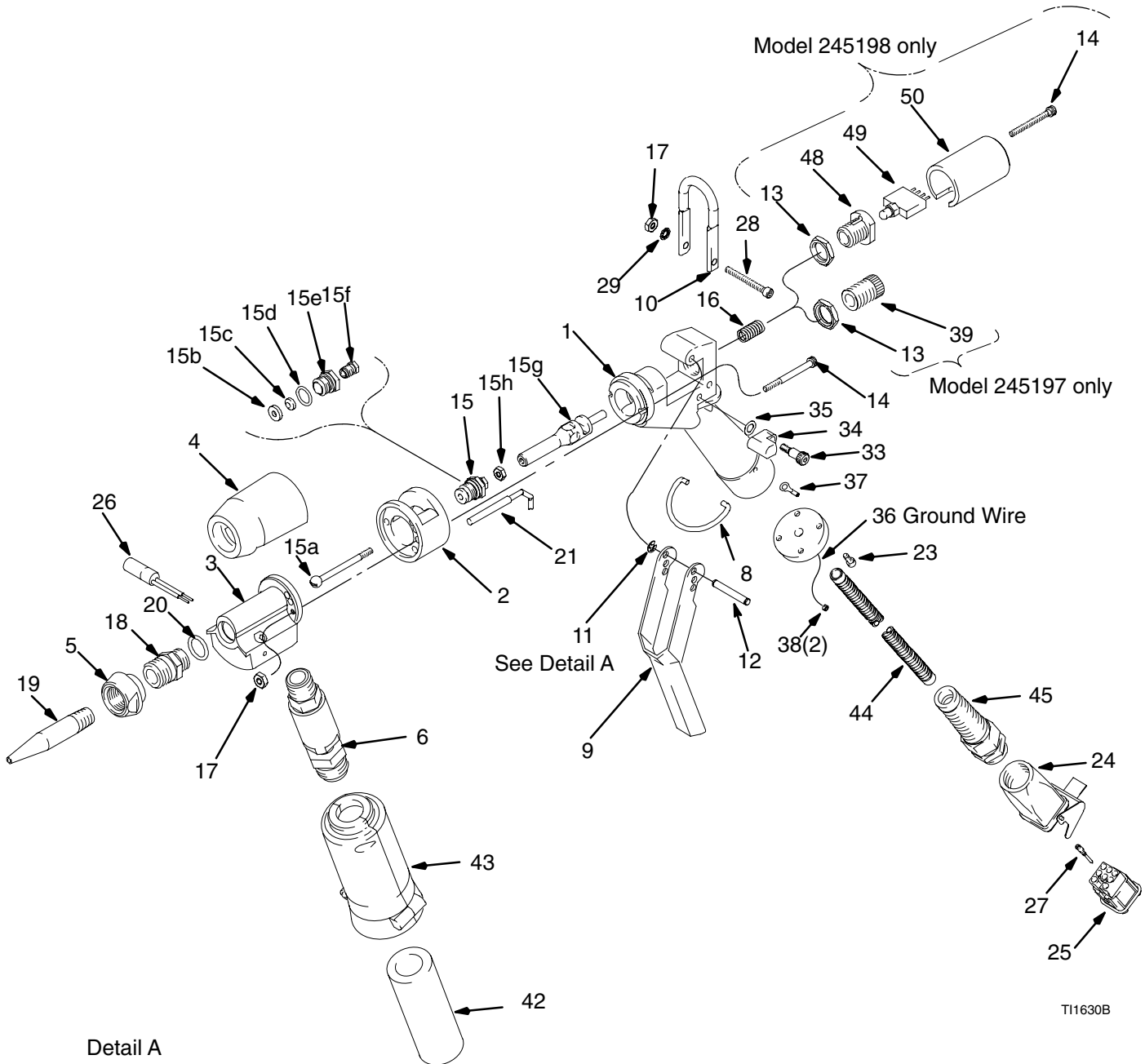
NOTE: For models with switch (42); cover (43) must be removed and the switch must be removed.

3. Loosen lock nut (13).
4. Unscrew the spring retainer (Item 39).
5. Using a 1/2 in. and 11/32 in. wrench, loosen hex nut (Item 15m).
6. Remove nozzle (19), cap (5), and shield (4).
7. Trigger gun and, using a screwdriver in the slot of the needle (15a), turn the needle clockwise several turns.
8. While holding yoke (15g), turn needle (15a) counterclockwise until it separates.
9. Remove the front half of the needle assembly (15a) from the gun.
10. Remove and replace packing support (15b), needle seals (15c), and O-ring packing (15d).
11. Install the front half of the needle assembly in the body (1).
12. While holding yoke (15g), install the needle (15a), rotating clockwise.
13. Adjust the needle as described in **Adjusting the Needle Assembly** on page 14.
14. Install shield (4), cap (5), and nozzle (19).
15. If necessary, adjust spring tension as described in **Adjusting the Spring Tension** on this page.

Parts

Models 245197, 245198

Hot Melt Gun



TI1630B

NOTE: Apply heat transfer compound (30) to cylindrical surface of heater (27) and sensor (21).

Parts

Model 245197

Manual Hot Melt Gun

Model 245198

Trigger Switch Hot Melt Gun

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	196507	BODY, hot-melt, manual gun	1	19	C32003	NOZZLE	1
2	C32028	INSULATOR, hot-melt hand gun	1	20*	103610	PACKING, o-ring	1
3	C32011	BODY, gun	1	21	C32255	SENSOR, temperature	1
4	C31017	SHIELD, hand gun	1	22	198511	ADAPTER, connector, manual	1
5	C31016	CAP	1	23	102410	SCREW, socket head	5
6	156849	FITTING, pipe 3/8 in. npt	1	24	116637	CONNECTOR, cable coupler hood	1
	C57733	SWIVEL, 3/8 in. npt (F)	1	25	115860	INSERT, male	1
8	C32368	RING	1	26	116747	HEATER, cartridge, 100W, 240V	1
9	C27051	TRIGGER	1	27	115862	CONNECTOR, male, crimp	
10	C32004	HANGER, gun	1			(Model 245197)	5
11	C20442	RING, retaining, ext.	6			(Model 245198)	7
12	C27035	PIN, trigger	3	28	C19977	SCREW, cap, socket head	1
13	C27036	NUT, lock	1	29	157021	WASHER, lock, internal	1
14	111821	SCREW, cap, socket head		30	C07664	Thermal compound (3 oz)	1
		(Model 245197)	2	31	15A506	SLEEVE, protective	2
		(Model 245198)	3	33	108483	SCREW, shoulder	1
15	918530	NEEDLE, assembly (consists of		34	C34009	TRIGGER LOCK	1
		items 15a through 15m	1	35	C20565	WASHER, spring	1
15a	C27038	NEEDLE	1	36	065345	WIRE, 16 AWG, high temp	.4 ft
15c	C27053	SUPPORT, packing	1	37	C78160	TERMINAL	1
15d*	C27060	SEAL, needle	3	38	112385	SCREW, set, socket head	2
15e*	103338	PACKING, O-ring	1	39	C27037 †	RETAINER, spring	1
15f	C32027	NUT, packing	1	42	C57733	SWIVEL, hose	1
15g	15C749	YOKE, trigger, handgun	1	43	116674	COVER, molded, handgun	1
15m	C27061	SCREW, adjustment	1	44	116675	CORD, flex, valve, 1K	1
16	C00020	SPRING	1	45	116673	BUSHING, strain relief	1
17	100284	NUT, hex, MSCR	3	48	C32369 ‡	RETAINER, spring	1
18*	C27014	SEAT	1	49	C32370 ‡	SWITCH	1
				50	C32371 ‡	COVER, switch	1

* These parts are included in Repair Kit C32002, which may be purchased separately.

† Model 245197 only.

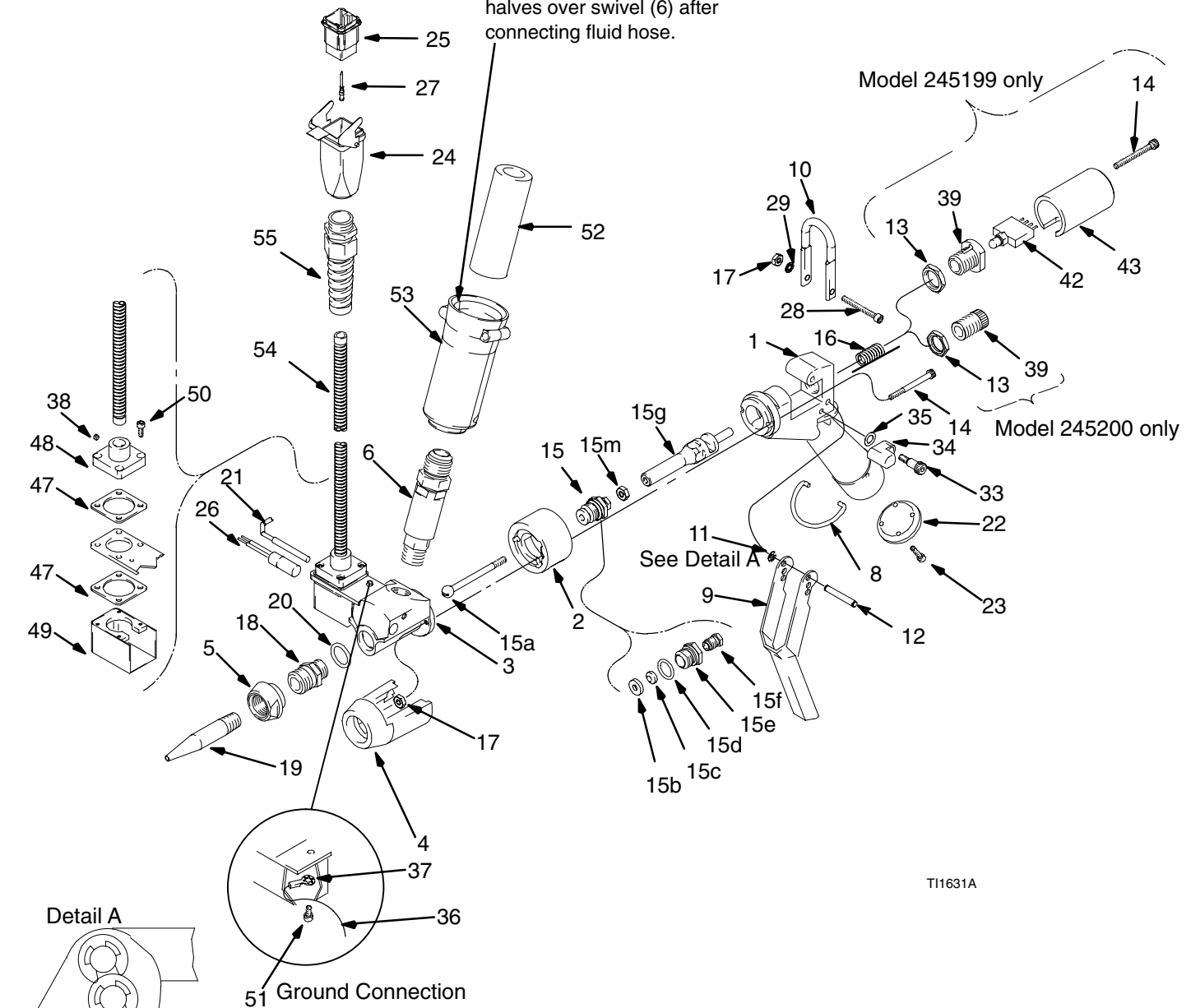
‡ Model 245198 only.

Parts

Models 245200 and 245199

Hot Melt Gun

NOTE: Assemble two halves over swivel (6) after connecting fluid hose.



Orient snap rings as shown.
For ease of assembly, install pins and snap rings from top to bottom.
Middle snap ring must be installed facing up, then rotated to position shown.
Snap rings must be flush with each other without overlapping.

NOTE: Apply heat transfer compound (58) to cylindrical surface of heater (27) and sensor (22).

Parts

Model 245200

Manual Hot Melt Gun

Model 245199

Trigger Switch Hot Melt Gun

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	196507	BODY, hot-melt, manual gun, flow	1	27	115862	CONNECTOR, male, crimp (Model 245200)	7
2	C32028	INSULATOR, hot-melt handgun	1			(Model 245199)	5
3	C32012	BODY, gun	1	28	C19977	SCREW, cap, socket head	1
4	C31017	SHIELD, handgun	1	29	157021	WASHER, lock, internal	1
5	C31016	CAP	1	31	617836	SLEEVE, fiberglass braid, #10, blk	1
6	156849	FITTING, pipe, 3/8 in. npt	1	33	108483	SCREW, shoulder SCH	1
8	C32368	RING	1	34	C34009	TRIGGER LOCK	1
9	C27051	TRIGGER, gun	1	35	C20565	WASHER, spring	1
10	C32004	HANGER, gun	1	36	065345	WIRE, 16 AWG	.4 ft
11	C20442	RING, retaining, ext.	6	37	C78160	TERMINAL	1
12	C27035	PIN, trigger	3	38	112385	SCREW, set	2
13	C27036	NUT, lock	1	39	C32369†	RETAINER, spring	1
14	111821	SCREW, cap, socket head (Model 245200)	2		C27037‡	RETAINER, spring	1
		(Model 245199)	3	42	C32370‡	SWITCH	1
15	918530	NEEDLE, assembly (consists of items 15a through 15m)	1	43	C32371‡	COVER, switch	1
15a	C27038	NEEDLE	1	44	C07535	TUBE, heat, shrink	1
15c	C27053	SUPPORT, packing	1	45	065326†	WIRE, copper, electrical	4.9 ft
15d*	103338	PACKING, O-ring	1	46	C07536	TUBE, heat shrink	.2 ft.
15e*	C32027	NUT, packing	3	47	C51071	GASKET	2
15f	C27061	SCREW, adjustment	1	48	198510	ADAPTER, connector, manual gun top	1
15g	15C749	YOKE, trigger, handgun	1	49	C32005	COVER, wires	1
15m	C19284	NUT	1	50	C19952	SCREW, socket head	4
16	C00020	SPRING	1	51	C19156	WASHER, machine, coarse	1
17	100284†	NUT, hex MSCR	3	52	C57733	SWIVEL, hose	1
18*	C27014	SEAT	1	53	116674	COVER, molded, hand gun	1
19	C32003	NOZZLE	1	54	116675	CORD, flex, valve, 1K	1
20*	103610	PACKING, O-ring	1	55	116673	BUSHING, strain relief	1
21	C32255	SENSOR, temperature	1	56	198422	COVER, protective	1
22	196508	PLUG	1	57	198442	STRAP, retaining mix manifold	2
23	102410	SCREW	4	58	C07664	HEAT TRANSFER COMPOUND (3 oz)	1
24	116637	BULKHEAD, housing, IN	1				
25	115860	INSERT, male	1				
26	116747	HEATER, cartridge	1				

* These parts are included in Repair Kit C32002, which may be purchased separately. See page 12 for complete Repair Kit list.

† Model 245200 only.

‡ Model 245199 only.

Accessories

JIC Inlet Adapters

Part No.	Adapter Description	Hose Size	Fits Hose Numbers
116704	1/4 npt(m) x 9/16–18(m) JIC	–6	115865, 115866, 115867
116703	1/4 npt(m) x 3/4–16(m) JIC	–8	115902, 115873, 115874
116702	1/4 npt(m) x 7/8–14(m) JIC	–10	115875, 115876, 115877, 115878, 115879
116712	1/4 npt(m) x 1-1/16–12(m) JIC	–12	115903, 115880, 115881, 115882, 115883
116765	3/8 npt(m) x 7/8–14(m) JIC		
116766	3/8 npt(m) x 1-1/16–12(m) JIC		
117832	3/8 npt(m) x 9/16–18(m) JIC		
117833	3/8 npt(m) x 3/4–16(m) JIC		

C34137 Fitting insulation 1/8" thick x 2" wide.
Sold by the foot.

C33049 Adhesive tape, High temp for securing
insulation (C34137) 1" x 108 ft.

198422 Wrap, Velcro 10" x 10" . Covers electrical
connection on heated hose.

198442 Strap, Velcro. Use two around ends of
wrap (198422) for security.

Technical Data

Maximum Working Pressure

All Models 3500 psi (241 bar)

Outlet Port Size

All Models 1/4 npt(f)

Inlet Port Size on Gun Housing

All Models 3/8 npt(f)

Inlet Port Size on Fluid Swivel

All Models 1/4 npt(f)

Height

245197 and 245198 8.25 in. (209.55 mm)

245200 and 245199 9.99 in. (253.75 mm)

Width

245197 and 245198 2.15 in. (54.61 mm)

245200 and 245199 3.72 in. (94.49 mm)

Length

2435197 and 245198 12.54in. (318.52mm)

245200 and 245199 11.91 in. (302.51mm)

Voltage

All Models 230/240 VAC

Wattage

All Models 200 W

RTD

Platinum RTD

.00385 $\Omega/\Omega/^{\circ}\text{C}$ 108.2 ohms @70°F

Heater Resistance

All Models 576 ohms +58 –29

Weight

All Models 3.5 lbs. (1.6 kg)

Wetted Parts

All Models

Fluid Section Hardened Steel,
Viton, AFLAS and PTFE Seals,
12L14 Steel,
1215 CRS,
4140 SST,
Chrome Alloy,
Black Oxide

Valve Needle Tool Steel shaft with
chrome alloy ball

Valve Seat Hardened Steel RC52

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.

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 présent 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 one of the following numbers to identify the distributor closest to you:

1-800-328-0211 Toll Free

612-623-6921

612-378-3505 Fax

*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.*

MM 309161

Graco Headquarters: Minneapolis
International Offices: Belgium, China, Japan, Korea

www.graco.com

PRINTED IN USA 309161 07/2000, Revised 03/2005