Instructions - Parts

Hot Melt Dispense Guns

311209S

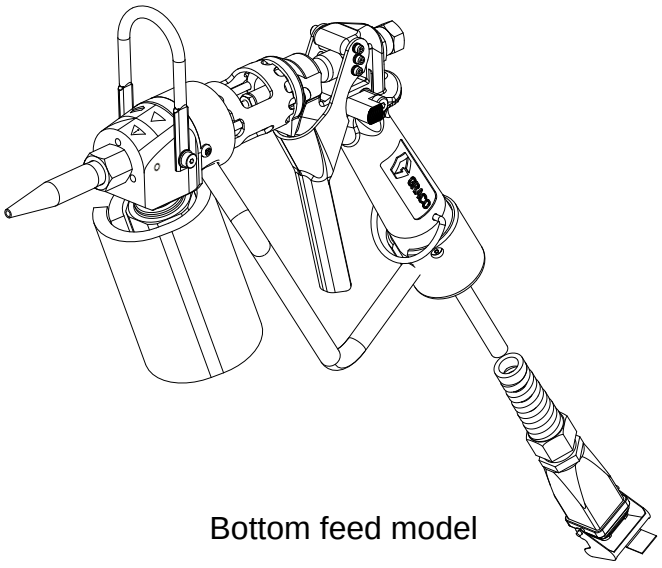
ENG

For dispensing non-flammable hot melt thermoplastic sealants and adhesives.

5000 psi (34.5 MPa, 345 bar) Maximum Working Pressure

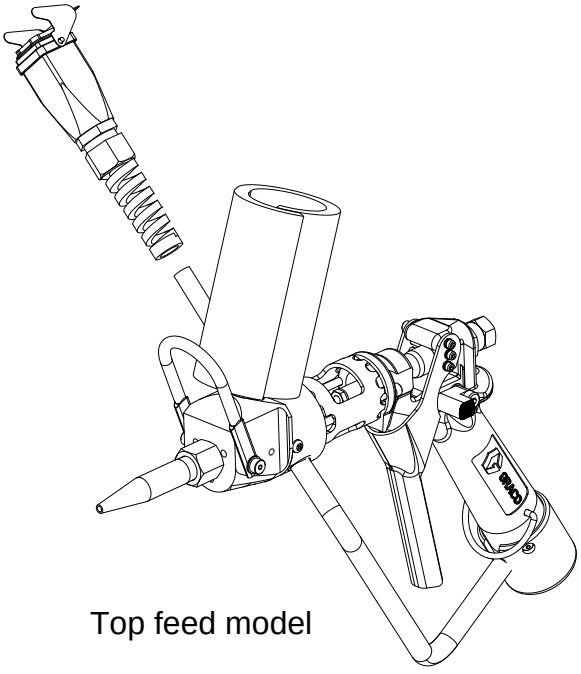
See page 2 for model information.

Important Safety Instructions
Read all warnings and instructions in this manual.
Save these instructions.



Bottom feed model

r_249512_311209_1



Top feed model

r_249512_311209_2

PROVEN QUALITY. LEADING TECHNOLOGY.

Contents

Models

Model 249514 Bottom Feed

Model 249512 Bottom Feed with Trigger Switch

Model 249515 Top Feed

Model 249513 Top Feed with Trigger Switch

Model 297273 Top Feed with Swirl

Model 297274 Bottom Feed with Swirl

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

⚠ WARNING

BURN HAZARD

Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.

PERSONAL PROTECTIVE EQUIPMENT

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:

- Protective eyewear
- Clothing and respirator as recommended by the fluid and solvent manufacturer
- Gloves
- Hearing protection

ELECTRIC SHOCK HAZARD

Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power cord before servicing equipment.
- Use only grounded electrical outlets.
- Use only 3-wire extension cords.
- Ensure ground prongs are intact on sprayer and extension cords.
- Do not expose to rain. Store indoors.

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** in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.

⚠ WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
- Ground all equipment in the work area. See **Grounding** instructions.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail.
- If there is static sparking or you feel a shock, **stop operation immediately.** Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not exceed the maximum working pressure or temperature rating of the 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 manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on 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.

MOVING PARTS HAZARD

Moving parts can pinch or amputate fingers and other body parts.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** in this manual. Disconnect power or air supply.

Installation

Install gun as follows:

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

Connect Heated Hose

1. Screw adapter onto gun swivel (A) and tighten securely.

Part No.	Adapter	Hose Size
120264	-8 JIC x -10 JIC	-8
--	Not required	-10
120265	-10 JIC x -12 JIC	-12

2. Securely connect hose to gun swivel (A).

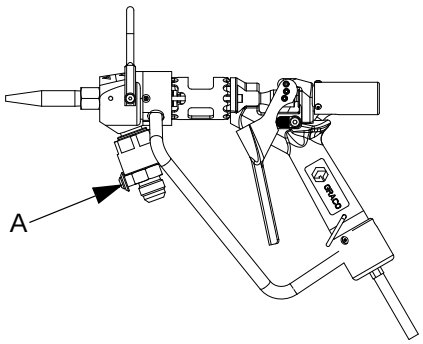


FIG. 1: Hose Gun Swivel

3. Wrap connection with insulating cuff (B) (119889).

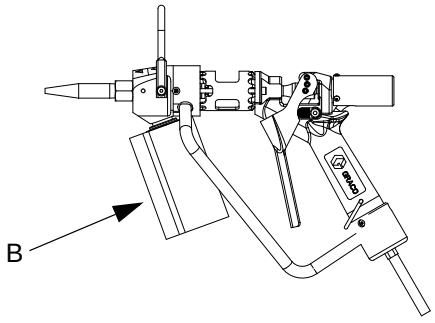


FIG. 2: Insulating Cuff

Connect Electrical Cable

1. Wrap hose cable around hose one time. Connect electrical cable from hose to gun cable; engage metal clip on top of connector.

FIG. 3: Connect Electrical Cable, Step 1

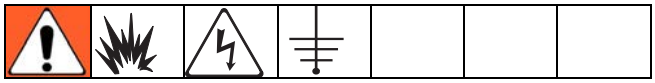
2. Place flat side of cable connection against hose, making sure metal clip faces away from hose. This will prevent damage to hose from clip rubbing against it.

FIG. 4: Connect Electrical Cable, Step 2

3. Fasten Velcro insulation wrap (198422) snugly around hose. Secure wrap with two Velcro straps (198442) on ends of wrap.

FIG. 5: Connect Electrical Cable, Step 3

Ground the System

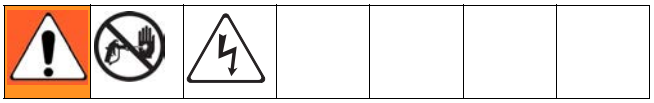


The following grounding instructions are minimum requirements for a basic dispensing system. Your system may include other equipment or objects that must be grounded. Check your local electrical code for detailed grounding instructions for your area and type of equipment. Your system must be connected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

- **Fluid hoses:** use only grounded fluid hoses with a maximum of 25 feet (7.5 m) combined hose length to ensure grounding continuity. Check electrical resistance of your fluid hoses at least once a week. If your hose does not have a tag on it that 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.
- **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 at least once a week.
- **Fluid supply container:** ground according to the local code.
- **Flammable liquids in the dispense area:** must be kept in approved, grounded containers. Do not store more than the quantity needed for one shift.
- **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.

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. To reduce the risk of static sparking, ground the pump, object being dispensed to, and all other spraying/dispensing equipment used or located in the spraying/dispensing area. Check your local electrical code for detailed grounding instructions for your area and type of equipment.

Pressure Relief Procedure



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

Trigger Lock

Always engage trigger lock when you stop spraying 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. 6.

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

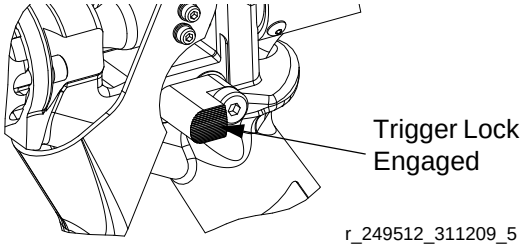


FIG. 6: Trigger Lock Engaged

To disengage trigger lock, rotate it upward. See FIG. 7.

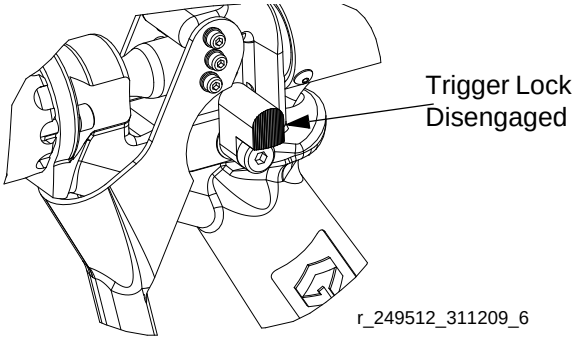


FIG. 7: Trigger Lock Disengaged

Operation

Heatup

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

- Relieve pressure (page 7) before heating up equipment.
- Engage trigger retainer to hold gun open, to prevent excessive pressure buildup.

1. Turn ON electrical controls and main air to unit.
2. Lock dispense valve trigger open by pulling and securing trigger using trigger retainer (Z).

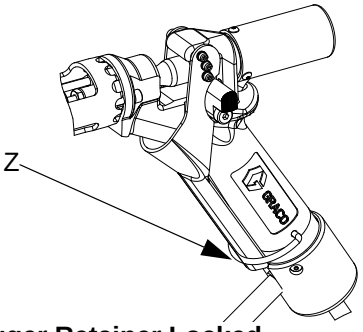
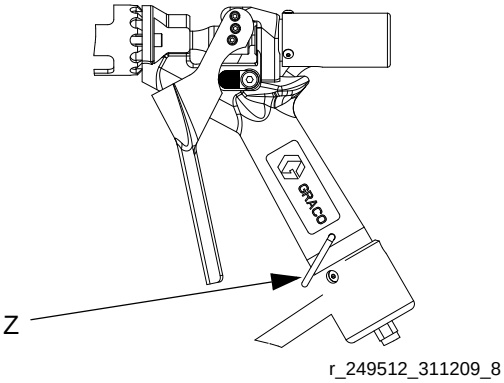


FIG. 8: Trigger Retainer Locked

3. Activate heat controls.
4. After pump, hose, and gun are up to temperature, release gun trigger retainer (Z) to close valve. Engage gun trigger lock to prevent accidental dispense of high pressure heated fluid.



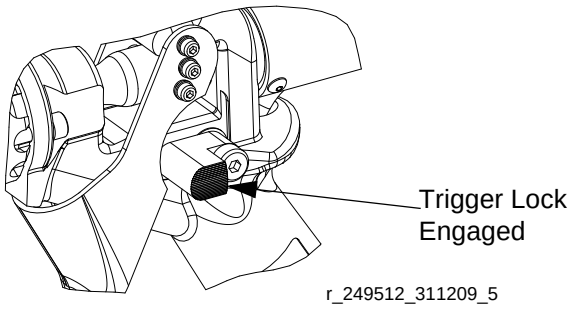


FIG. 9: Trigger Retainer Unlocked and Trigger Lock Engaged

Dispensing

1. Start pump. Fluid flow rate is controlled at pump. Adjust pump pressure to obtain desired flow rate. Use lowest pressure necessary to dispense fluid. The pressure adjustment depends on hose length, fluid viscosity, and nozzle size.
2. Disengage gun trigger lock.

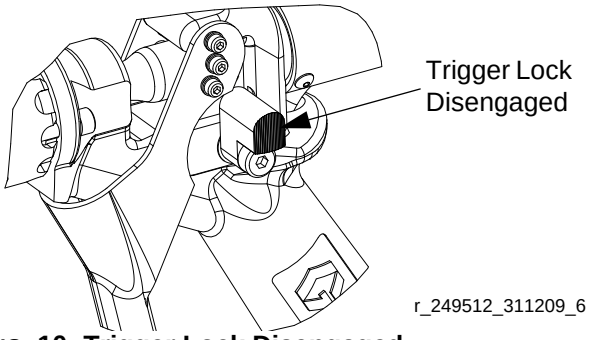


FIG. 10: Trigger Lock Disengaged

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

Shutdown

1. Turn off all heat at controller.
2. Shut off fluid supply pump.
3. Trigger gun to relieve pressure while system is still hot.
4. With gun over a waste container, hold trigger open by securing with trigger retainer (Z).

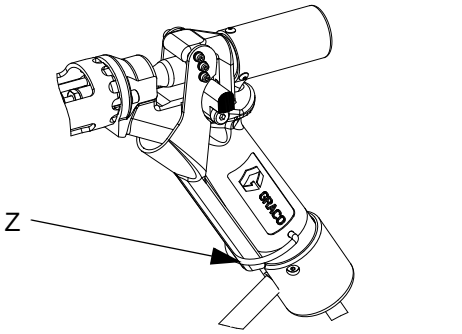


FIG. 11: Trigger Retainer Locked

Troubleshooting

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

Problem	Cause(s)	Solution(s)
Material leaks from front of gun body	Seat or packing is worn	Replace seat (6) or packing (47).
	Obstruction inside gun	Remove seat (6). Check and replace if necessary.
	Worn needle	Check and replace needle (4a) if necessary.
Material leaks from back of gun body	Needle seal or packing is worn	Replace seals (4c) or packing (4d).
Gun does not shut off	Needle or seat is worn	Replace needle (4a) or seat (6).
	Spring is broken or not installed correctly	Check and replace spring (14) if necessary.
	Obstruction inside gun	Remove seat (6). 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 cartridge failed	Replace failed heater.
	Sensor failed	Replace failed sensor.
	Temperature controller failed	Refer to Therm-O-Flow® 200 manual 311208 as appropriate.
	No power to heating circuitry	

Service

After adjusting or servicing gun, ensure that fluid will not trigger on when trigger lock is engaged. If fluid does flow, gun is not assembled correctly or trigger lock is damaged. Reassemble gun or return it to your nearest Graco distributor. Do not use gun until the problem is corrected.

1. If fluid continues to flow after trigger is released:
   - gun valve may need adjustment,
   - gun valve may be obstructed or damaged,
   - needle assembly (4) or seat (6) may be worn or damaged.

   Replace needle assembly (4) or seat (6) as instructed on page 13.

2. Use Repair Kit 253553 for Manual Hot-Melt Guns 249512, 249513, 249514, 249515, 297273, and 297274.

Install New Heater Cartridge(s), RTD Sensor, or Switch

1. Remove covers (9 and 16).

2. Pull terminal blocks (36) and insulation displacement connectors (IDC) (38) out of handle. Loosen the screw in the terminal block or cut off the IDC to disconnect lead wires of failed components.

3. Gently slide new heater(s) or sensor into appropriate hole.

4. Feed new wires through conduit to the correct terminal block or IDC. If using a terminal block, cut wires to length and strip insulation before connecting.

   If using an IDC, insert one new RTD wire and one yellow wire through the IDC holes until the ends can be seen in the window on the opposite side. Use pliers to press down insert, then close the IDC cover.

   When replacing switch (51) ensure tube (53) protrudes from the back of the handle with its end near the center of the switch body. Gently push wires through the tube into the gun handle. See FIG. 12.

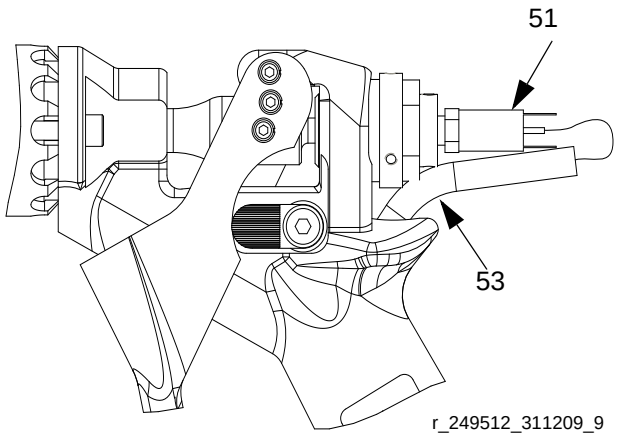


FIG. 12

5. Replace covers (9 and 16).

6. See FIG. 13. Use an ohm meter to check:

   a. Heater pins 1 to 2, 445 Ω +/- 35 Ω.

   b. RTD sensor pin 3 to 4, 108 Ω +/-1 Ω at 70°F (21°C).

   c. Continuity to gun body from pin 8.

   d. No continuity from pins 1-7 to gun body or connector shell, or ground pin 8.

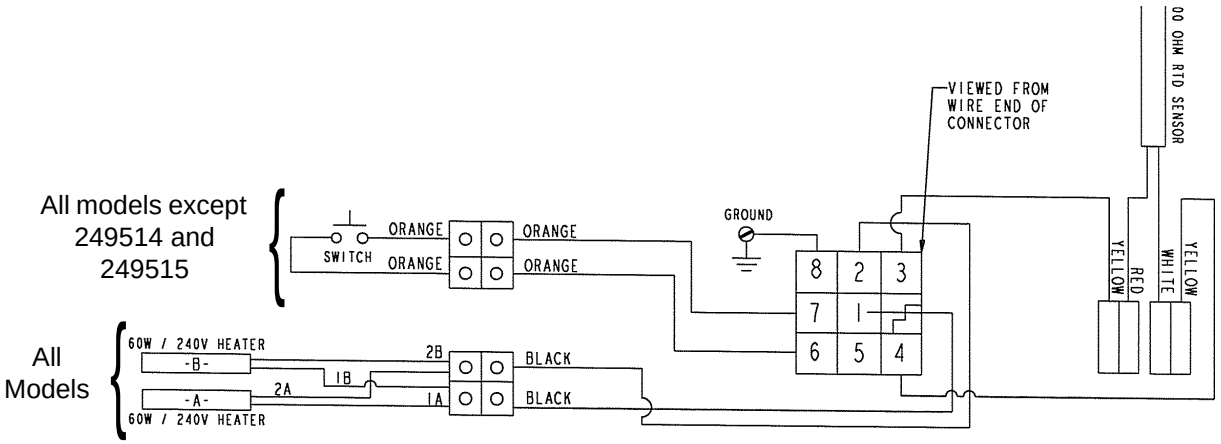


FIG. 13: 8 Pin, 240 Volt Shown

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 890 ohms, +/- 70 ohms for the 240V valves. Replace heater if necessary.

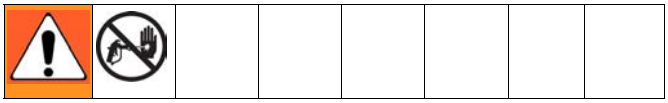
Also inspect heater when performing regular maintenance procedures.

Sensor

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

Also inspect sensor when performing regular maintenance procedures.

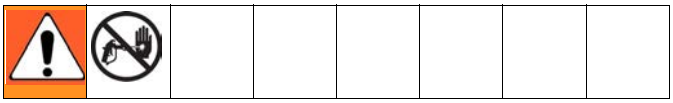
Adjust Needle Assembly



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

1. Relieve pressure in system.
2. Disconnect gun from hose.
3. Use 11/32 in. wrench to loosen hex nut (4g).
4. Trigger gun and use a 1/8 in. open-end wrench on flats of needle to turn needle (4a) clockwise one turn as viewed from handle end of gun.
5. Release trigger; a slight free play of the trigger handle should occur.
6. Repeat Step 4 until free play occurs.
7. Tighten hex nut (4g) to lock the adjustment.

Service Valve Stem and Seal



If fluid leaks past seal (4c), the seal or needle (4a) may be worn or damaged. To replace seal or valve stem, use the following procedure.

1. Relieve pressure in system.
2. Disconnect gun from hose.
3. Remove cover (16), and then slide heater cartridge and sensor cartridge out of body (2).
4. Loosen needle nut.
5. Remove screws (33).
6. Unscrew needle with body from yoke.
7. Remove seal-cartridge assembly from body and replace seals and/or needle. Repack grease area of packing nut prior to reassembly.
8. Reassemble in reverse order and follow **Adjust Needle Assembly**, page 13.

Parts

Models 249514 and 249512, Hot Melt Guns

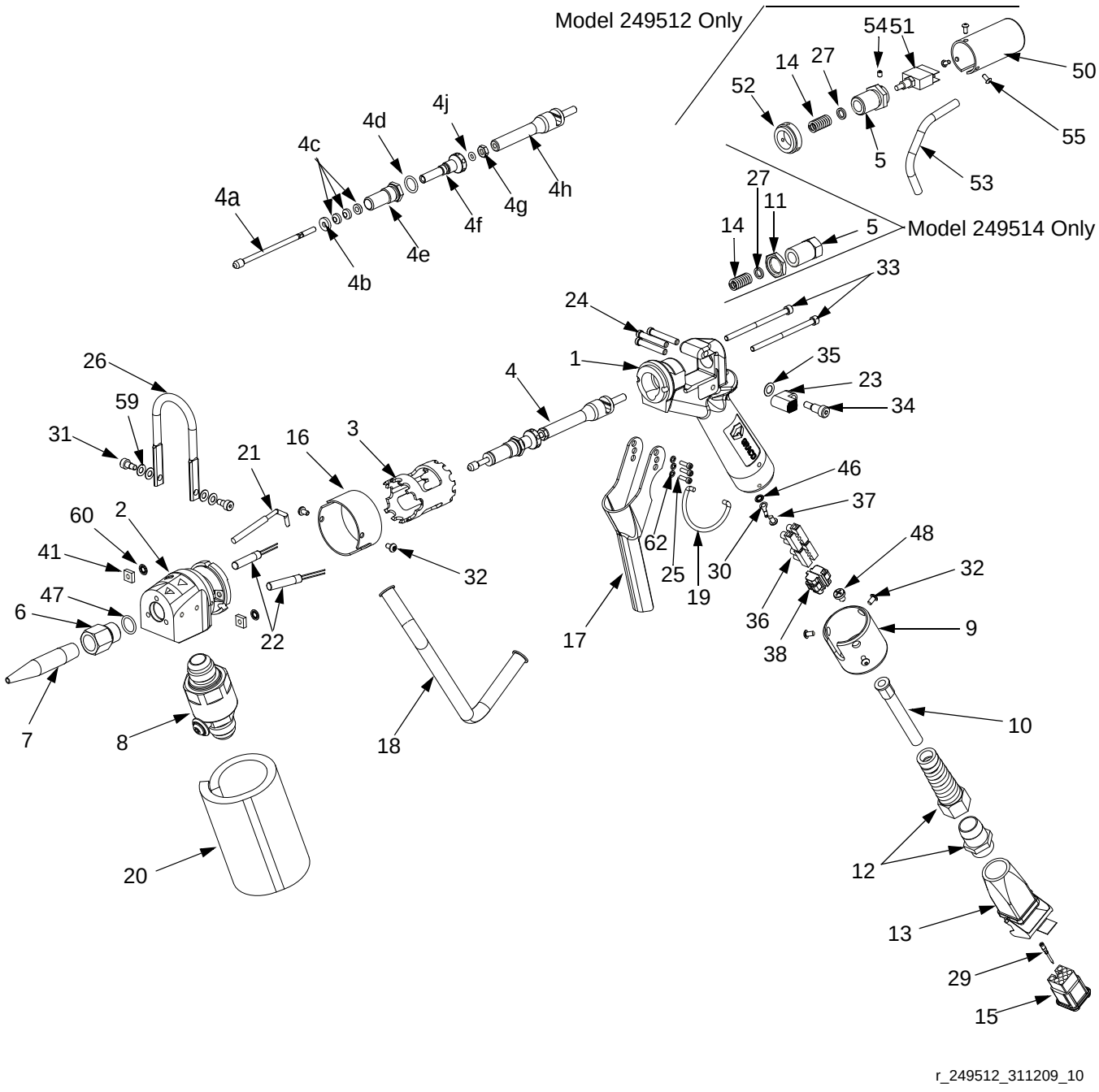


FIG. 14: Models 249514 and 249512, Hot Melt Guns

Model 249514
Manual Hot Melt Gun, Bottom Feed, Extrude, No Switch

Model 249512
Manual Hot Melt Gun, Bottom Feed, Extrude, with Switch

Ref. No.	Part No.	Description	Qty
1	15G017	HANDLE	1
2	15X297	BODY, gun	1
3	15G006	SPACER, thermal, isolator	1
4◆	287734	NEEDLE, assy, includes 4a-4j	1
4a	15G531	NEEDLE	1
4b	C27053	SUPPORT, packing	1
4c*	C27060	SEAL, needle	3
4d*	103338	PACKING, o-ring	1
4e	15F993	NUT, packing	1
4f	15F991	SCREW, adjustment	1
4g	C19284	NUT, hex	1
4h	15F997	YOKE, gun	1
4j*	106560	PACKING, o-ring	1
5		RETAINER, spring	
	C27037	Model 249514	1
	15G004	Model 249512	1
6◆	15G001	ADAPTER, seat	1
7	C32003	NOZZLE	1
8	287736	SWIVEL, assy (inline with stop)	1
9	15G018	COVER, gun handle	1
10	119876	CONDUIT, flex	1
11†	C27036	NUT, lock	1
12	116673	BUSHING, strain relief	1
13	116637	CONNECTOR, cable coupler hood	1
14	C00020	SPRING	1
15	115860	INSERT, male	1
16	15F989	COVER, gun wires	1
17	C27051	TRIGGER, gun	1
18	15G022	TUBE	1
19	C32368	RING	1
20	119889	COVER, swivel	1
21	C32255	SENSOR, temperature	1
22	17K470	CARTRIDGE, heater	2
23	C34009	TRIGGER, lock	1
24	15X116	PIN, trigger	3
25	C19950	SCREW, Cap	3
26	15G020	HANGER	1
27	15G121	WASHER, gun	1
28❄	065337	WIRE, copper, electric	1
29	115862	CONNECTOR, male, crimp	
		Model 249514	1
		Model 249512	1
30	C78160	TERMINAL	1
31	122340	SCREW, shoulder, socket hd.	2
32	122337	SCREW, cap, socket button hd.	5
33	124779	SCREW, cap, socket hd.	2
34	108483	SCREW, shoulder	1
35	C20565	WASHER, spring washer	1
36	15X093	BLOCK, terminal	2
37	102975	SCREW, 6-32 x .25	1
38	122341	CONNECTOR, pigtail, IDC	2
39‡❄	C07535	TUBE, heat shrink	1
40❄	C34137	INSULATOR, fiberglass	1
41	122433	NUT, square	2
42❄	065366	WIRE, silver-coated copper	1
43❄	C33049	TAPE, adhesive, fiberglass	1
44❄	198422	COVER, protective	1
45❄	198442	STRAP, retaining mix manifold	2
46	100272	WASHER, #6, internal lock	1
47*◆	103610	PACKING, o-ring	1
48	116807	SCREW, 10-24 x .25	1
49❄	617836	SLEEVE, fiberglass braid, #10 blk	2
50‡	15G003	COVER, switch	1
51‡	C32370	SWITCH	1
52‡	15G019	SPACER, cover mounting	1
53‡	122335	TUBE, 1/4 O.D.	1
54‡	102273	SCREW, set, 6-32 x .19	1
55‡	122338	SCREW, cap, socket button hd.	3
57❄‡	065379	WIRE, silver-coated copper, orange	1
58❄	065380	WIRE, silver-coated copper, yellow	1
59	122339	WASHER, Belleville	4
60	157021	WASHER, lock	2
61❄	070269	SEALANT, anaerobic	AR
62	C19208	WASHER, lock	3
63❄	101369	WRENCH, allen	1
64		CONNECTOR, male, crimp	
	116640	Model 249514	4
	116640	Model 249512	6

** Parts included in Seal Kit 253553 (purchase separately).*

◆ Parts included in Repair Kit 289901 (purchase separately).

† Model 249514 only.

‡ Model 249512 only.

❄ Not shown.

Models 249515 and 249513, Hot Melt Guns

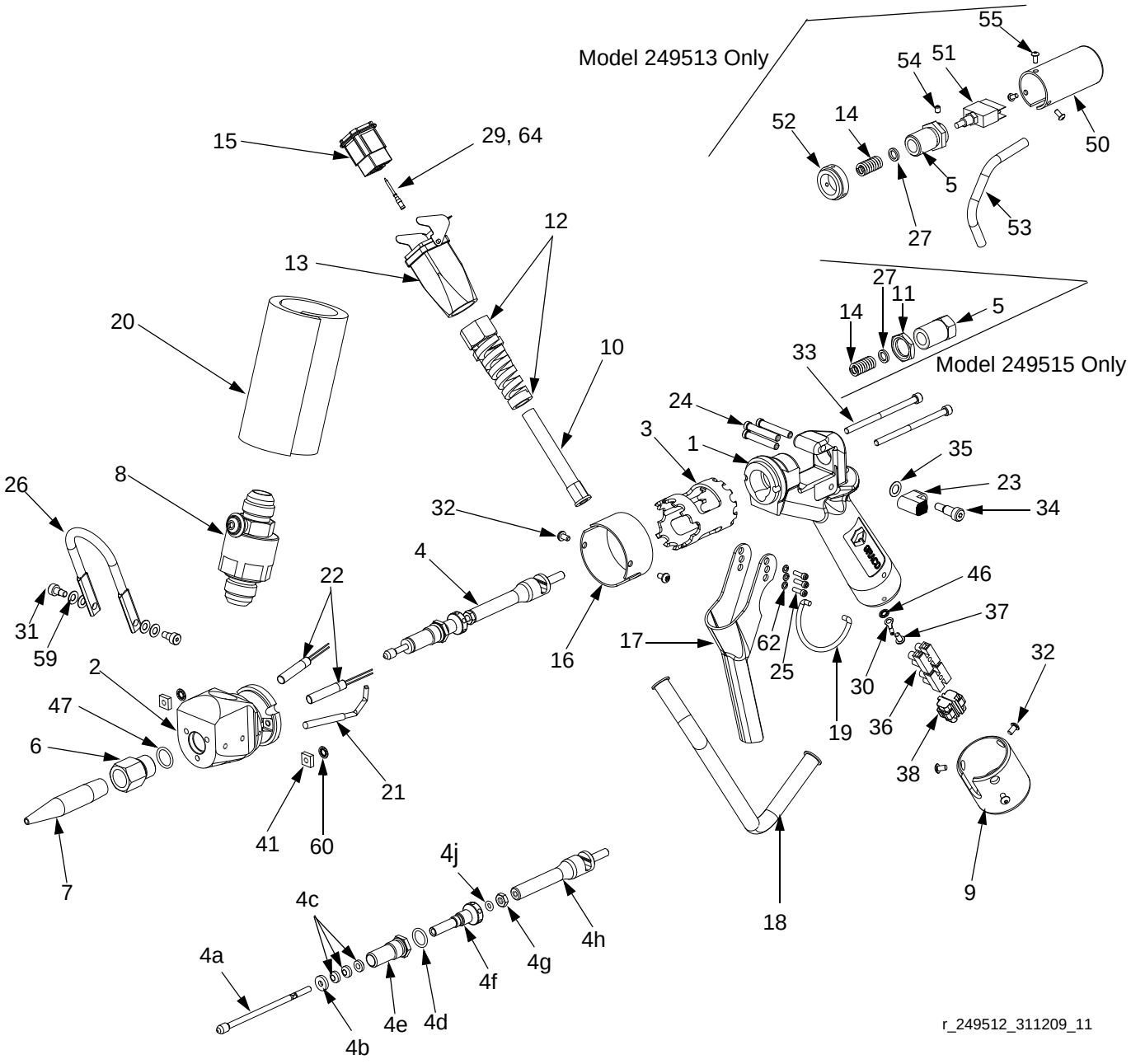


FIG. 15: Models 249515 and 249513, Hot Melt Guns

Model 249515
Manual Hot Melt Gun, Top Feed, Extrude, No Switch

Model 249513
Manual Hot Melt Gun, Top Feed, Extrude, with Switch

Ref. No.	Part No.	Description	Qty.
1	15G017	HANDLE	1
2	15X297	BODY, gun	1
3	15G006	SPACER, thermal, isolator	1
4◆	287734	NEEDLE, assy, includes 4a-4j	1
4a	15G531	NEEDLE	1
4b	C27053	SUPPORT, packing	1
4c*	C27060	SEAL, needle	3
4d*	103338	PACKING, o-ring	1
4e	15F993	NUT, packing	1
4f	15F991	SCREW, adjustment	1
4g	C19284	NUT, hex	1
4h	15F997	YOKE, gun	1
4j*	106560	PACKING, o-ring	1
5		RETAINER, spring	1
	C27037	Model 249515	
	15G004	Model 249513	
6◆	15G001	ADAPTER, seat	1
7	C32003	NOZZLE	1
8	287736	SWIVEL, assy (inline with stop)	1
9	15G018	COVER, gun handle	1
10	119876	CONDUIT, flex	1
11†	C27036	NUT, lock	1
12	116673	BUSHING, strain relief	1
13	116637	CONNECTOR, cable coupler hood	1
14	C00020	SPRING	1
15	115860	INSERT, male	1
16	15F989	COVER, gun wires	1
17	C27051	TRIGGER, gun	1
18	15G022	TUBE	1
19	C32368	RING	1
20	119889	COVER, swivel	1
21	C32255	SENSOR, temperature	1
22	17K470	CARTRIDGE, heater	2
23	C34009	TRIGGER, lock	1
24	15X116	PIN, trigger	3
25	C19950	SCREW, cap	3
26	15G020	HANGER	1
27	15G121	WASHER, gun	1
28❄	065337	WIRE, copper, electric	1
29	115862	CONNECTOR, male, crimp	
		Model 249515	1
		Model 249513	1
30	C78160	TERMINAL	1
31	122340	SCREW, shoulder, socket hd.	2
32	122337	SCREW, cap, socket button hd.	5
33	124779	SCREW, cap, socket hd.	2
34	108483	SCREW, shoulder	1
35	C20565	WASHER, spring washer	1
36	15X093	BLOCK, terminal	2
37	102975	SCREW, 6-32 x .25	1
38	122341	CONNECTOR, pigtail, IDC	2
39‡❄	C07535	TUBE, heat shrink	1
40❄	C34137	INSULATOR, fiberglass	1
41	122433	NUT, square	2
42❄	065366	WIRE, silver-coated copper	1
43❄	C33049	TAPE, adhesive, fiberglass	1
44❄	198422	COVER, protective	1
45❄	198442	STRAP, retaining mix manifold	2
46	100272	WASHER, #6 internal lock	1
47*◆	103610	PACKING, o-ring	1
49❄	617836	SLEEVE, fiberglass braid, #10 blk	2
50‡	15G003	COVER, switch	1
51‡	C32370	SWITCH	1
52‡	15G019	SPACER, cover mounting	1
53‡	122335	TUBE, 1/4 O.D.	1
54‡	102273	SCREW, 6-32 x .19	1
55‡	122338	SCREW, cap, socket button hd.	3
56❄	065379	WIRE, silver-coated copper, orange	1
57❄	065380	WIRE, silver-coated copper, yellow	1
59	122339	WASHER, Belleville	4
60	157021	WASHER, lock	2
61❄	070269	SEALANT, anaerobic	AR
62	C19208	WASHER, lock	3
63❄	101369	WRENCH, allen	1
64		CONNECTOR, male, crimp	
	116640	Model 249515	4
	116640	Model 249513	6

** Parts included in Seal Kit 253553 (purchase separately).*

◆ Parts included in Repair Kit 289901 (purchase separately).

† Model 249515 only.

‡ Model 249513 only.

❄ Not shown.

Models 297274 and 297273, Hot Melt Guns

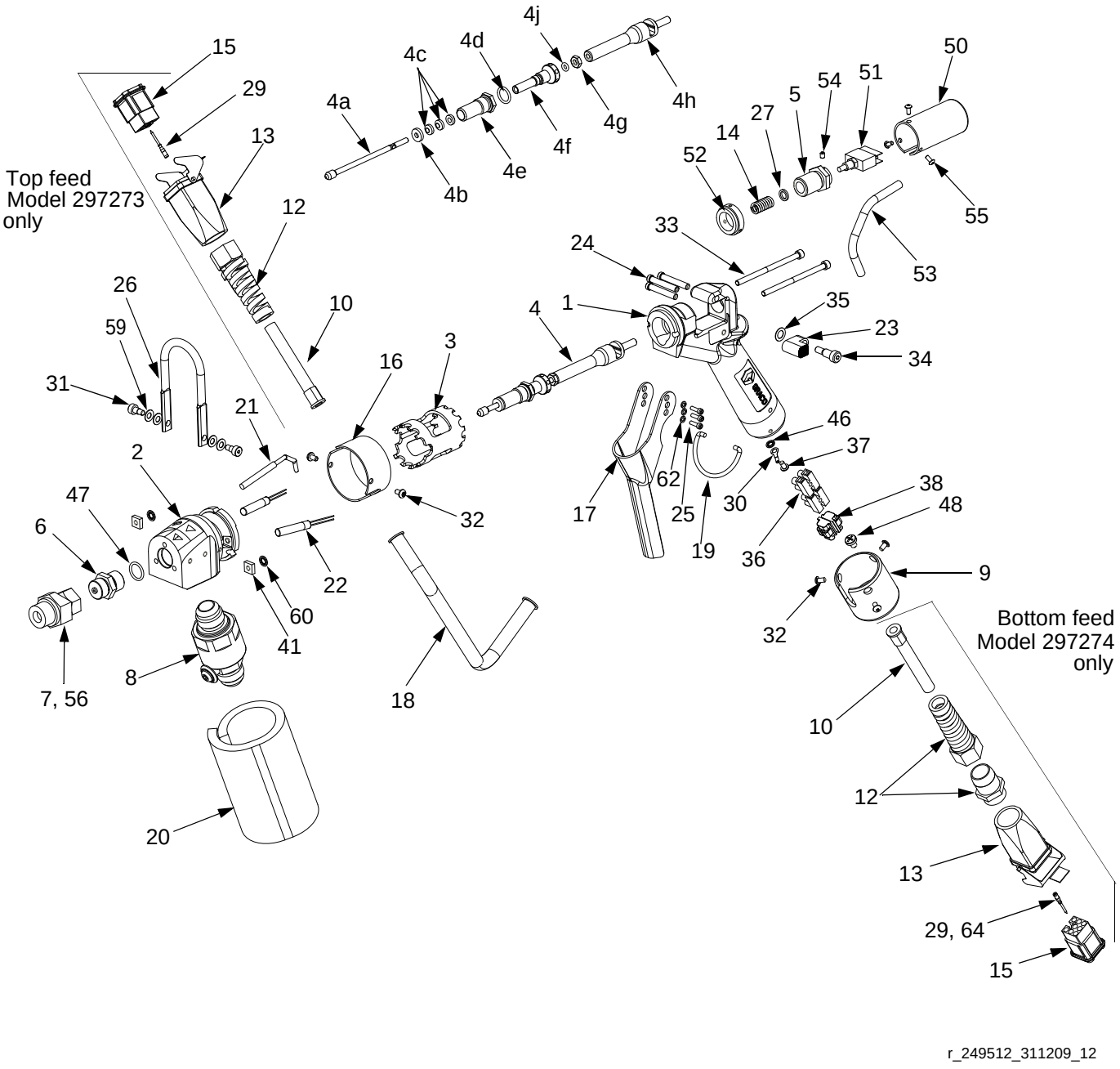


FIG. 16: Models 297274 and 297273, Hot Melt Guns

Model 297274
Manual Hot Melt Gun, Bottom Feed, Swirl, with Switch

Model 297273
Manual Hot Melt Gun, Top Feed, Swirl, with Switch

Ref. No.	Part No.	Description	Qty.
1	15G017	HANDLE	1
2	15X297	BODY, gun	1
3	15G006	SPACER, thermal, isolator	1
4	287734	NEEDLE, assy, includes 4a-4j	1
4a	15G531	NEEDLE	1
4b	C27053	SUPPORT, packing	1
4c*	C27060	SEAL, needle	3
4d*	103338	PACKING, o-ring	1
4e	15F993	NUT, packing	1
4f	15F991	SCREW, adjustment	1
4g	C19284	NUT, hex	1
4h	15F997	YOKE, gun	1
4j*	106560	PACKING, o-ring	1
5	15G004	RETAINER, spring	1
6	15G002	ADAPTER, swirl	1
7	118072	HEAD, applicator, swirl	1
8	287736	SWIVEL, assy (inline with stop)	1
9	15G018	COVER, gun handle	1
10	119876	CONDUIT, flex	1
12	116673	BUSHING, strain relief	1
13	116637	CONNECTOR, cable coupler hood	1
14	C00020	SPRING	1
15	115860	INSERT, male	1
16	15F989	COVER, gun wires	1
17	C27051	TRIGGER, gun	1
18	15G022	TUBE	1
19	C32368	RING	1
20	119889	COVER, swivel	1
21	C32255	SENSOR, temperature	1
22	17K470	CARTRIDGE, heater	2
23	C34009	TRIGGER, lock	1
24	15X116	PIN, trigger	3
25	C19950	SCREW, cap	3
26	15G020	HANGER	1
27	15G121	WASHER, gun	1
28❄	065337	WIRE, copper, electric	1
29	115862	CONNECTOR, male, crimp	1
30	C78160	TERMINAL	1
31	122340	SCREW, shoulder, socket hd.	2
32	122337	SCREW, cap, socket button hd.	5
33	124779	SCREW, cap, socket hd.	2
34	108483	SCREW, shoulder	1
35	C20565	WASHER, spring washer	1
36	15X093	BLOCK, terminal	2
37	102975	SCREW, 6-32 x .25	1
38	122341	CONNECTOR, pigtail, IDC	2
39❄	C07535	TUBE, heat shrink	1
40❄	C34137	INSULATOR, fiberglass	1
41	122433	NUT, square	2
42❄	065366	WIRE, silver-coated copper	1
43❄	C33049	TAPE, adhesive, fiberglass	1
44❄	198422	COVER, protective	1
45❄	198442	STRAP, retaining mix manifold	2
46	100272	WASHER, lock	1
47*	103610	PACKING, o-ring	1
48†	116807	SCREW, mach, pan head, cross	1
49❄	617836	SLEEVE, fiberglass braid, #10 blk	2
50	15G003	COVER, switch	1
51	C32370	SWITCH	1
52	15G019	SPACER, cover mounting	1
53	122335	TUBE, 1/4 O.D.	1
54	102273	SCREW, set, socket	1
55	122338	SCREW, cap, socket button hd.	3
56	117950	NOZZLE, 0.030	1
57❄	065379	WIRE, silver-coated copper, orange	1
58❄	065380	WIRE, silver-coated copper, yellow	1
59	122339	WASHER, Belleville	4
60	157021	WASHER, lock	2
61❄	070269	SEALANT, anaerobic	AR
62	C19208	WASHER, lock	3
63❄	101369	WRENCH, allen	1
64	116640	CONNECTOR, male, crimp	6

** Parts included in Seal Kit 253553 (purchase separately).*

† Model 297274 only.

❄ *Not shown.*

Accessories

Part No.	Description
C34137	Fitting insulation, 1/8 in. thick x 2 in. wide. Sold by the foot.
C33049	Adhesive tape, high temp for securing insulation (C34137), 1 in. x 108 ft.
198422	Wrap, velcro, 10 in. x 10 in. Covers electrical connection on heated hose.
198442	Strap, velcro. Use two around ends of wrap (198422) for security.

Swirl Assemblies

For models 297273 and 297274 only.

Part No.	Description	Orifice Size (in.)
118072	Swirl applicator head	n/a
117950	Swirl nozzle	.030
117951	Swirl nozzle	.045
117952	Swirl nozzle	.060
117953	Swirl nozzle	.080

Technical Data

Maximum operating temperature	400°F (204°C)
Maximum fluid working pressure	5000 psi (34.5 MPa, 345 bar)
Outlet port size	5/8-18 UNF-2B
Inlet port size on gun housing	7/8-14 UNF- 2B
Inlet port size on fluid swivel	7/8-14 JIC(m)
Voltage	230/240 Vac
Wattage	120 W
Resistance temperature detector (platinum RTD; 0.00385 ohm/ohm/°C)	108.2 ohms @ 70°F
Heater resistance	*individually:* 890 ohms, +/- 70 ohms *wired in parallel:* 445 ohms, +/- 35ohms
Weight	*without swivel:* 2.7 lb (1.2 kg) *with swivel:* 3.4 lb (1.5 kg)
Dimensions	*Height:* 7.5 in. (191 mm) *Width:* 3.0 in. (76 mm) *Length:* *Models 249514 and 249515:* 9.0 in. (229 mm) *Models 249512 and 249513:* 10.5 in. (267 mm) *Models 297273 and 297274:* 11.5 in. (292 mm)
Wetted parts	*Aluminum, fluorocarbon rubber, stainless steel, PTFE, carbon steel, brass*

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