

PSM

3B0424C

1K Ambient and 1K Warm Melt Precision Metering System

EN

For accurate metering and dispensing of ambient and warm melt materials. For professional use only.

Not approved for use in explosive atmospheres or hazardous (classified) locations.

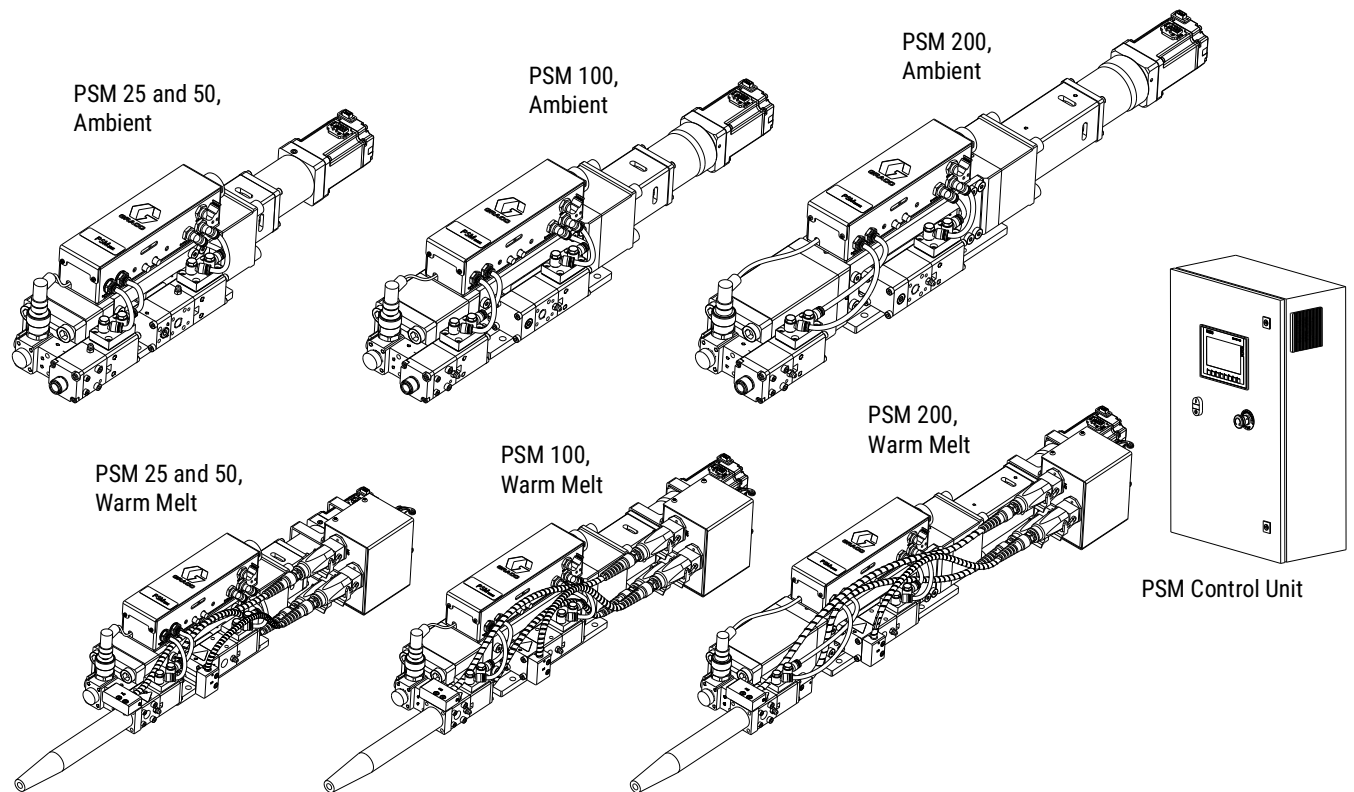
100 psi (0.7 MPa, 7 bar) Maximum Air Inlet Pressure.

See page 3 for model information, including maximum fluid working pressure.



Important Safety Instructions

Read all warnings and instructions in this manual, your PSM instruction manual, and your dispensing manuals before using the equipment. Save these instructions.



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Related Manuals

Manuals in English	Description
3B0424	PSM Instruction Manual
X032396	iQ Dispense Valves Instructions and Parts List Manual
3A8005	Therm-O-Flow® Warm Melt Instructions and Parts List Manual

Models

Models, PSM Ambient

Part	Capacity	Maximum Fluid Working Pressure psi (MPa, bar)	Description
2010342	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, SST ⁽¹⁾ , PLC, Ethernet IP
2010343	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, CER ⁽²⁾ , PLC, Ethernet IP
2010346	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, SST ⁽¹⁾ , PLC, Ethernet IP
2010347	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, CER ⁽²⁾ , PLC, Ethernet IP
2010350	100cc	3000 psi (20.7 MPa, 207 bar)	System, PSM100, SST ⁽¹⁾ , PLC, Ethernet IP
2010352	200cc	3000 psi (20.7 MPa, 207 bar)	System, PSM200, SST ⁽¹⁾ , PLC, Ethernet IP
2010372	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, SST ⁽¹⁾ , PLC, PN ⁽³⁾
2010373	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, CER ⁽²⁾ , PLC, PN ⁽³⁾
2010376	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, SST ⁽¹⁾ , PLC, PN ⁽³⁾
2010377	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, CER ⁽²⁾ , PLC, PN ⁽³⁾
2010380	100cc	3000 psi (20.7 MPa, 207 bar)	System, PSM100, SST ⁽¹⁾ , PLC, PN ⁽³⁾
2010382	200cc	3000 psi (20.7 MPa, 207 bar)	System, PSM200, SST ⁽¹⁾ , PLC, PN ⁽³⁾

Models, PSM Warm Melt

Part	Capacity	Maximum Fluid Working Pressure psi (MPa, bar)	Description
2010344	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, SST ⁽¹⁾ , Warm Melt, PLC, Ethernet IP
2010348	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, SST ⁽¹⁾ , Warm Melt, PLC, Ethernet IP
2010351	100cc	3000 psi (20.7 MPa, 207 bar)	System, PSM100, SST ⁽¹⁾ , Warm Melt, PLC, Ethernet IP
2010353	200cc	3000 psi (20.7 MPa, 207 bar)	System, PSM200, SST ⁽¹⁾ , Warm Melt, PLC, Ethernet IP
2010374	25cc	3000 psi (20.7 MPa, 207 bar)	System, PSM25, SST ⁽¹⁾ , Warm Melt, PLC, PN ⁽³⁾
2010378	50cc	3000 psi (20.7 MPa, 207 bar)	System, PSM50, SST ⁽¹⁾ , Warm Melt, PLC, PN ⁽³⁾
2010381	100cc	3000 psi (20.7 MPa, 207 bar)	System, PSM100, SST ⁽¹⁾ , Warm Melt, PLC, PN ⁽³⁾
2010383	200cc	3000 psi (20.7 MPa, 207 bar)	System, PSM200, SST ⁽¹⁾ , Warm Melt, PLC, PN ⁽³⁾

⁽¹⁾ SST: Stainless steel material

⁽²⁾ CER: Ceramic material

⁽³⁾ Any PSM system can be converted to Ethernet IP communication mode. Order kit 2010286 and add Ethernet IP communication protocol. See Ethernet IP Communication Protocol page in your PSM Instruction Manual. See **Related Manuals**, page 2.

Safety Symbols

The following safety symbols appear throughout this manual and on warning labels. Read the table to understand what each symbol means.

Symbol	Meaning
	Burn Hazard
	Electric Shock Hazard
	Equipment Misuse Hazard
	Fire and Explosion Hazard
	Moving Parts Hazard
	Skin Injection Hazard
	Skin Injection Hazard
	Splash Hazard
	Toxic Fluid or Fumes Hazard

Symbol	Meaning
	Do Not Place Hands or Other Body Parts Near Fluid Outlet
	Do Not Stop Leaks with Hand, Body, Glove or Rag
	Eliminate Ignition Sources
	Follow Pressure Relief Procedure
	Ground Equipment
	Read Manual
	Ventilate Work Area
	Wear Personal Protective Equipment



Safety Alert Symbol

This symbol indicates: Attention! Become Alert! Look for this symbol throughout the manual to indicate important safety messages.

General Warnings

The following warnings apply throughout this manual. Read, understand, and follow the warnings before using this equipment. Failure to follow these warnings can result in serious injury.

 WARNING	
 	ELECTRIC SHOCK HAZARD This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock. • Turn off and disconnect all power before disconnecting any cables and before servicing or installing equipment. • Connect only to grounded power source. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
    	SKIN INJECTION HAZARD High-pressure fluid from dispensing device, 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 dispensing device at anyone or at any part of the body. • Do not put your hand over the fluid outlet. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses and couplings daily. Replace worn or damaged parts immediately.

! WARNING



FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. 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 sparking).
- Ground all equipment in the work area. See **Grounding** instructions.
- Never spray or flush solvent at high pressure.
- 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.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock. 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 Specifications** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Specifications** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer.
- Turn off all equipment and follow the **Pressure Relief Procedure** when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- 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.



MOVING PARTS HAZARD

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



- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.



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 Safety Data Sheets (SDSs) 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.

 WARNING	
	BURN HAZARD Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns: • Do not touch hot fluid or equipment.
	PERSONAL PROTECTIVE EQUIPMENT Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to: • Protective eyewear, and hearing protection. • Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Changing Materials

NOTICE
Changing the material types used in your equipment requires special attention to avoid equipment damage and downtime. • When changing materials, flush the equipment multiple times to ensure it is thoroughly clean. • Always clean the fluid inlet strainers after flushing. • Check with your material manufacturer for chemical compatibility. • When changing between epoxies and urethanes or polyureas, disassemble and clean all fluid components and change hoses. Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

Repair



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow **Pressure Relief Procedure** in your PSM Instruction Manual when you stop operating and before cleaning, checking, or servicing the equipment.

To avoid injury from toxic fluids or fumes, such as splashing in the eyes or on skin, wear appropriate personal protective equipment.

To avoid injury from fire, explosion, or electric shock, all electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

To avoid severe burns, do not touch hot fluid or equipment.

Preparation

NOTE: Graco suggests using TSL™ only in repair procedures. All procedures should be performed by an appropriate professional.

1. Follow steps 1 through 3 of the **Pressure Relief Procedure** in your PSM Instruction Manual. See **Related Manuals**, page 2.
2. Turn off the air supply when the fluid pressure drops to ZERO.
3. Go to the Advanced Screen of the PSM Control Unit (F on Typical Installation page in your PSM Instruction Manual, see **Related Manuals**, page 2). Set the move speed at about 0.2 mm/s, then jog select Piston move down until the lower switch light is activated.

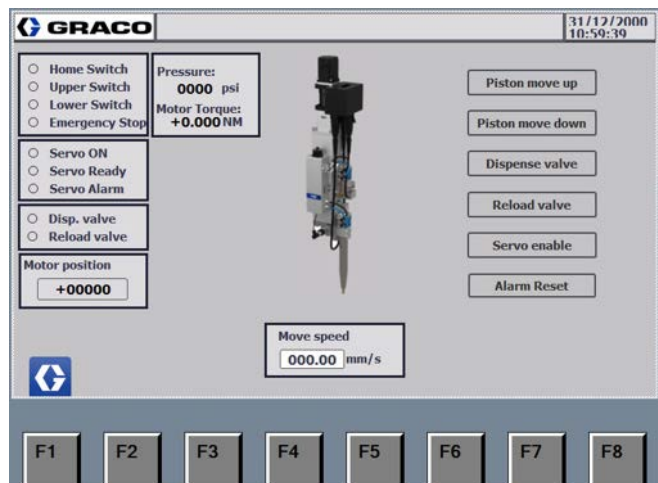


FIG. 1 Advanced Screen

NOTE: To open the Advanced mode, the operator must enter the password **1492**.

4. Turn off the system power.
5. Disconnect all cables and tubes from Junction Box Assembly (AA on Component Identification page in your PSM Instruction Manual, see **Related Manuals**, page 2).
6. Open the top cover of the Junction Box (AA on Component Identification page in your PSM Instruction Manual, see **Related Manuals**, page 2) and loosen the two fix screws in the cylinder housing (112). Next, take off the Junction Box Assembly (AA).

Piston/Cylinder Replacement

Disassemble Metering Module

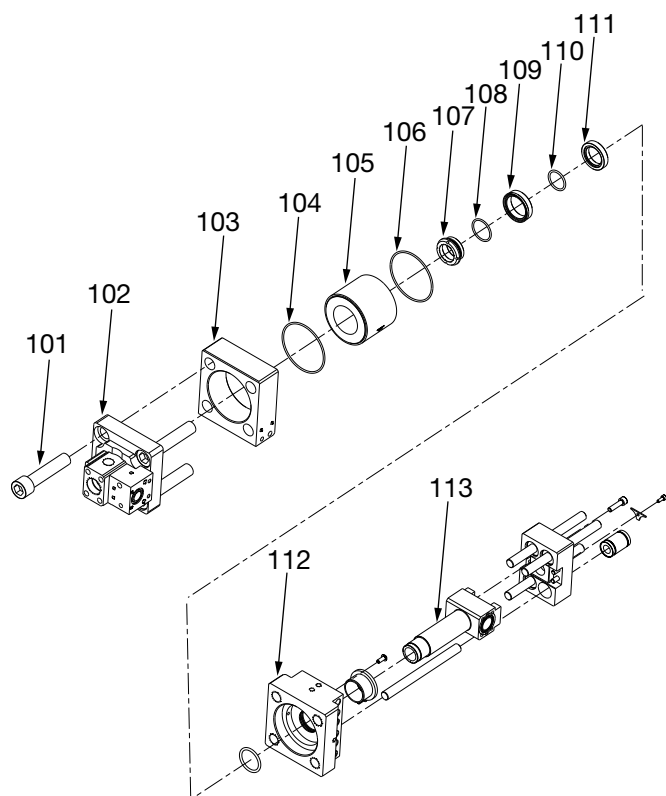
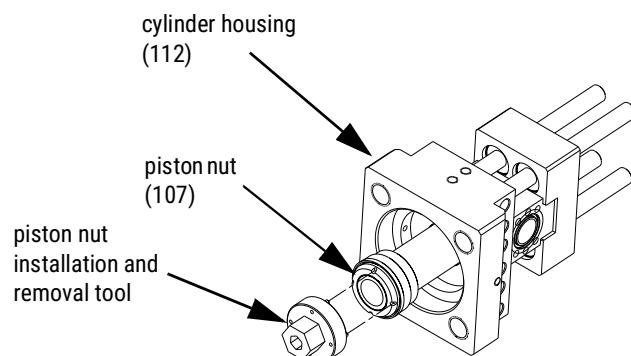


FIG. 2 Disassemble Cylinder of 50 cc and 100 cc

1. Remove the four screws (101).
2. Remove support block (102) and the sleeves (103).
3. Remove the cylinder (105) and O-rings (104 and 106) from the cylinder housing (112).
4. Using piston nut installation and removal tool (2013509), remove the piston nut (107) and the O-ring (108, only for PSM25) from the rod (113).



5. Remove the piston (109) from the rod (113).
6. Remove the O-ring (110).
7. Remove the washer (111) from the rod (113).
8. Clean all parts that have been removed.

Install Metering Module

1. Install the washer (111) to the rod (113) with TSL oil.
2. Install the new O-ring (110) with TSL oil.
3. Install the new piston (109) in the correct direction.
4. Install the new O-ring (108, only for PSM25cc) to the piston nut (107) with TSL oil.
5. Install the piston nut (107) and tighten the piston nut with correct torque.
6. Install the lubricated new O-ring (106) into the grooves of cylinder housing (112) with TSL oil.
7. Carefully slide the end of the cylinder (105) into the cylinder housing (112) in the correct direction. Ensure the cylinder doesn't damage the sides of the piston as the cylinder is inserted.
8. Insert the lubricated new O-ring (104) into the grooves of the cylinder (105).
9. Secure cylinder in place with the sleeves (103), support block (102) screws (101). Diagonally tighten the screws (101) by slowly and progressively increasing torque until the screws are securely housed.
10. Install other parts.

NOTE: Not all parts need to be replaced with new ones. The operator may replace the parts per actual situation.

Warm Melt Module Replacement (Only for PSM Warm Melt)

Disassemble Warm Melt Module

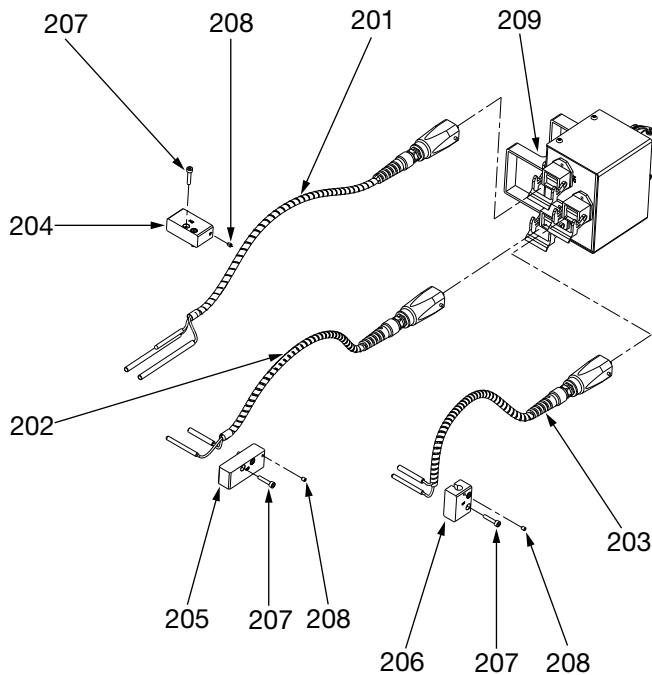


Fig. 3 Disassemble Cylinder of 50 cc and 100 cc

1. Unlock and pull the cables (201, 202, and 203) out of the connector (209).
2. Remove the screws (207 and 208) from the covers (204, 205, and 206).
3. Remove the covers (204, 205, and 206) from the cables (201, 202, and 203).

Disassemble Warm Melt Module

1. Install the covers (204, 205, and 206) to the cables (201, 202, and 203) with screws (207 and 208).
2. Insert the cables (201, 202, and 203) into the connector (209) and lock the cables.

Prepare for Operation

1. Pressurize Supply Pump System (E on Typical Installation page in your PSM Instruction Manual) connected to the PSM Reload Valve (AD on Component Identification page in your PSM Instruction Manual). See your PSM Instruction Manual. See **Related Manuals**, page 2.
2. Perform the **Prime the System** as outlined in your PSM Instruction Manual. See **Related Manuals**, page 2.
3. Perform the **Weight Check** as outlined in your PSM Instruction Manual. See **Related Manuals**, page 2.
4. Dispense several full stroke shots until the PSM Metering Unit (H on Typical Installation page in your PSM Instruction Manual) is free of air and there is no leakage at the dispense outlet after shutoff. See your PSM Instruction Manual. See **Related Manuals**, page 2.

Recycling and Disposal

End of Product Life

At the end of the product's useful life, dismantle and recycle it in a responsible manner.

- Follow the **Pressure Relief Procedure** in your PSM Instruction Manual. See **Related Manuals**, page 2.
- Drain and dispose of fluids according to applicable regulations. Refer to the material manufacturer's Safety Data Sheet.
- Remove motors, circuit boards, LCDs (liquid crystal displays), and other electronic components. Recycle according to applicable regulations.
- Do not dispose of electronic components with household or commercial waste. 
- Deliver remaining product to a recycling facility.

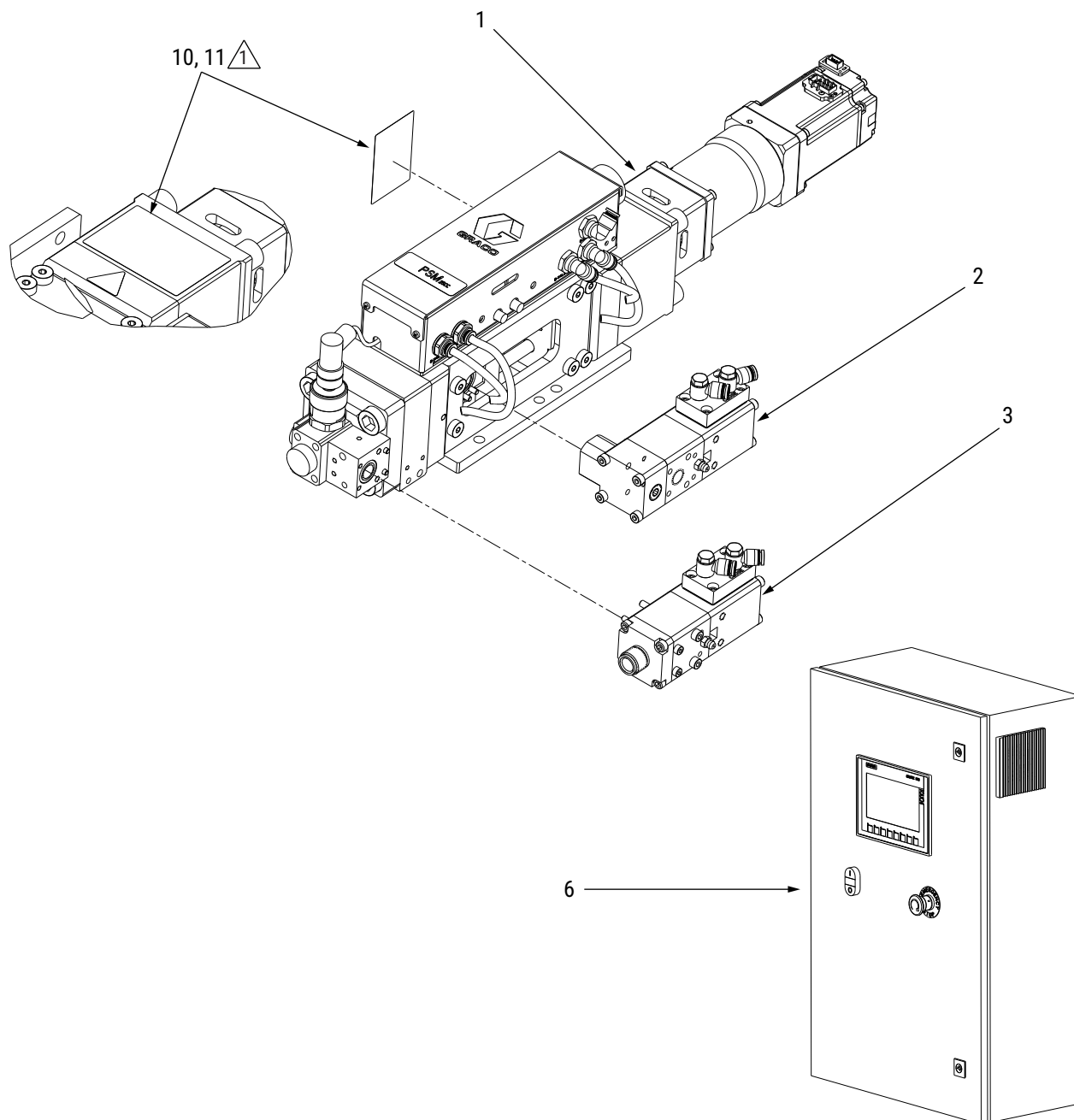
Parts

Overview

Parts Description	Page
System	12
Base	16
Metering Module	18
Power Transmission Module	20
Junction Box	22
Inlet Valve Module	24
1K Inlet Valve Module	26
Outlet Valve Module	28
1K Outlet Valve Module	30
Warm Melt Module (Only for PSM Warm Melt)	32
Control Unit	34

System

System, PSM Ambient, 2010342, 2010343, 2010346, 2010347, 2010350, 2010352, 2010372, 2010373, 2010376, 2010377, 2010380, and 2010382



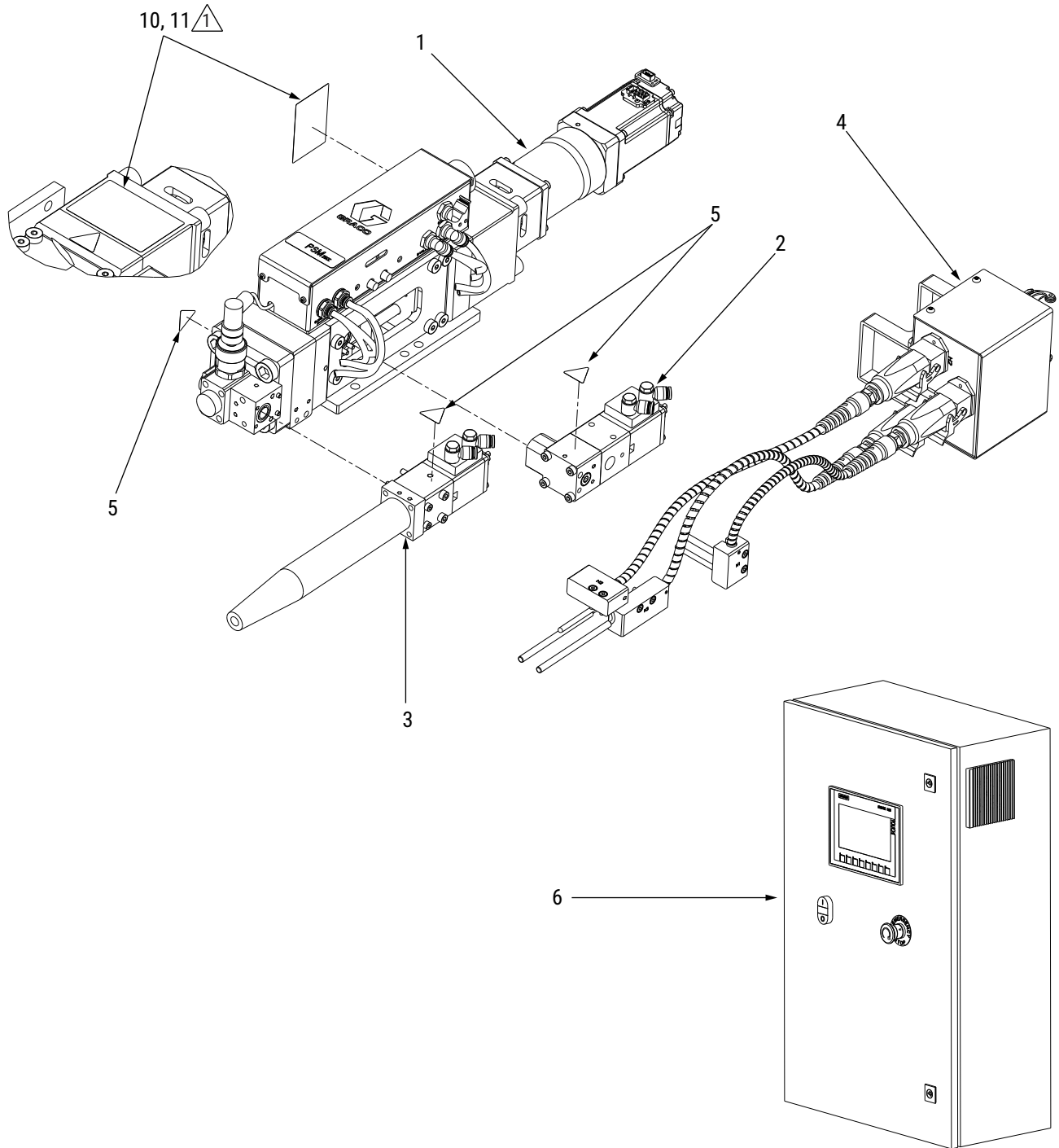
 Pasted on the left side of base part.

PSM Ambient System Parts List

Ref.	Part	Description	Qty.											
			2010342	2010343	2010346	2010347	2010350	2010352	2010372	2010373	2010376	2010377	2010380	2010382
1	----	BASE, PSM25, SST; See Base , page 16	1						1					
	----	BASE, PSM25, CER; See Base , page 16		1						1				
	----	BASE, PSM50, SST; See Base , page 16			1						1			
	----	BASE, PSM50, CERO; See Base , page 16				1						1		
	----	BASE, PSM100, SST; See Base , page 16					1						1	
	----	BASE, PSM200, SST; See Base , page 16						1						1
2	----	VALVE, kit, 1K, inlet; See Inlet Valve, PSM Ambient , page 24	1	1	1	1	1	1	1	1	1	1	1	1
3	----	VALVE, kit,1K, outlet, HW; See Outlet Valve, PSM Ambient , page 28		1		1				1		1		
	----	VALVE, kit,1K, outlet, SST; See Outlet Valve, PSM Ambient , page 28	1		1		1	1	1		1		1	1
6	2010313	CONTROL, PSM, Ethernet, PLC; See Control Unit , page 34	1	1	1	1	1	1						
	2009752	CONTROL, PSM, PN, PLC; See Control Unit , page 34							1	1	1	1	1	1
7*	2010113	CABLE, servo motor, X5, 10m	1	1	1	1	1	1	1	1	1	1	1	1
8*	2010112	CABLE, servo encoder, X3, 10m	1	1	1	1	1	1	1	1	1	1	1	1
9*	2009852	CABLE, X1 to X10,10m	1	1	1	1	1	1	1	1	1	1	1	1
10*	----	BLANK, label, kit	1	1	1	1	1	1	1	1	1	1	1	1
11*	----	IDENTIFICATION, PSM product	1	1	1	1	1	1	1	1	1	1	1	1
12*	----	WIRE, grounding assembly	1	1	1	1	1	1	1	1	1	1	1	1
13*	----	SCREW, ground	1	1	1	1	1	1	1	1	1	1	1	1
14*	2013509	TOOL, four claw spanner, PSM	1	1	1	1	1	1	1	1	1	1	1	1

* These parts are not shown on the sketch.

System, PSM Warm Melt, 2010344, 2010348, 2010351, 2010353, 2010374, 2010378, 2010381, and 2010383



 Pasted on the left side of base part.

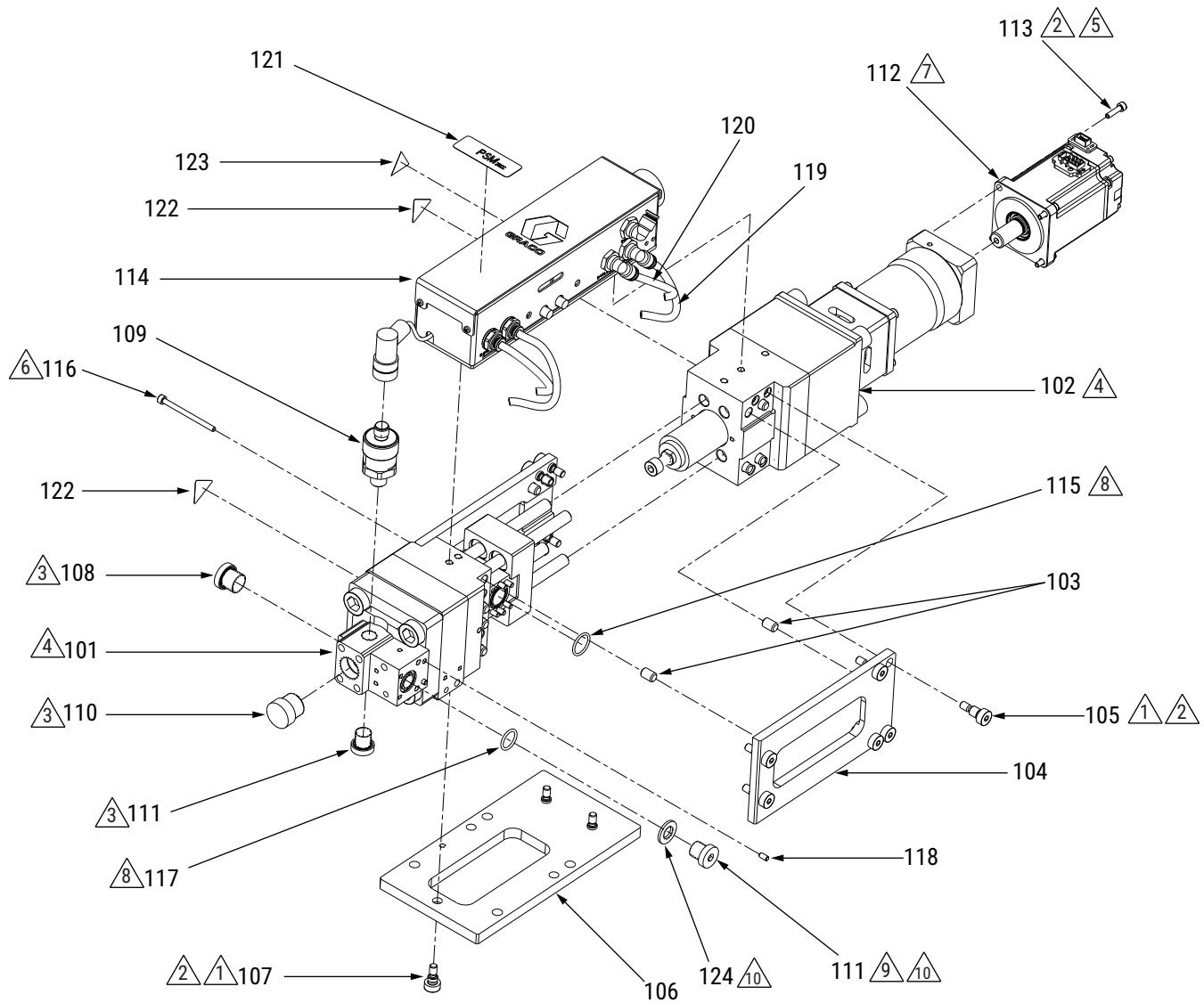
PSM Warm Melt System Parts List

Ref.	Part	Description	Qty.							
			2010344	2010348	2010351	2010353	2010374	2010378	2010381	2010383
1	----	BASE, PSM25, SST; See Base , page 16	1				1			
	----	BASE, PSM25, CER; See Base , page 16								
	----	BASE, PSM50, SST; See Base , page 16		1				1		
	----	BASE, PSM50, CER; See Base , page 16								
	----	BASE, PSM100, SST; See Base , page 16			1				1	
	----	BASE, PSM200, SST; See Base , page 16				1				1
2	----	VALVE, kit, iQ, inlet; See Inlet Valve, PSM Warm Melt , page 25	1	1	1	1	1	1	1	1
3	----	VALVE, kit, iQ, outlet; See Outlet Valve, PSM Warm Melt , page 29	1	1	1	1	1	1	1	1
4	2009219	MODULE, PSM25, 50, 100, warm melt; See Warm Melt Module (Only for PSM Warm Melt) , page 32	1	1	1		1	1	1	
	2009220	MODULE, PSM200, warm melt; See Warm Melt Module (Only for PSM Warm Melt) , page 32				1				1
5▲	290228	LABEL, safety, warning, burn	1	1	1	1	1	1	1	1
6	2010313	CONTROL, PSM, Ethernet, PLC; See Control Unit , page 34	1	1	1	1				
	2009752	CONTROL, PSM, PN, PLC; See Control Unit , page 34					1	1	1	1
7*	2010113	CABLE, servo motor, X5, 10m	1	1	1	1	1	1	1	1
8*	2010112	CABLE, servo encoder, X3, 10m	1	1	1	1	1	1	1	1
9*	2009852	CABLE, X1 to X10, 10m	1	1	1	1	1	1	1	1
10	----	BLANK, label, kit	1	1	1	1	1	1	1	1
11	----	IDENTIFICATION, PSM product	1	1	1	1	1	1	1	1
12*	----	WIRE, grounding assembly	1	1	1	1	1	1	1	1
13*	----	SCREW, ground	1	1	1	1	1	1	1	1
14*	2013509	TOOL, four claw spanner, PSM	1	1	1	1	1	1	1	1

* These parts are not shown on the sketch.

▲ Replacement safety labels, tags, and cards are available at no cost.

Base



△1 Torque to 5.16-6.64 ft-lb (7.0-9.0 N·m).

△2 Apply blue Anaerobic sealant.

△3 Apply SST pipe sealant.

△4 Apply lubricant grease.

△5 Torque to 0.37-0.74 ft-lb (0.5-1.0 N·m).

△6 Torque to 1.25-1.70 ft-lb (1.7-2.3 N·m).

△7 Installation direction as show.

△8 Apply TSL oil.

△9 Apply white oil 0553-6.

△10 Spare part and not installed on the product.

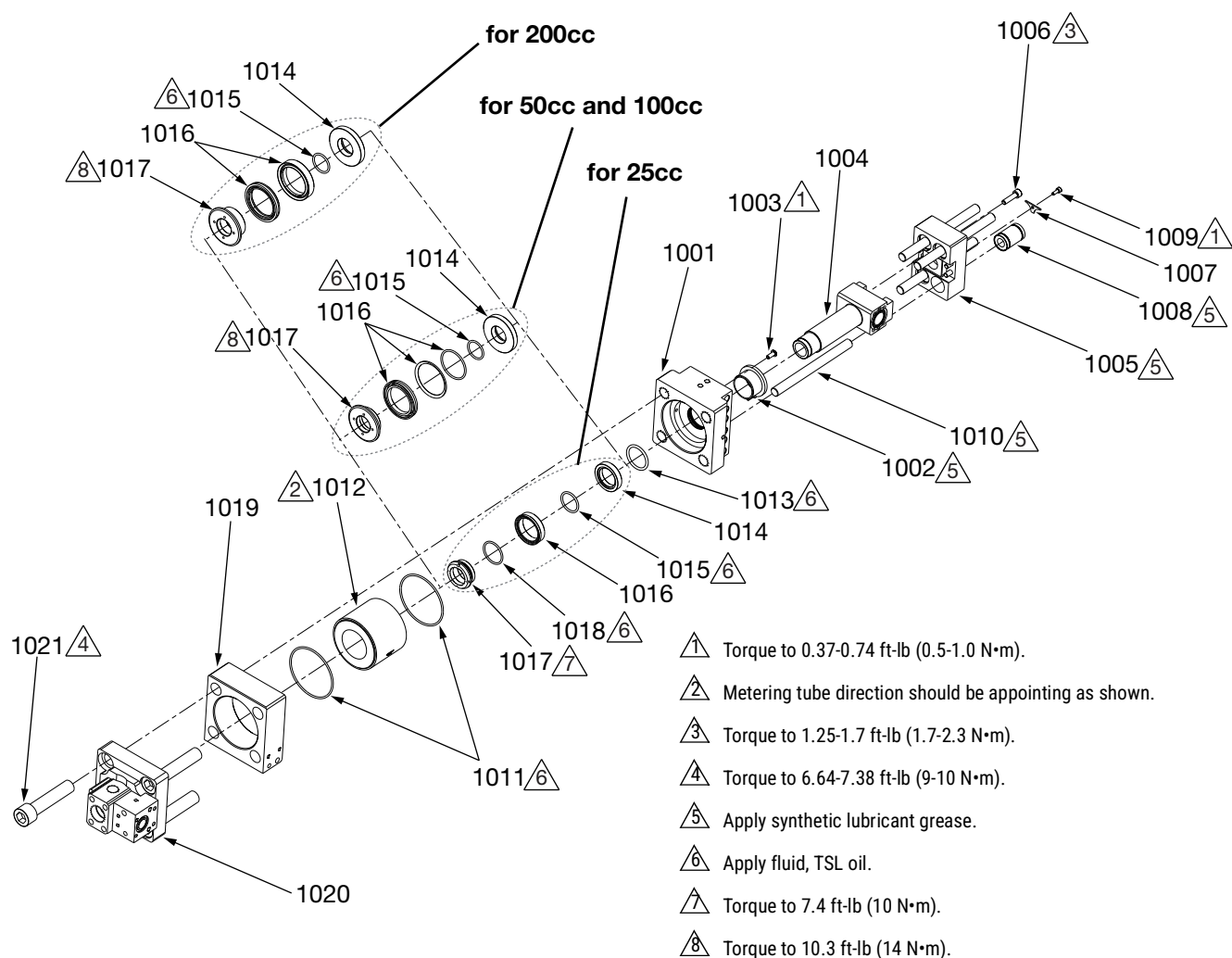
Base Parts List

Ref.	Part	Description	Qty.					
			25cc		50cc		100cc	200cc
			SST	CER	SST	CER	SST	SST
101	----	MODULE, metering, SST, PSM25; See page 18	1					
	----	MODULE, metering, CER, PSM25; See page 18		1				
	----	MODULE, metering, SST, PSM50; See page 18			1			
	----	MODULE, metering, CER, PSM50; See page 18				1		
	----	MODULE, metering, SST, PSM100; See page 18					1	
	----	MODULE, metering, SST, PSM200; See page 18						1
102	----	MODULE, power transmission, PSM25; See page 20	1	1				
	----	MODULE, power transmission, PSM50; See page 20			1	1		
	----	MODULE, power transmission, PSM100 See page 20					1	
	----	MODULE, power transmission, PSM200 See page 20						1
103	18D920	PIN, dowel, DIA 8-12	16	16	16	16	16	16
104	18D648	PLATE, side, base, pump, PSM25,50	2	2	2	2		
	18D649	PLATE, side, base, pump, PSM100					2	
	2008980	PLATE, side, base, pump, PSM200						2
105	18B949	SCREW, shoulder, DIA 8, M6	12	12	12	12	12	12
106	2010110	PLATE, bottom, base, PSM25,50	1	1	1	1		
	2010111	PLATE, bottom, base, PSM100					1	
	2008981	PLATE, bottom, base, PSM200						1
107	18B951	SCREW, DIA 8, M6	3	3	3	3	3	3
108	18D732	PLUG, blind flange, G 3/8	1	1	1	1	1	1
109	18C018	TRANSMITTER, pressure	1	1	1	1	1	1
110	18D886	PLUG, UN 13/16-16	1	1	1	1	1	1
111	18D615	PLUG, blind flange, G 1/4	2	2	2	2	2	2
112	18D881	MOTOR, servo, 220V, 400W, INO	1	1	1	1	1	1
113	----	SCREW, M4 × 0.7-16, socket head, SST	4	4	4	4	4	4
114	2011564	JUNCTION BOX, PSM25,50; See page 22	1	1	1	1		
	2011565	JUNCTION BOX, PSM100; See page 22					1	
	2009000	JUNCTION BOX, PSM200; See page 22						1
115	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1
116	----	SCREW, M4 × 0.7-55, socket head	6	6	6	6	6	6
117	18D698 ⁽¹⁾	O-RING	1	1	1	1	1	1
118	18D684	PIN, dowel, DIA 4-8	2	2	2	2	2	2
119	----	TUBE, 6mm OD × 4mm ID, PU, Black	0.6 ft	0.6 ft	0.6 ft	0.6 ft	0.6 ft	0.6 ft
120	----	TUBE, 6mm OD × 4mm ID, PU, Blue	0.6 ft	0.6 ft	0.6 ft	0.6 ft	0.6 ft	0.6 ft
121	----	IDENTIFICATION, PSM25	1	1				
	----	IDENTIFICATION, PSM50			1	1		
	----	IDENTIFICATION, PSM100					1	
	----	IDENTIFICATION, PSM200						1
122▲	15H108	LABEL, safety, warning, pinch	2	2	2	2	2	2
123▲	189930	LABEL, caution	1	1	1	1	1	1
124	2013470	PLATE, seal	1	1	1	1	1	1

▲ Replacement safety labels, tags, and cards are available at no cost.

(1) This part is not sold separately. Order sealing kit 2009677 when ordering this part.

Metering Module



Metering Module Parts List

Ref.	Part	Description	Qty.					
			25cc		50cc		100cc	200cc
			SST	CER	SST	CER	SST	SST
1001	18D720	BLOCK, tube	1	1	1	1	1	1
1002	18D718	SLEEVE, guide, PSM	1	1	1	1	1	1
1003	----	SCREW, M4 × 0.7-10, button head, SST	2	2	2	2	2	2
1004	18D962	ROD, piston, PSM25, warm melt	1	1				
	18D963	ROD, piston, PSM50, warm melt			1	1		
	18D964	ROD, piston, PSM100, warm melt					1	
	2008969	ROD, piston, PSM200						1
1005	18D966	BLOCK, push, heated	1	1	1	1	1	1
1006	----	SCREW, M5 × 0.8-20, socket head	4	4	4	4	4	4
1007	18D712	PLATE, bearing limit	2	2	2	2	2	2

Ref.	Part	Description	Qty.					
			25cc		50cc		100cc	200cc
			SST	CER	SST	CER	SST	SST
1008	18B942	BEARING	4	4	4	4	4	4
1009	---	SCREW, M3 × 0.5-8, socket	2	2	2	2	2	2
1010	18D709	ROD, guide, PSM25,50	4	4	4	4		
	18D710	ROD, guide, PSM100					4	
	2008970	ROD, guide, PSM200						4
1011	18D690 ⁽¹⁾ ◆✓❁❖	O-RING	2	2	2	2	2	2
1012	2009061	CYLINDER, 25, SST, PSM	1					
	2009062	CYLINDER, 25, CER, PSM		1				
	18D703	CYLINDER, 50, SST, PSM			1			
	18D606	CYLINDER, 50, CRE, PSM				1		
	18D704	CYLINDER, 100, SST, PSM					1	
	2008971	CYLINDER, 200, SST, PSM						1
1013	18D955 ⁽¹⁾	O-RING, 25 × 2.65	1	1	1	1	1	1
1014	--- †	PLATE, support back, PSM25	1	1				
	--- ‡ ❁	PLATE, support back, PSM50,100,200			1	1	1	1
1015	18D751 ⁽¹⁾ ◆✓❁❖	O-RING	1	1	1	1	1	1
1016	--- ◆	PISTON, 960, PSM25, UHMW PE	1					
	--- ✓	PISTON, 960, PSM25, UPE M22		1				
	--- ❁	PISTON, 1800, PSM50,100			1	1	1	
	--- ❖	PISTON, PSM200						1
1017	--- †	PLATE, support front, PSM25	1	1				
	--- ‡	PLATE, support front, PSM50,100			1	1	1	
	--- ❁	NUT, support front, PSM200						1
1018	18D765 ⁽¹⁾ ◆✓	O-RING	1	1				
1019	18D968	SLEEVE, tube, PSM25,50, warm melt	1	1	1	1		
	18D969	SLEEVE, tube, PSM100, warm melt					1	
	2008974	SLEEVE, tube, PSM200						1
1020	18D686	BLOCK, support	1	1	1	1	1	1
1021	---	SCREW, M14 × 2.0-65, socket head	4	4	4	4		
	---	SCREW, M14 × 2.0-95, socket head					4	
	---	SCREW, M14 × 2.0-155, socket head						4

◆ Parts included in 25cc SST piston kit 2009678.

✓ Parts included in 25cc CER piston kit 2009679.

❁ Parts included in 50cc and 100cc piston kit 2009680.

❖ Parts included in 200cc piston kit 2009681.

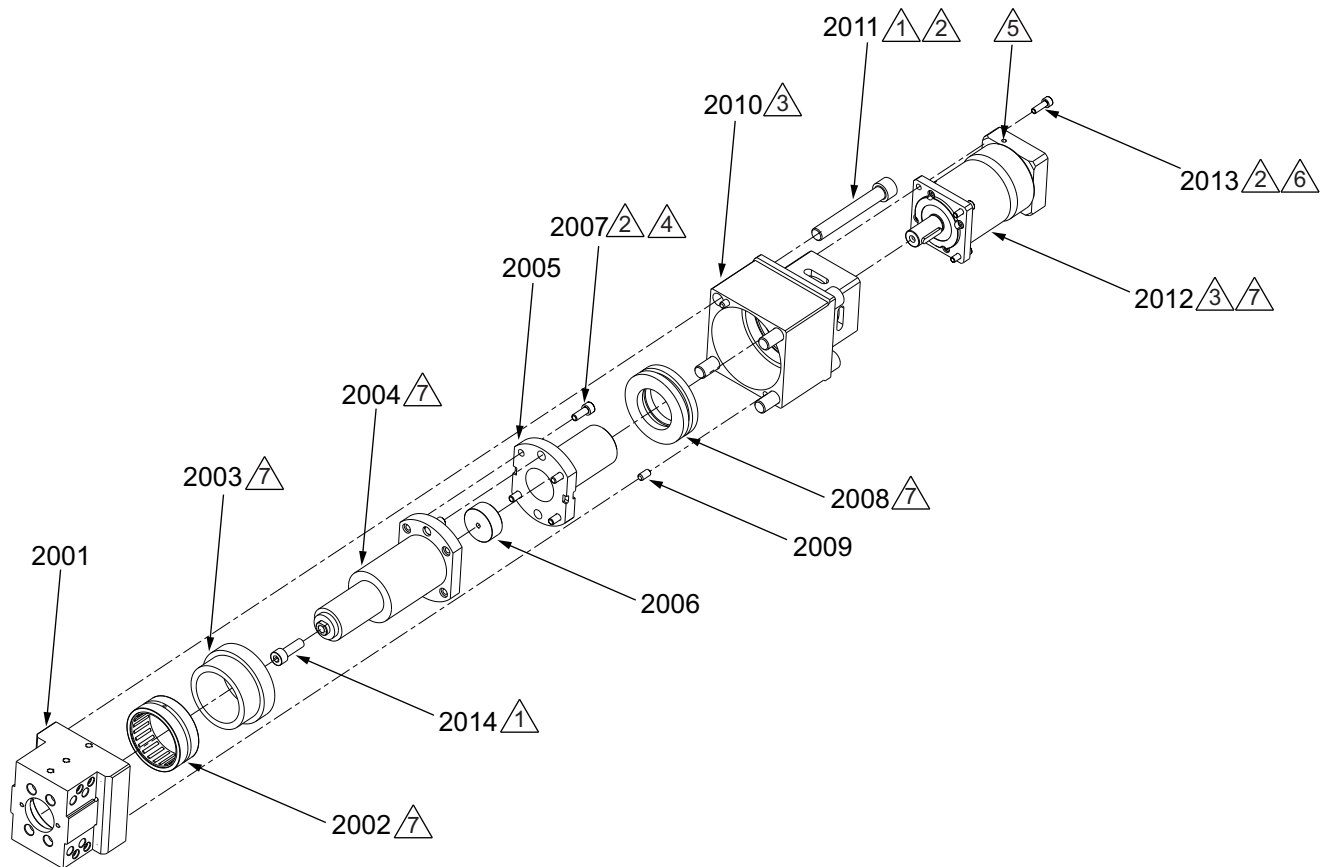
† Parts included in 25cc nut and back plate kit 2012437.

‡ Parts included in 50cc and 100cc nut and back plate kit 2012438.

❁ Parts included in 200cc nut and back plate kit 2012439.

(1) This part is not sold separately. Order sealing kit 2009677 when ordering this part.

Power Transmission Module



① Torque to 5.90-6.64 ft-lb (8.0-9.0 N•m).

② Apply blue Anaerobic sealant.

③ Installation direction as show.

④ Torque to 2.21-2.95 ft-lb (3.0-4.0 N•m).

⑤ When installing, ensure the two threaded holes are on the left and right side of PSM metering unit.

⑥ Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).

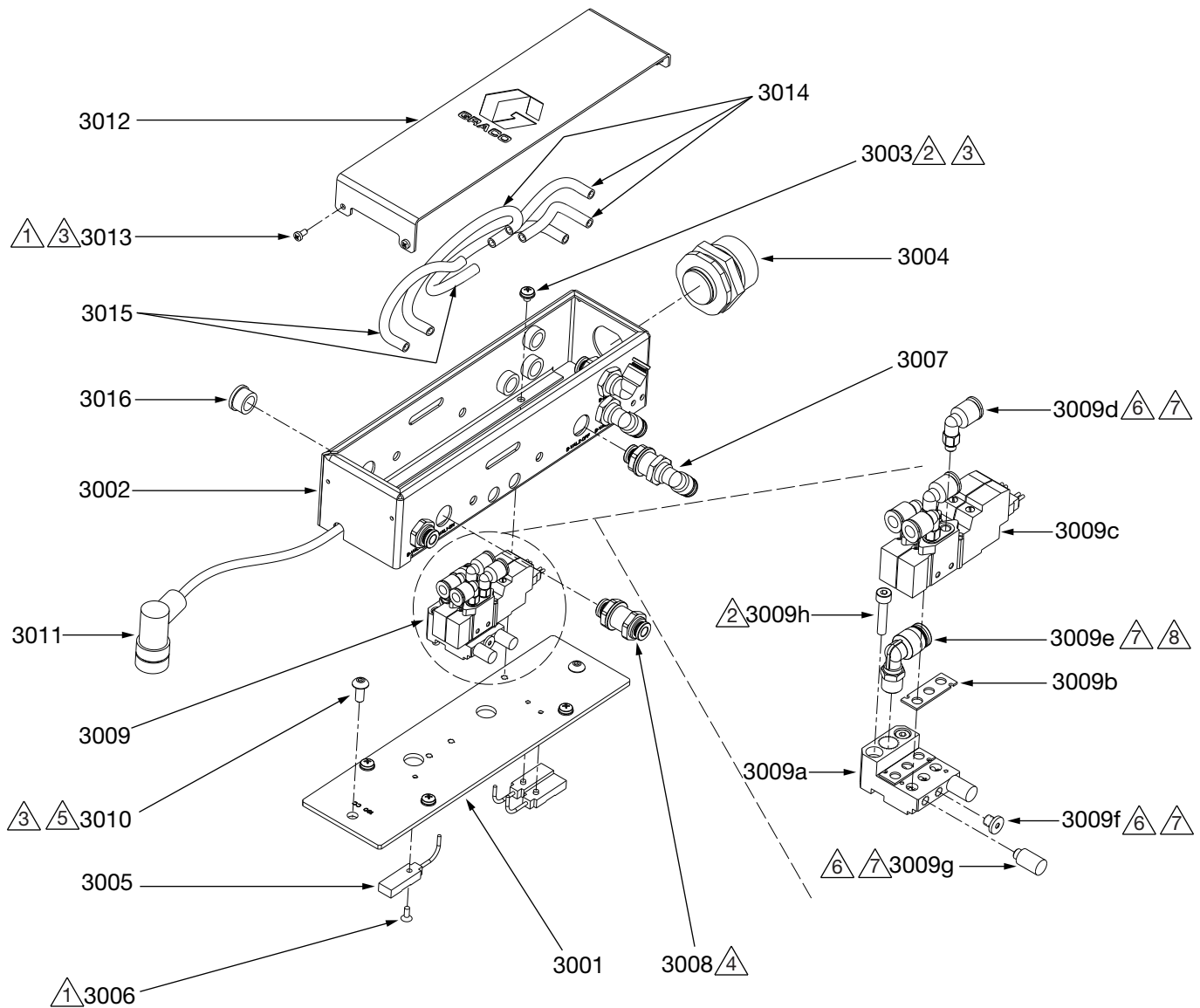
⑦ Apply synthetic lubricant grease.

Power Transmission Module Parts List

Ref.	Part	Description	Qty.			
			25cc	50cc	100cc	200cc
2001	18D674	BLOCK, sleeve	1	1	1	1
2002	18D895	BEARING, needle bearing	1	1	1	1
2003	18D672	BEARING, composite	1	1	1	1
2004	2002387	KIT, ball screw, nut, PSM25,50	1	1		
	2002388	KIT, ball screw, nut, PSM100			1	
	2008976	KIT, ball screw, nut, PSM200				1
2005	----	ADAPTER, axle sleeve, PSM25,50	1	1		
	----	ADAPTER, axle sleeve, PSM100			1	
	----	ADAPTER, axle sleeve, PSM200				1
2006	----	GASKET, axle sleeve, PSM25,50,100	1	1	1	
	----	GASKET, axle sleeve, PSM200				1
2007	----	SCREW, M6 × 1.0-16, socket head	4	4	4	4
2008	18D660	BEARING, single thrust	1	1	1	1
2009	----	PIN, dowel, DIA 6-12	2	2	2	2
2010	18D655	SEAT, reduction box, PSM25,50	1	1		
	18D656	SEAT, reduction box, PSM100			1	
	2008979	SEAT, reduction box, PSM200				1
2011	----	SCREW, M12 × 1.75-85, socket head	4	4	4	4
2012	2012441	BOX, reduction, ratio 40	1			
	18D723	BOX, reduction, ratio 60		1	1	1
2013	----	SCREW, M5 × 0.8-16, socket head, SST	4	4	4	4
2014	----	SCREW, M8 × 1.25-25, socket head	1	1	1	1

Junction Box

Junction Box, 2011564, 2011565, and 2009000



1 Torque to 0-0.37 ft-lb (0-0.5 N•m).

2 Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).

3 Apply blue Anaerobic sealant.

4 Rubber gasket should be assembled on the outer surface.

5 Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).

6 Torque to 1.70-2.58 ft-lb (2.3-3.5 N•m).

7 Apply SST pipe sealant.

8 Torque to 4.43-5.16 ft-lb (6.0-7.0 N•m).

Junction Box Parts List

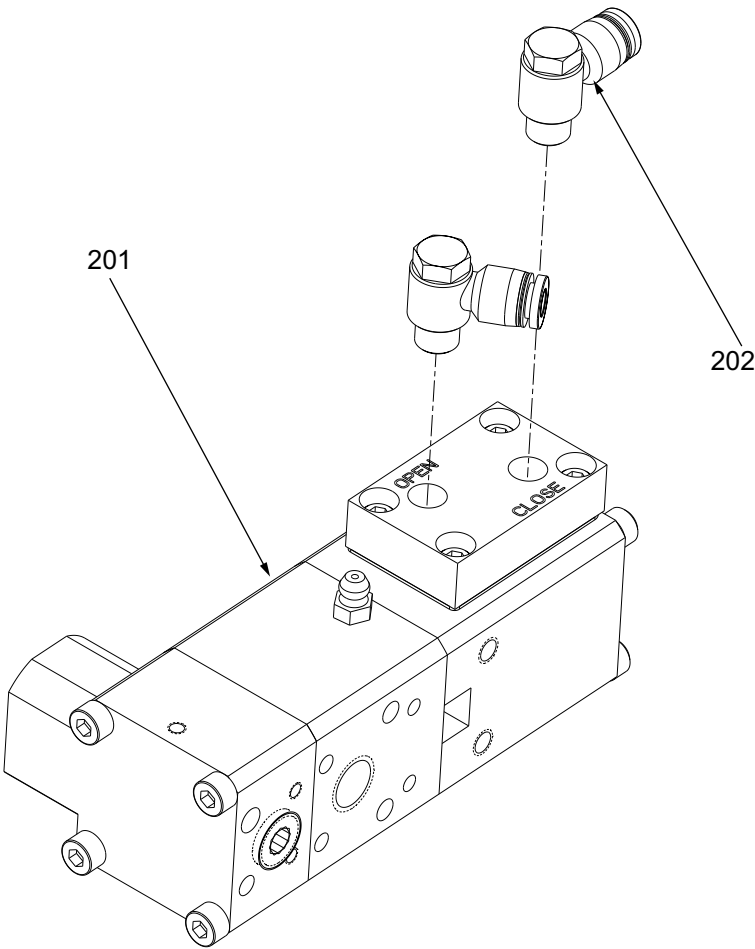
Ref.	Part	Description	Qty.			
			25cc	50cc	100cc	200cc
3001	----	PLATE, junction box, PSM25,50	1	1		
	----	PLATE, junction box, PSM100			1	
	----	PLATE, junction box, PSM200				1
3002	----	FRAME, control	1	1	1	1
3003	----	SCREW, M4 x 0.7-5, Phillips, with washer	4	4	4	4
3004	----	ADAPTER, WF20, M26	1	1	1	1
3005	18D624	SENSOR, position	3	3	3	3
3006	----	SCREW, M3 x 0.5-8, flat head, SST	3	3	3	3
3007	18D617	FITTING, DIA 6, M14, PLM6	3	3	3	3
3008	18B922	FITTING, DIA 6, M14 x 1	2	2	2	2
3009	25S118	MODULE, solenoid valve, PSM	1	1	1	1
3009a	----	BLOCK, support, PSM	1	1	1	1
3009b*	----	GASKET, rubber, PSM	2	2	2	2
3009c*	----	KIT, solenoid valve, PSM	2	2	2	2
3009d*	----	FITTING, DIA 6, M5 x 0.8	4	4	4	4
3009e	----	FITTING, DIA 6, PT1/8	1	1	1	1
3009f	----	PLUG, blind flange, M5	1	1	1	1
3009g	----	MUFFLER, M5	2	2	2	2
3009h	----	SCREW, M4 x 0.7-20, socket	2	2	2	2
3010	----	SCREW, M6 x 1.0-10, socket head	2	2	2	2
3011	----	FITTING, transmitter, PSM25,50,100	1	1	1	
	----	FITTING, transmitter, PSM200				1
3012	----	COVER, control, PSM	1	1	1	1
3013	----	SCREW, M3 x 0.5-6, pan head, SST	4	4	4	4
3014	----	TUBE, 6 mm OD x 4 mm ID, PU, black	2 ft	2 ft	2 ft	2 ft
3015	----	TUBE, 6 mm OD x 4 mm ID, PU, blue	1.5 ft	1.5 ft	1.5 ft	1.5 ft
3016	----	CAP, hole, M14	5	5	5	5
3017*	----	IDENTIFICATION, driver, tru-shot	1	1	1	1
3018*	----	LABEL, blank	1	1	1	1

* Parts included in fitting solenoid valve kit 2006571.

* These parts are not shown on the sketch.

Inlet Valve Module

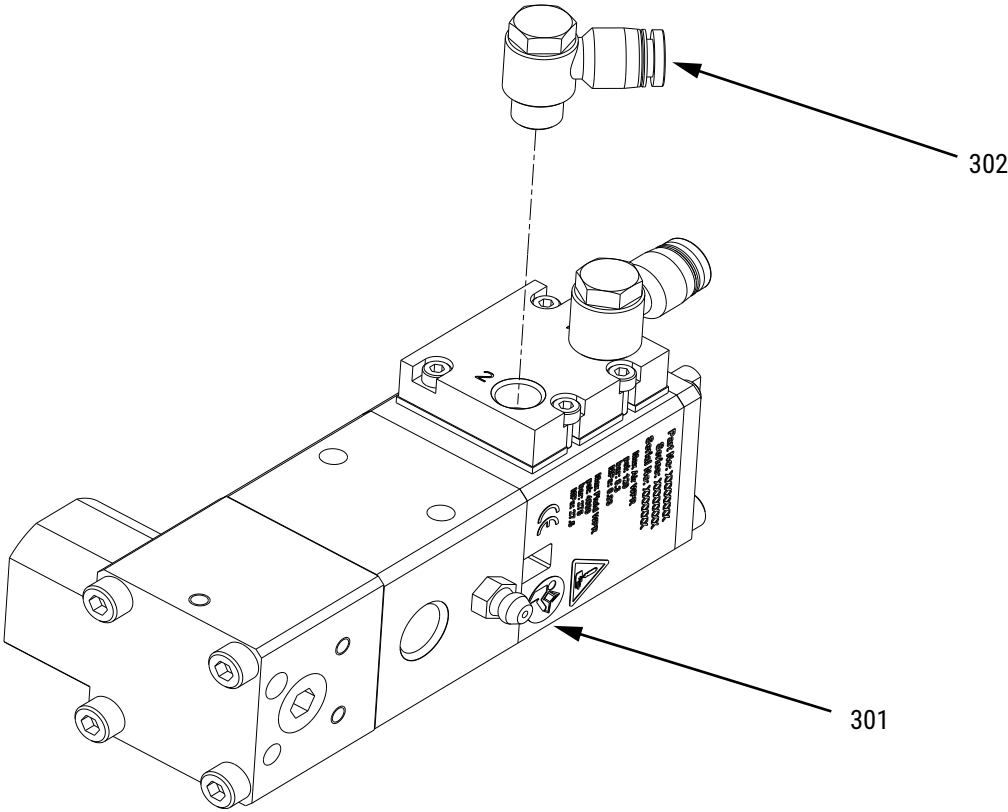
Inlet Valve, PSM Ambient



PSM Ambient Inlet Valve Module Parts List

Ref.	Part	Description	Qty.
201	2009194	VALVE, 1K, ball seat; See 1K Inlet Valve Module , page 26	1
202	18C103	FITTING, DIA 6, PT1/8, PV	2

Inlet Valve, PSM Warm Melt



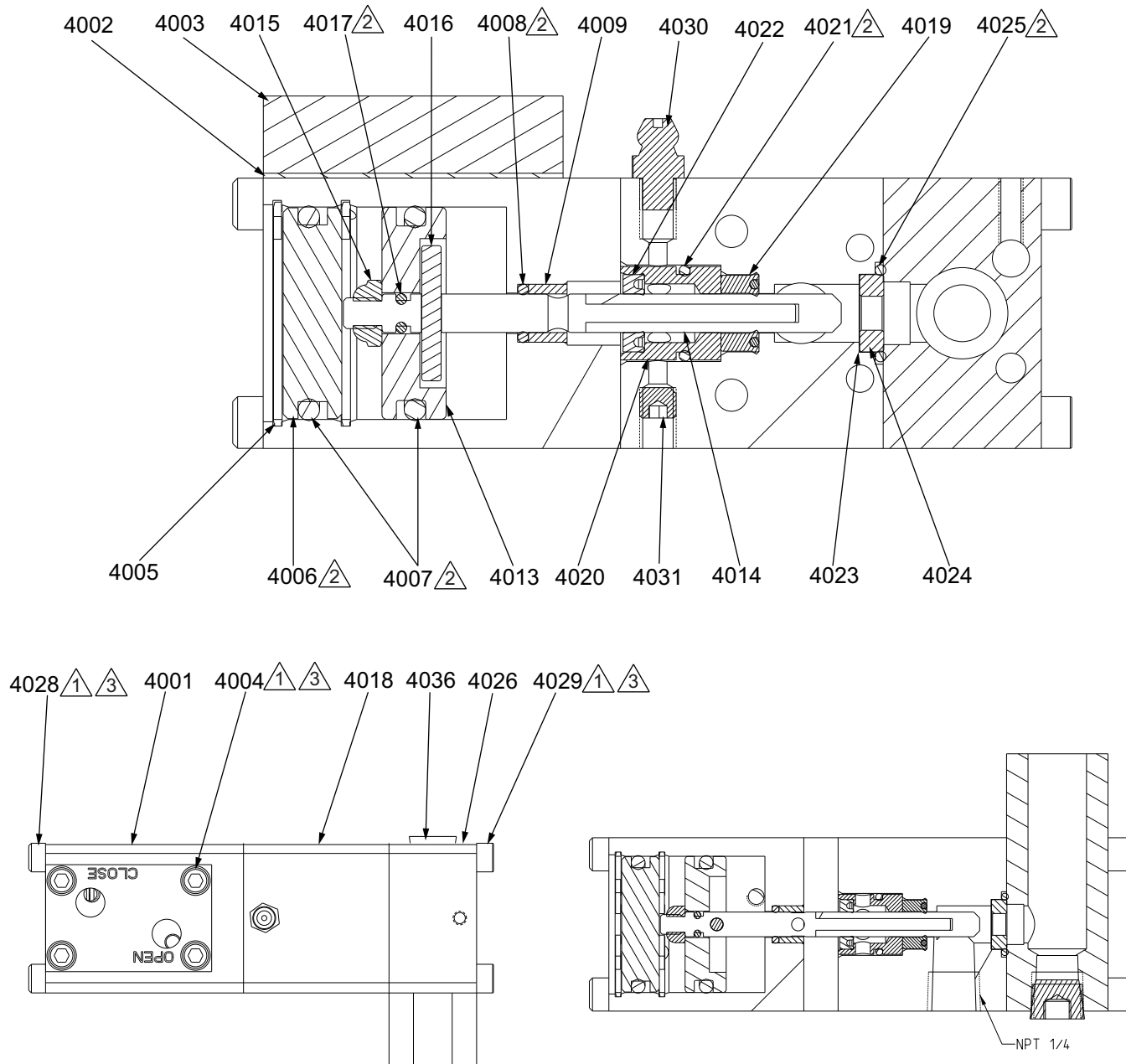
Valve shown for assembling reference.

PSM Warm Melt Inlet Valve Module Parts List

Ref.	Part	Description	Qty.
301	2011771	VALVE, PSM, 90DEG outlet	1
302	18C103	FITTING, DIA 6, PT1/8, PV	2

1K Inlet Valve Module

Valve, 1K, Inlet, Ball Seat, 2009194



- ① Apply blue Anaerobic sealant.
- ② Assemble all o-ring and seals with a hight coat of lubricant grease.
Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
- ③ Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).

1K Inlet Valve Module Parts List

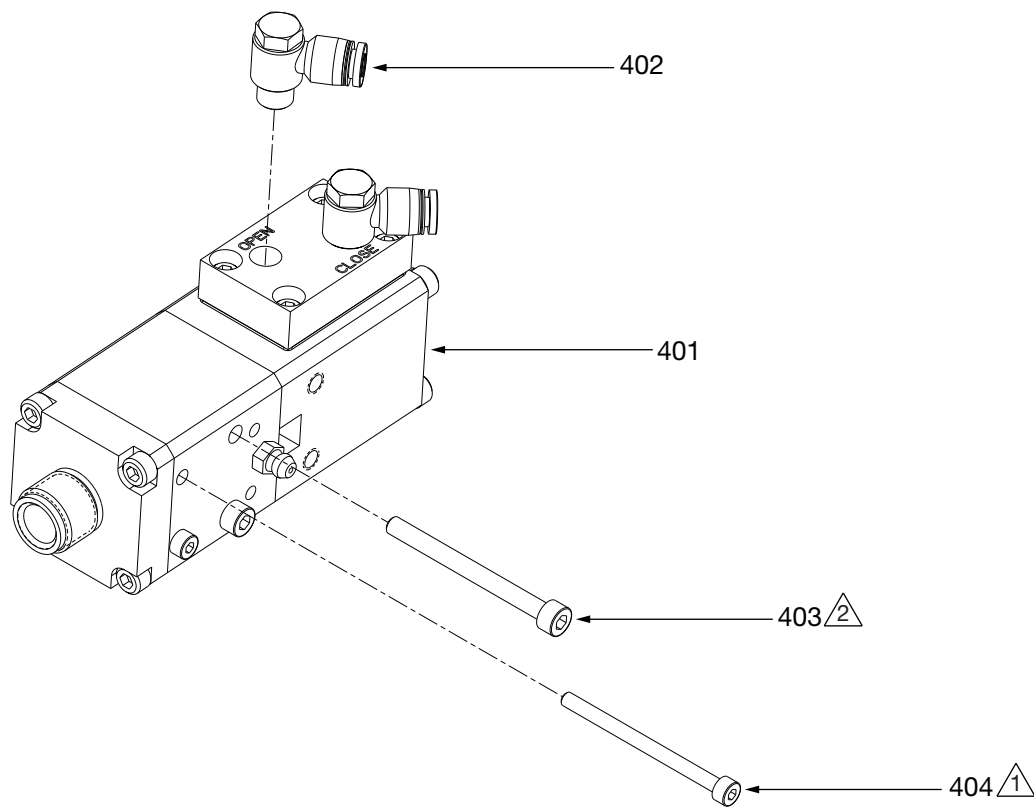
Ref.	Part	Description	Qty.
4001	2009379	HOUSING, air cylinder	1
4002	626057 ♦	GASKET, air manifold	1
4003	626069	PLATE, air control 2K2	1
4004	104371	SCREW, cap screw 10-32 x 0.375	4
4005	552163	RING, retaining	2
4006	196018	CAP, air cylinder SD	1
4007	154662 ♦	PACKING, O-ring	2
4008	156454 ♦	PACKING, O-ring	1
4009	551181 ♦	BEARING, sleeve 1/4, 3/8, 1/4 NYL	1
4013	626703	PISTON, air	1
4014	2009384 ♦	SHAFT, piston, high flow	1
4015	102920	NUT, lock	1
4016	16D760 ♦	PIN, trigger	1
4017	157628 ♦	PACKING, O-ring	1
4018	2009380	HOUSING, material	1
4019	551190 ✓♦	SEAL, U-cup polymt 1/4, 1/2, 1/4	1
4020	2010702 ♦	BEARING, seal, TC	1
4021	103610 ✓♦	PACKING, O-ring	1
4022	551191 ✓♦	PACKING, seal U-cup URT 1/4, 1/2, 1/8 UR	1
4023	171860 ✓♦	GASKET, seat	1
4024	185467 ♦	SEAT, valve	1
4025	104319 ✓♦	PACKING, O-ring	1
4026	2009001	SEAT, 1K valve, PSM	1
4028	2009383	SCREW, M5 x 0.8-70, socket head	4
4029	18D935	SCREW, M5 x 0.8-45, socket	4
4030	120892	FITTING, grease	1
4031	18B944	SCREW, set, M6 x 1.0-5, flat	1
4036	18F960	PLUG, 1/4 NPT	1

✓ Parts included in 1K valve sealing kit 2009688.

♦ Parts included in ball seat 1K valve rebuild kit 2009689.

Outlet Valve Module

Outlet Valve, PSM Ambient



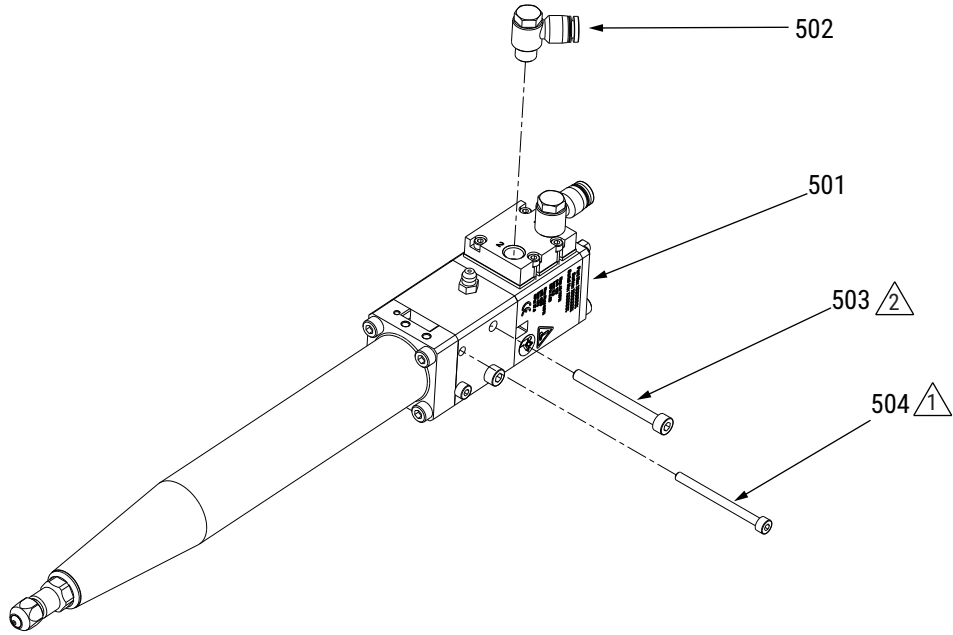
1 Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).

2 Torque to 1.7-2.2 ft-lb (2.3-3.0 N•m).

PSM Ambient Outlet Valve Module Parts List

Ref.	Part	Description	Qty.											
			25cc				50cc				100cc		200cc	
			2010342	2010343	2010372	2010373	2010346	2010347	2010376	2010377	2010350	2010380	2010352	2010382
401	2009195	VALVE, 1K, snaff back, HW; See 1K Outlet Valve Module , page 30		1		1		1		1				
	2011633	VALVE, 1K, snaff back, SST; See 1K Outlet Valve Module , page 30	1		1		1		1		1	1	1	1
402	18C103	FITTING, DIA 6, PT1/8, PV	2	2	2	2	2	2	2	2	2	2	2	2
403	----	SCREW, M5 × 0.8-55, socket head	2	2	2	2	2	2	2	2	2	2	2	2
404	----	SCREW, M4 × 0.7-55, socket head	2	2	2	2	2	2	2	2	2	2	2	2

Outlet Valve, PSM Warm Melt



- ¹ Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- ² Torque to 1.7-2.2 ft-lb (2.3-3.0 N•m).

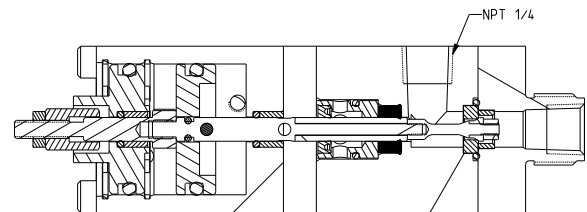
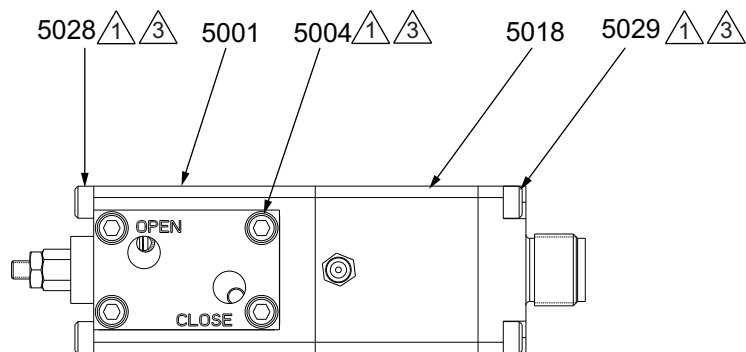
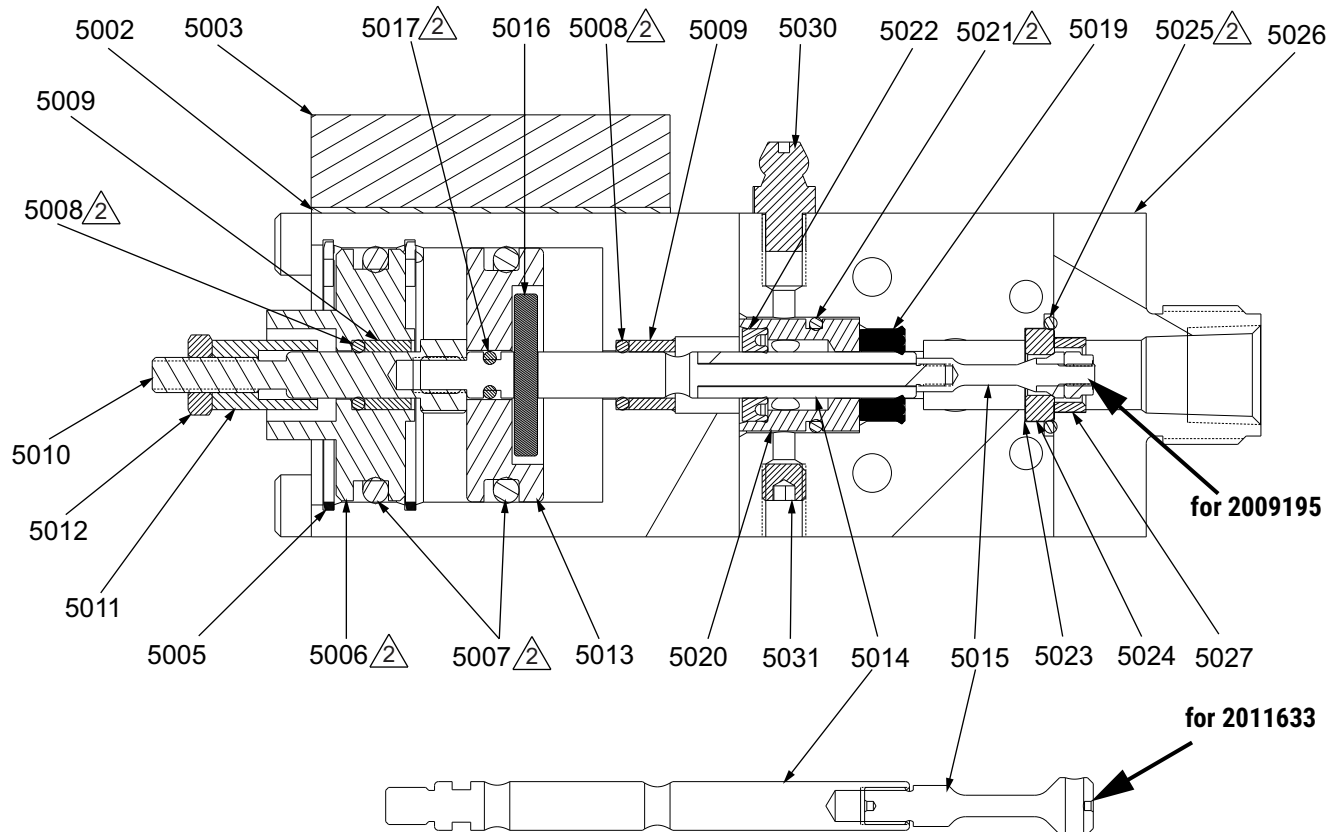
Valve shown for assembling reference.

PSM Warm Melt Outlet Valve Module Parts List

Ref.	Part	Description	Qty.
501	2012490	VALVE,T, NPT, 200, RM, AMB, PSM	1
502	18C103	FITTING, DIA 6, PT1/8, PV	2
503	----	SCREW, M5 × 0.8-50, socket head	2
504	----	SCREW, M4 × 0.7-50, socket head	2

1K Outlet Valve Module

Valve, 1K, Outlet, Snaff Back, 2009195 and 2011633



- ① Apply blue Anaerobic sealant.
- ② Assemble all o-ring and seals with a hight coat of lubricant grease. Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
- ③ Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).

1K Outlet Valve Module Parts List

Ref.	Part	Description	Qty.											
			25cc				50cc				100cc		200cc	
			2010342	2010343	2010372	2010373	2010346	2010347	2010376	2010377	2010350	2010380	2010352	2010382
5001	2009379	HOUSING, air cylinder	1	1	1	1	1	1	1	1	1	1	1	1
5002	626057 ♦+	GASKET, air manifold	1	1	1	1	1	1	1	1	1	1	1	1
5003	626069	PLATE, air control 2K2	1	1	1	1	1	1	1	1	1	1	1	1
5004	104371	SCREW, cap screw 10-32 x 0.375	4	4	4	4	4	4	4	4	4	4	4	4
5005	552163	RING, retaining	2	2	2	2	2	2	2	2	2	2	2	2
5006	626704	CAP, air cylinder	1	1	1	1	1	1	1	1	1	1	1	1
5007	154662 ♦+	PACKING, O-ring	2	2	2	2	2	2	2	2	2	2	2	2
5008	156454 ♦+	PACKING, O-ring	2	2	2	2	2	2	2	2	2	2	2	2
5009	551181 ♦+	BEARING, sleeve 1/4, 3/8, 1/4 NYL	2	2	2	2	2	2	2	2	2	2	2	2
5010	626708	SHAFT, adjustment	1	1	1	1	1	1	1	1	1	1	1	1
5011	626709	NUT, adjustment	1	1	1	1	1	1	1	1	1	1	1	1
5012	100166	NUT, full, hex	1	1	1	1	1	1	1	1	1	1	1	1
5013	626703	PISTON, air	1	1	1	1	1	1	1	1	1	1	1	1
5014	18F856 ♦	SHAFT, piston, high flow		1		1		1		1				
	15K421 +	SHAFT, primary	1		1		1		1		1	1	1	1
5015	26D829 ♦	NUT, lock		1		1		1		1				
	626062 +	NEEDLE, 2K2 SST hardened	1		1		1		1		1	1	1	1
5016	16D760 ♦+	PIN, trigger	1	1	1	1	1	1	1	1	1	1	1	1
5017	157628 ♦+	PACKING, O-ring	1	1	1	1	1	1	1	1	1	1	1	1
5018	2009380	HOUSING, material	1	1	1	1	1	1	1	1	1	1	1	1
5019	551190 ✓♦+	SEAL, U-cup polymt 1/4, 1/2, 1/4	1	1	1	1	1	1	1	1	1	1	1	1
5020	2010702 ♦+	BEARING, seal, TC	1	1	1	1	1	1	1	1	1	1	1	1
5021	103610 ✓♦+	PACKING, O-ring	1	1	1	1	1	1	1	1	1	1	1	1
5022	551191 ✓♦+	PACKING, seal U-cup URT 1/4, 1/2, 1/8 UR	1	1	1	1	1	1	1	1	1	1	1	1
5023	171860 ✓♦+	GASKET, seat	1	1	1	1	1	1	1	1	1	1	1	1
5024	185467 ♦+	SEAT, valve	1	1	1	1	1	1	1	1	1	1	1	1
5025	104319 ✓♦+	PACKING, O-ring	1	1	1	1	1	1	1	1	1	1	1	1
5026	2009381	FLANGE, nose piece	1	1	1	1	1	1	1	1	1	1	1	1
5027	626060 ♦+	INSERT, suff-back, 2K2	1	1	1	1	1	1	1	1	1	1	1	1
5028	2009383	SCREW, M5 x 0.8-70, socket head	4	4	4	4	4	4	4	4	4	4	4	4
5029	2009382	SCREW, M5 x 0.8-16, socket head	4	4	4	4	4	4	4	4	4	4	4	4
5030	120892	FITTING, grease	1	1	1	1	1	1	1	1	1	1	1	1
5031	18B944	SCREW, set, M6 x 1.0-5, flat	1	1	1	1	1	1	1	1	1	1	1	1

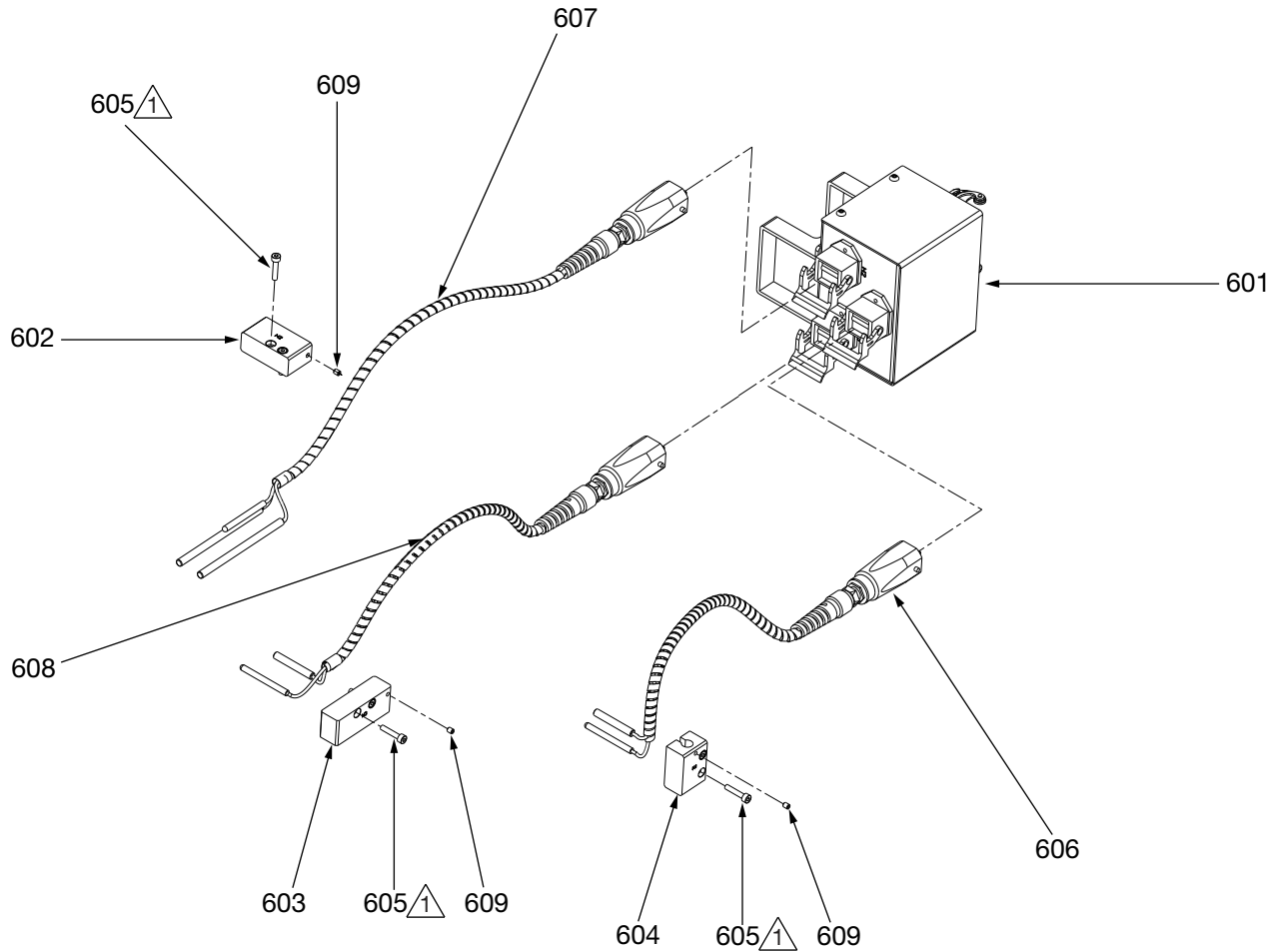
✓ Parts included in 1K valve sealing kit 2009688.

♦ Parts included in snaff back 1K valve rebuild kit 2009690.

+ Parts included in snaff back 1K valve rebuild kit 2012253.

Warm Melt Module (Only for PSM Warm Melt)

Warm Melt Module, 2009219 and 2009220*



 Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).

* Part 2009219 is for PSM Warm Melt 25cc, 50cc, and 100cc.
Part 2009220 is for PSM Warm Melt 200cc.

Warm Melt Module Parts List

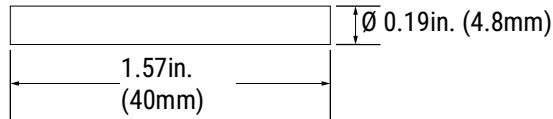
Ref.	Part	Description	Qty.			
			25cc	50cc	100cc	200cc
601	----	MODULE, connector, warm melt	1	1	1	1
602	----	COVER, heater, H2	1	1	1	1
603	----	COVER, heater, H3	1	1	1	1
604	----	COVER, heater, H1	1	1	1	1
605	----	SCREW, M4 × 0.7-20, socket	6	6	6	1
606*	2009236	CABLE, PSM, warm melt, 400mm, 1 heated and 1 sensor	1	1	1	1
	2009237	CABLE, PSM, warm melt, 500mm, 1 heated and 1 sensor				1
607*	2009240	CABLE, PSM, warm melt, 550mm, 2 heated and 1 sensor	1	1	1	
	2009241	CABLE, PSM, warm melt, 700mm, 2 heated and 1 sensor				1
608*	2009238	CABLE, PSM, warm melt, 550mm, 1 heated and 1 sensor	1	1	1	
	2009243	CABLE, PSM, warm melt, 650mm, 2 heated and 1 sensor, short				1
609	----	SCREW, set, M4 × 0.7-5	8	8	8	8

Include temperature sensors and heating rods.

Temperature Sensor

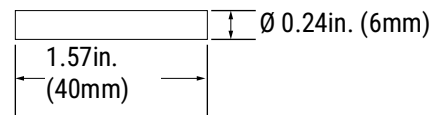
The temperature sensor is specified with the following parameters:

- Voltage: 220V
- Power: 150W
- Dimensions:
 - Length: 1.57in. (40mm)
 - Diameter: 0.19in. (4.8mm)

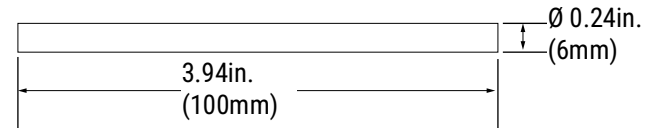


Heating rod

2009236, 2009237, 2009238, and 2009243

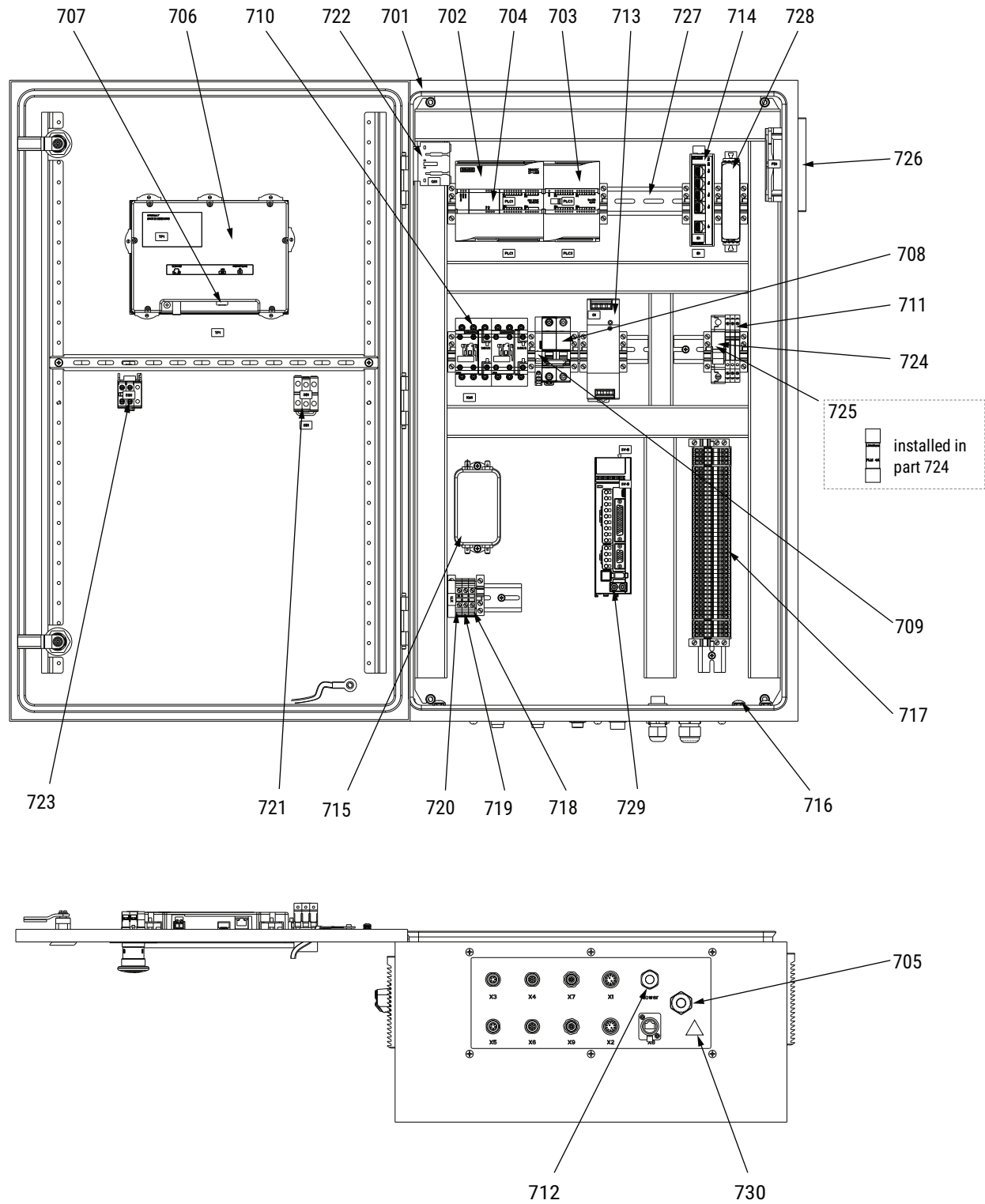


2009240 and 2009241



Control Unit

2009752 and 2010313



Control Unit Parts List

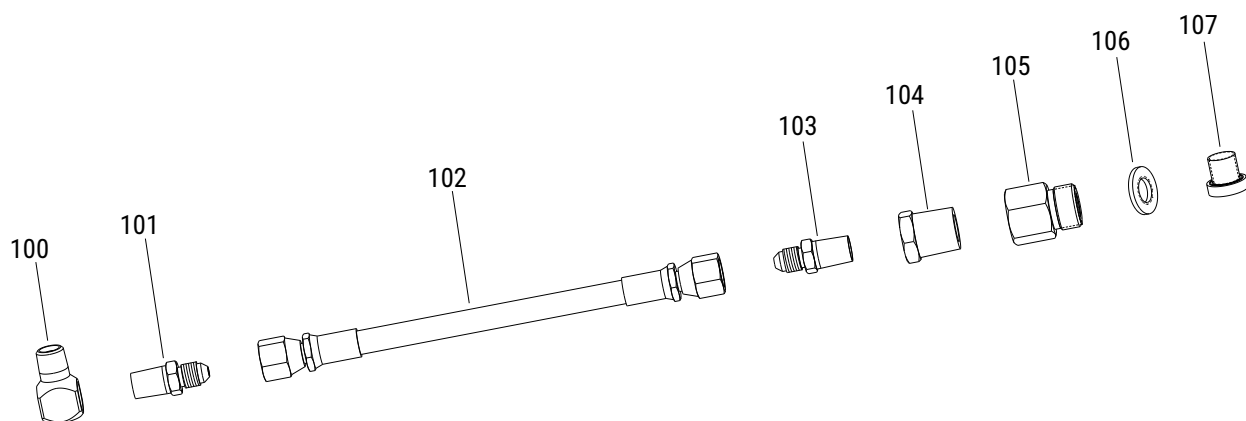
Ref.	Part	Description	Qty.
701	---	ENCLOSURE, 500W × 800H × 250D mm, PSM	1
702	2009708	CONTROL, PLC CPU 1214C DC/DC/DC	1
703	2009710	CONTROL, PLC SM1223 DI16/DQ16 relay	1
704	2009712	CONTROL, PLC CB1241 RS485	1
705	---	GLAND, cable, M25	1
706	2009714	DISPLAY, KTP700 basic PN	1
707	2009715	FLASH DRIVE, disk	1
708	2011004	CIRCUIT BRKR	2
709	2009724	CIRCUIT BRKR, auxiliary contact	1
710	2009720	CONTACT, 3P, 1NO+1NC	2
711	2009732	RELAY, module with base	3
712	---	GLAND, cable, M16	1
713	2009725	POWER SUPPLY, 150W, 24VDC	1
714	2009726	SWITCH, Ethernet	1
715	2009735	FILTER	1
716	---	BAR, grounding	3
717	2009738	TERMINAL, block, gray	45
718	2009739	TERMINAL, gray	1
719	2009740	TERMINAL, blue	1
720	2009741	TERMINAL, ground, green yellow	1
721	2009743	STOP, emergency button	1
722	2000179	KNOB, operator, disconnect	1
723	2000176	STARTER, operator	1
724	2009727	HOLDER, fuse	1
725	2009728	FUSE, FLM 4A	1
726	2009731	FAN, assembly	1
727	---	RAIL, din	5
728	2009723	RELAY, safety	1
729	2009713	DRIVER, servo driver unit	1
730▲	189930	LABEL, caution	1
731*	2000316	BRAND, PSM	1
732*	---	IDENTIFICATION, PSM product	1
733*	---	BLANK, label, kit	1
734*	15G280	LABEL, warning, safety, multiple	1

* Not shown.

▲ Replacement safety labels, tags, and cards are available at no cost.

Kits and Accessories

Remote Kits



Kits	Description	100	101	102	103	104	105	106	107
		Adapter	Fitting	Hose	Fitting	Bushing	Bushing	Seal	Plug
2000842	KIT, hose, ASSY, JIC fitting, PSM, 3/32 x 60	166866	124961	16W047	124961	102022	18D958	2013470	18D615
2000843	KIT, hose, ASSY, JIC fitting, PSM, 1/8 x 60			16V531					
2000844	KIT, hose, ASSY, JIC fitting, PSM, 3/16 x 36	166866 +100030	94/1000/ 98	16C502	94/1000 /98	100329			
2000845	KIT, hose, ASSY, JIC fitting, PSM, 3/16 x 48			16C503					
2000847	KIT, hose, ASSY, JIC fitting, PSM, 3/16 x 72			16C504					
2000848	KIT, hose, ASSY, JIC fitting, PSM, 1/4 x 36	166866	124961	16C511	124961	102022			
2000849	KIT, hose, ASSY, JIC fitting, PSM, 1/4 x 48			16C512					
2000850	KIT, hose, ASSY, JIC fitting, PSM, 1/4 x 60			24G990					
2000851	KIT, hose, ASSY, JIC fitting, PSM, 1/4 x 72			16C513					
2000852	KIT, hose, ASSY, JIC fitting, PSM, 3/8 x 36		116704	112100	16C520	504285			
2000853	KIT, hose, ASSY, JIC fitting, PSM, 3/8 x 48	16C521							
2000854	KIT, hose, ASSY, JIC fitting, PSM, 3/8 x 60	24F994							
2000855	KIT, hose, ASSY, JIC fitting, PSM, 3/8 x 72	116703	112100	16C522	C20700	----			
2000856	KIT, hose, ASSY, JIC fitting, PSM, 1/2 x 36			16C530					
2000857	KIT, hose, ASSY, JIC fitting, PSM, 1/2 x 48			16C531					
2000858	KIT, hose, ASSY, JIC fitting, PSM, 1/2 x 60			24G996					
2000859	KIT, hose, ASSY, JIC fitting, PSM, 1/2 x 72			16C532					

Communication Module Kits

Part	Description	Qty.
2010286	KIT, module, Ethernet IP	1

Sealing Kits

Part	Description	Qty.
2009677	KIT, sealing, PSM	1

Piston Kits

Part	Description	Qty.
2009678	KIT, piston, PSM 25cc, SST	1
2009679	KIT, piston, PSM 25cc, CER	1
2009680	KIT, piston, PSM 25cc and 50cc	1
2009681	KIT, piston, PSM 200cc	1

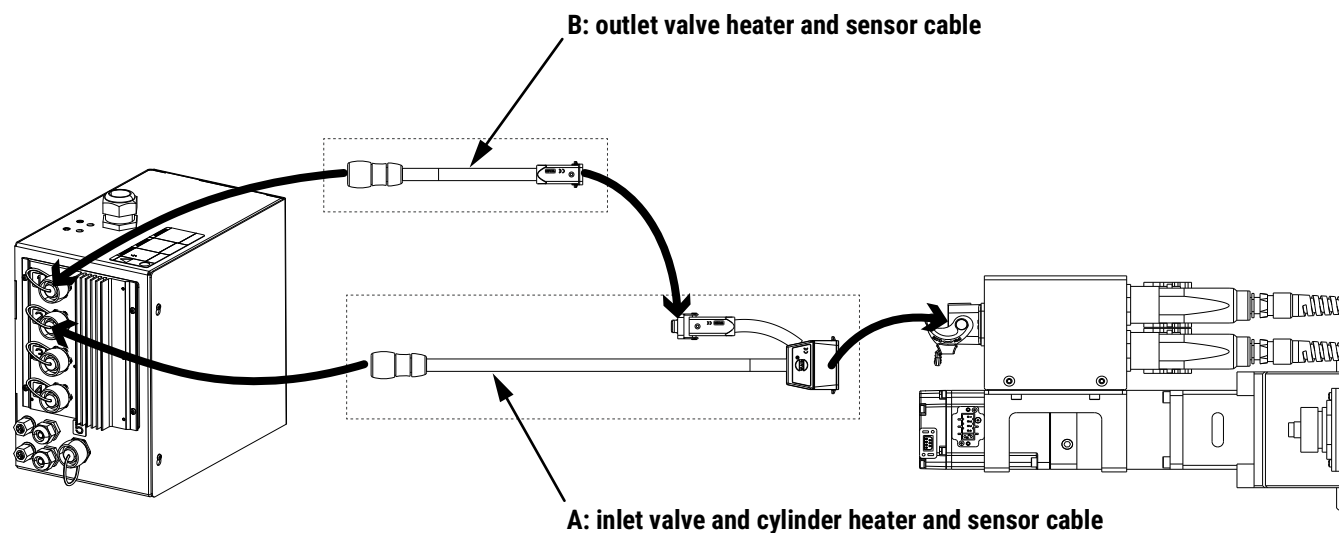
Valve Kits

Part	Description	Qty.
2009688	KIT, sealing, 1K, valve	1
2009689	KIT, rebuild, 1K valve, ball seat	1
2009690	KIT, rebuild, 1K valve, snaff back	1
2012253	KIT, rebuild, 1K valve, snaff back, SST	1

Metering Module Kits

Part	Description	Qty.
2012437	KIT, nut, back plate, PSM 25cc	1
2012438	KIT, nut, back plate, PSM 50 and 100cc	1
2012439	KIT, nut, back plate, PSM 200cc	1

Cables for Warm Melt Pump



Part	Description	Qty.
2009698	Cable, PSM, Warm Melt, A, 10m	1
2009699	Cable, PSM, Warm Melt, A, 15m	1
2009700	Cable, PSM, Warm Melt, A, 20m	1
2009701	Cable, PSM, Warm Melt, B, 9m	1
2009702	Cable, PSM, Warm Melt, B, 14m	1
2009703	Cable, PSM, Warm Melt, B, 19m	1

Appendix: Spare Parts

Part	Description	Qty Per Machine
18D881	MOTOR, servo, 220V, 400W	1
18C018	TRANSMITTER, pressure	1
18D718	SLEEVE, guide, PSM	1
2009678	KIT, piston, PSM25, SST	1
2009679	KIT, piston, PSM25, CER	1
2009680	KIT, piston, PSM50, 100	1
2009681	KIT, piston, PSM200	1
2012437	KIT, nut, bake plate, PSM25	1
2012438	KIT, nut, bake plate, PSM50,100	1
2012439	KIT, nut, bake plate, PSM200	1
2009061	CYLINDER, 25, SST, PSM	1
2009062	CYLINDER, 25, CER, PSM	1
18D703	CYLINDER, 50, SST, PSM	1
18D606	CYLINDER, 50, CER, PSM	1
18D704	CYLINDER, 100, SST, PSM	1
2008971	CYLINDER, 200, SST, PSM	1
2009677	KIT, sealing, PSM	1
18D962	ROD, piston, PSM25, WM	1
18D963	ROD, piston, PSM50, WM	1
18D964	ROD, piston, PSM100, WM	1
2008969	ROD, piston, PSM200, WM	1
18D660	BEARING, PSM	1
2002387	KIT, ball screw, PSM25, 50	1
2002388	KIT, ball screw, PSM100	1
2008976	KIT, ball screw, nut, PSM200	1
2012441	BOX, reduction, PSM25	1
18D723	BOX, reduction, PSM50/100/200	1
2009688	KIT, sealing, 1K valve	1
2009689	KIT, rebuild, 1K valve, ball seat	1
2009690	KIT, rebuild, 1K valve, snaff back, 000, HW	1
2012253	KIT, rebuild, 1K valve, snaff back, 000, SST	1
18D617	FITTING, DIA 6, M14, PLM6	3
18B922	FITTING, DIA 6, M14 × 1	2
25S118	MODULE, solenoid valve, PSM	1
2006571	KIT, solenoid valve, FITT M5 × 0.8, DIA6	1
18D624	SENSOR, position	3
2009236	CABLE, PSM, WM, 400mm, 1 heated and 1 sensor, PSM25, 50, 100	1
2009240	CABLE, PSM, WM, 550mm, 2 heated and 1 sensor, PSM25, 50, 100	1
2009238	CABLE, PSM, WM, 550mm, 1 heated and 1 sensor, PSM25, 50, 100	1
2009237	CABLE, PSM, WM, 500mm, 1 heated and 1 sensor, PSM200	1
2009241	CABLE, PSM, WM, 700mm, 2 heated and 1 sensor, PSM200	1
2009243	CABLE, PSM, WM, 650mm, 2 heated and 1 sensor, short, PSM200	1
2009725	POWER SUPPLY, 150W, 24VDC, MW	1
2000267	BOARD, PCB, assembly	1
CU7788	DISPLAY, PCB	1

Technical Specifications

PSM System		
	US	Metric
Maximum Inlet Fluid Pressure	3000 psi	20.7 MPa, 207 bar
Maximum Working Fluid Pressure	3000 psi	20.7 MPa, 207 bar
Maximum Air Pressure	100 psi	0.7 MPa, 7 bar
Electrical Power	200–240 VAC, 50/60 Hz, 10 A	
Viscosity Range	20–1,000,000 cps	
Wetted Parts	304 Stainless Steel, 7075-T651, Ceramic, FKM, FFKM, Hard Chrome, PEEK, PH17-4, Ethylene Propylene, Parker PolyMyte™, Tungsten Carbide, UHMWPE	
Shot Size Range ⁽¹⁾	25 cc: 0.1–25cc 50 cc: 0.2–50 cc 100 cc: 0.5–100 cc 200 cc: 0.5–200cc	
Shot Size Repeatability	1%	
Maximum Flowrate ⁽²⁾	25 cc: 12 cc/s 50 cc: 15 cc/s 100 cc: 15 cc/s 200 cc: 15 cc/s	
Maximum Working Temperature	158°F	70°C
Inlet / Outlet Sizes		
Air Inlet Size	1/4 in.	6 mm
Fluid Inlet Size	1/4 in. npt (f)	
Fluid Outlet	iQ valve: 1.7mm tip size 1K valve: 1/4 in. npt(f)	
Weight		
PSM Metering Unit	25 cc: 40.8 lb 50 cc: 40.8 lb 100 cc: 43.0 lb 200 cc: 48.5 lb	25 cc: 18.5 kg 50 cc: 18.5 kg 100 cc: 19.5 kg 200 cc: 22 kg
PSM Warm Melt Metering Unit (with warm melt module)	25 cc: 45.2 lb 50 cc: 45.2 lb 100 cc: 49.6 lb 200 cc: 52.9 lb	25 cc: 20.5 kg 50 cc: 20.5 kg 100 cc: 22.5 kg 200 cc: 24 kg
Warm Melt Module	6.1 lb	2.75 kg
PSM Control Unit	88.2 lb	40.0 kg
Notes		
All trademarks or registered trademarks are the property of their respective owners.		
⁽¹⁾ Minimum shot size varies based on the material type and the customer tolerance requirements.		
⁽²⁾ Maximum flowrate varies based on the material viscosity.		

California Proposition 65

CALIFORNIA RESIDENTS

 **WARNING:** Cancer and reproductive harm – www.P65warnings.ca.gov.

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Original instructions. This manual contains English. MM 3B0424

Graco Headquarters: Minneapolis

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