

PSM

3A9277C

1K Precision Metering System

EN

For accurate metering and dispensing of single-component materials. For professional use only.

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

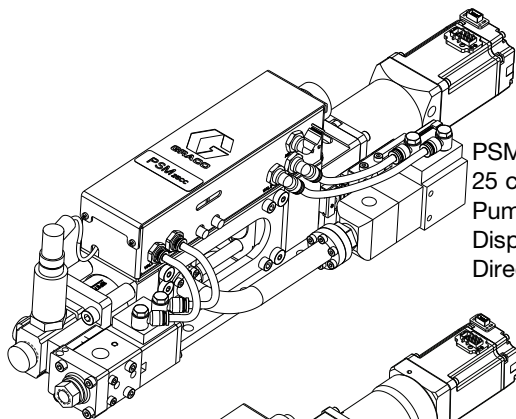
100 psi (0.7 MPa, 7 bar) Maximum Air Inlet Pressure.

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

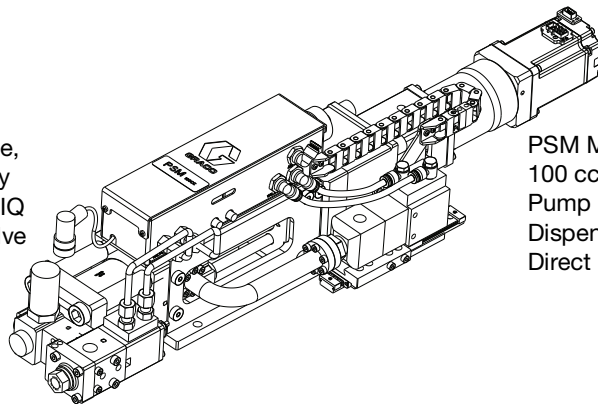


Important Safety Instructions

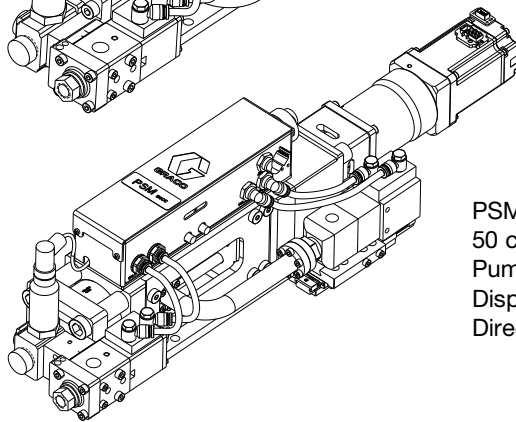
Read all warnings and instructions in this manual, your instruction manual, and your dispensing manuals before using the equipment. Save these instructions.



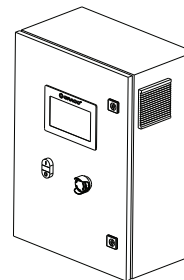
PSM Machine,
25 cc, Supply
Pump Feed, IQ
Dispense Valve
Direct Show



PSM Machine,
100 cc, Supply
Pump Feed, IQ
Dispense Valve
Direct Show



PSM Machine,
50 cc, Supply
Pump Feed, IQ
Dispense Valve
Direct Show



PSM Control Box



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Related Manuals

Manuals in English	Description
3A7273	PSM Instruction Manual
308876	1K Ultra-Lite™ Instructions and Parts List Manual
333585	IQ Dispense Valves Instructions and Parts List Manual

Models

Part	Maximum Fluid Working Pressure psi (MPa, bar)	Description	Includes:		
			PSM Machine	PSM Control Box	Direct Connection ⁽³⁾
25S141	1200 psi (8.3 MPa, 83 bar)	PSM System, 25 cc, I/O, SST ⁽¹⁾	✓	✓	✓
25S148		PSM System, 25 cc, I/O, CER ⁽²⁾	✓	✓	✓
2000828		PSM System, 25 cc, I/O, SST ⁽¹⁾ , Tip Seal	✓	✓	✓
2000829		PSM System, 25 cc, I/O, CER ⁽²⁾ , Tip Seal	✓	✓	✓
2001633		PSM System, 25 cc, I/O, SST ⁽¹⁾ , Ball Seal	✓	✓	✓
2001634		PSM System, 25 cc, I/O, CER ⁽²⁾ , Ball Seal	✓	✓	✓
25S142	3000 psi (20.7 MPa, 207 bar)	PSM System, 50 cc, I/O, SST ⁽¹⁾	✓	✓	✓
25S167		PSM System, 50 cc, I/O, CER ⁽²⁾	✓	✓	✓
2000830		PSM System, 50 cc, I/O, SST ⁽¹⁾ , Tip Seal	✓	✓	✓
2000831		PSM System, 50 cc, I/O, CER ⁽²⁾ , Tip Seal	✓	✓	✓
2001635		PSM System, 50 cc, I/O, SST ⁽¹⁾ , Ball Seal	✓	✓	✓
2001636		PSM System, 50 cc, I/O, CER ⁽²⁾ , Ball Seal	✓	✓	✓
25S143	3000 psi (20.7 MPa, 207 bar)	PSM System, 100 cc, I/O, SST ⁽¹⁾	✓	✓	✓
25S170		PSM System, 100 cc, I/O, CER ⁽²⁾	✓	✓	✓
2000832		PSM System, 100 cc, I/O, SST ⁽¹⁾ , Tip Seal	✓	✓	✓
2000833		PSM System, 100 cc, I/O, CER ⁽²⁾ , Tip Seal	✓	✓	✓
2001637		PSM System, 100 cc, I/O, SST ⁽¹⁾ , Ball Seal	✓	✓	✓
2001638		PSM System, 100 cc, I/O, CER ⁽²⁾ , Ball Seal	✓	✓	✓











(1) SST: Stainless steel material

(2) CER: Ceramic material

(3) Any PSM system can be converted from direct connection mode to remote connection mode by using remote kits. See **Remote Kits**, page 46 and order remote kits.

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 symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 <h2 style="margin: 0;">WARNING</h2>	
 	<p>ELECTRIC SHOCK HAZARD</p> <p>This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none"> • 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.
     	<p>SKIN INJECTION HAZARD</p> <p>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.</p> <ul style="list-style-type: none"> • 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 in your PSM Instruction Manual 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.
	<p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> • 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



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.







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 in your PSM Instruction Manual.
- 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.

! WARNING

 	<p>EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • 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 in your PSM Instruction Manual 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.
 	<p>MOVING PARTS HAZARD Moving parts can pinch, cut or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • 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 in your PSM Instruction Manual and disconnect all power sources.







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 plashing 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.

Prepare Machine for Piston/Cylinder Replacement Kit Installation

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 box (F, page 7 in your PSM Instruction Manual). Set the move speed at about 0.2 cc/s, then jog select “Piston move down” until the lower switch light is activated.

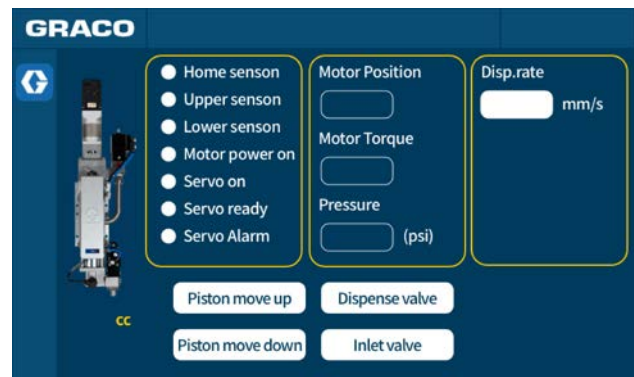


FIG. 1 Advanced Screen

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, page 8 in your PSM Instruction Manual).
6. Open the top cover of the Junction Box (AA, page 8 in your PSM Instruction Manual) and loosen the four fix screws in the cylinder housing (112, page 8). Next, take off the Junction Box Assembly (AA, page 8 in your PSM Instruction Manual).

Disassemble Cylinder, 25 cc

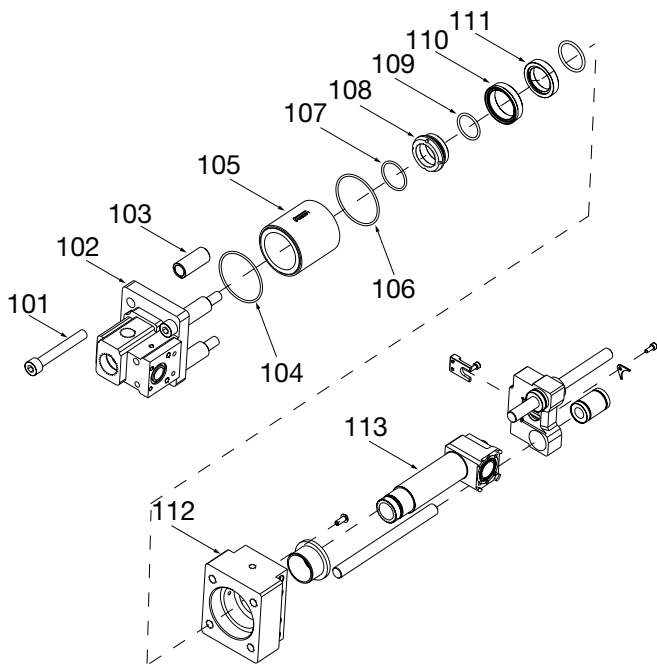


Fig. 2 Disassemble Cylinder of 25 cc

1. Remove the four screws (101).
2. Remove the Dispense Valve (AB, page 8 in your PSM Instruction Manual), support block (102) and the sleeves (103).
3. Remove the cylinder (105) and O-rings (104 and 106) from the cylinder housing (112).
4. Remove the piston nut (108) from the rod (113).
5. Remove the O-ring (107).
6. Remove the piston (110) from the rod (113).
7. Remove the O-ring (109).
8. Remove the washer (111) from the rod (113).
9. Clean all parts that have been removed.

Install Cylinder, 25 cc

1. Install the new washer (111) to the rod (113) with TSL oil.
2. Install the new O-ring (109) with TSL oil.
3. Install the new piston (110) in the correct direction.
4. Install the new O-ring (107) to the piston nut (108) with TSL oil.
5. Install the piston nut (108) and tighten the piston nut with correct torque.
6. Install the 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 O-rings (104) into the grooves of the cylinder (105).
9. Install the support block (102).
10. Secure cylinder in place with the four sleeves (101). Diagonally tighten the screws by slowly and progressively increasing torque until the screws are securely housed.
11. Install other parts.

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

Disassemble Cylinder, 50 cc and 100 cc

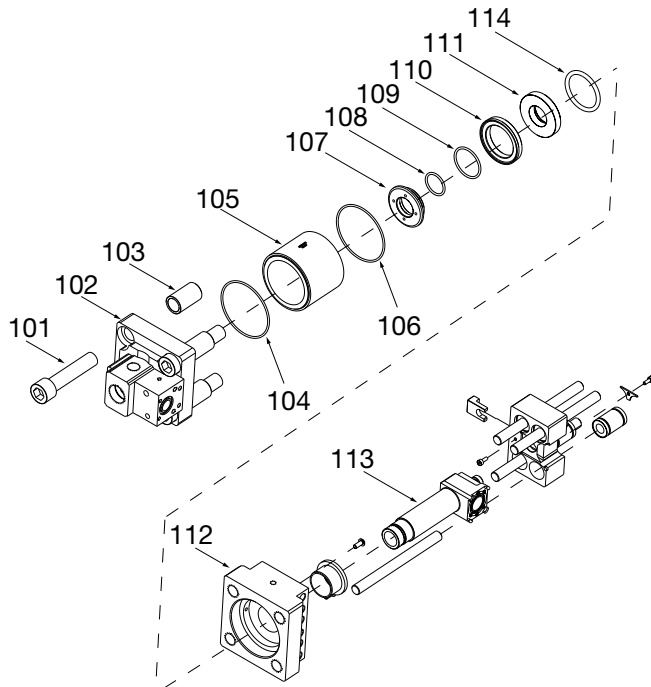


FIG. 3 Disassemble Cylinder of 50 cc and 100 cc

1. Remove the four screws (101).
2. Remove the Dispense Valve (AB, page 8 in your PSM Instruction Manual), support block (102) and the sleeves (103).
3. Remove the cylinder (105) and O-rings (104 and 106) from the cylinder housing (112).
4. Remove the piston nut (107) from the rod (113).
5. Remove the O-rings (108 and 109).
6. Remove the piston (110) from the rod (113).
7. Remove the washer (111) and the O-ring (114) from the rod (113).
8. Clean all parts that have been removed.

Install Cylinder, 50 cc and 100 cc

1. Install the new O-ring (114) and the washer (111) to the rod (113) with TSL oil.
2. Install the new piston (110) in the correct direction.
3. Install the new O-ring (109) with TSL oil.
4. Install the new O-ring (108) 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 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 O-rings (104) into the grooves of the cylinder (105).
9. Install the support block (102).
10. Secure cylinder in place with the four sleeves (103). Diagonally tighten the screws (101) by slowly and progressively increasing torque until the screws are securely housed.
11. Install other parts.

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


Prepare Machine for Operation

1. Pressurize Supply Pump System (E, page 7) connected to the PSM Reload Valve (AD, page 8). See your PSM Instruction Manual.
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 Machine (H, page 7) is free of air and there is no leakage at the dispense outlet after shutoff. See your PSM Instruction Manual.

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.

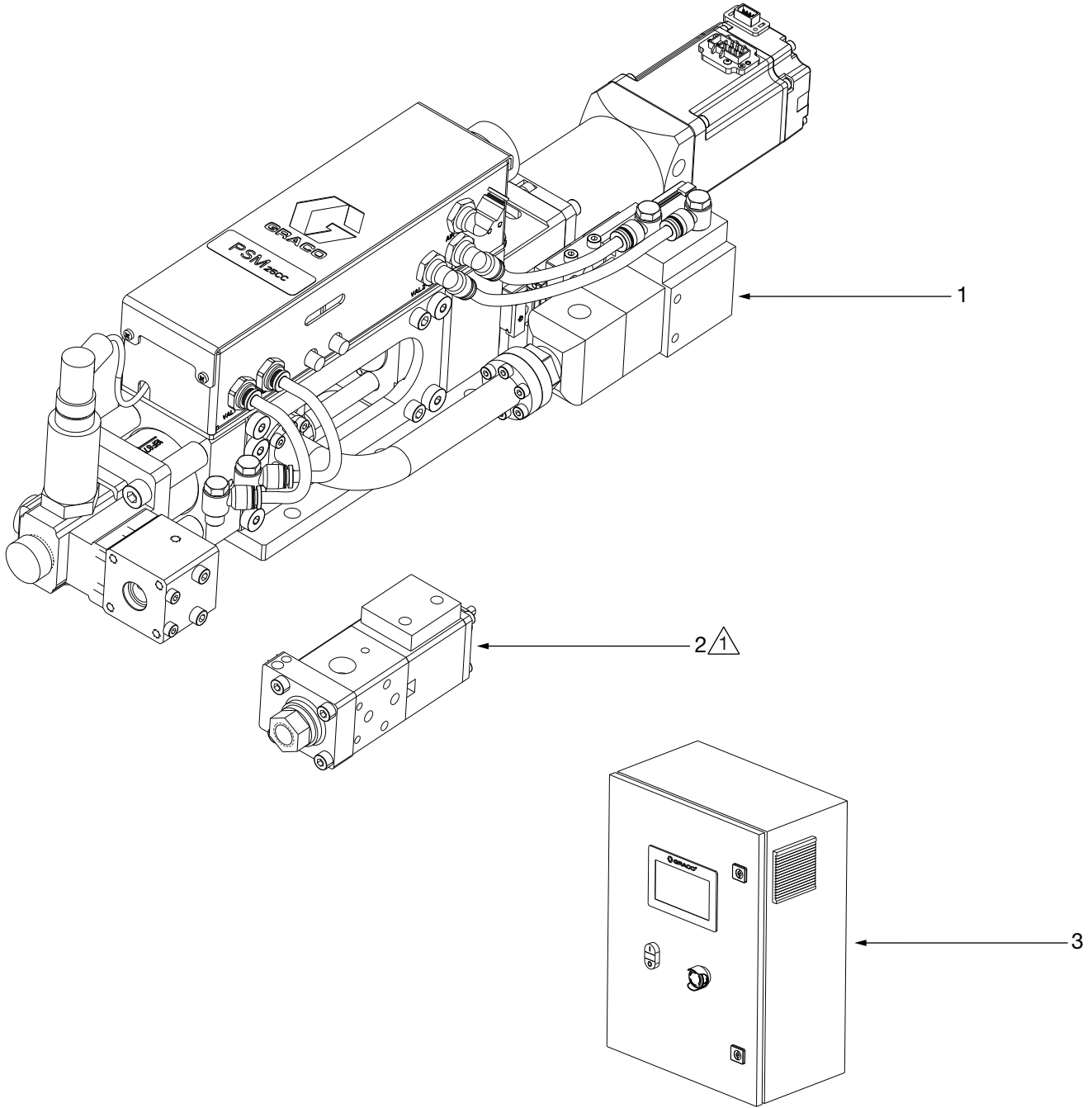
Parts


Overview

Parts Description	Page
System	12
Module	18
Base	24
Metering Module	28
Power Transmission Module	32
Supply Pump Module	36
Junction Box	40
Control Box	42
Dispense Valve Module	44

System

System, 25 cc, 25S141, 25S148, 2000828, 2000829, 2001633, and 2001634



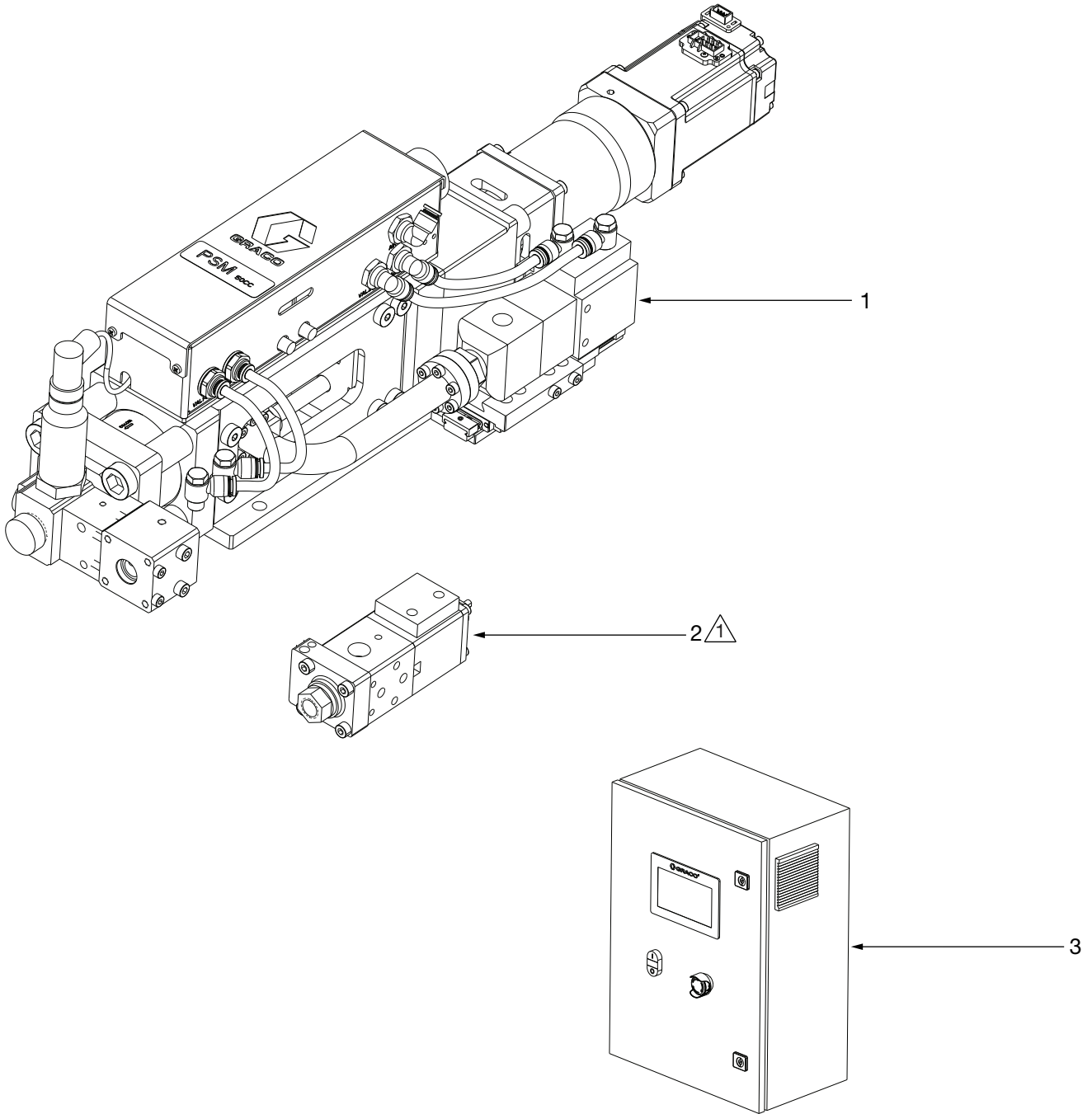
 Apply sealant, Anaerobic, blue.


System Parts List, 25 cc

Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
1	2002776	MODULE, MP W/O IQ valve, PSM, 25, SST; See Module, 25 cc, 2002776 and 2002777 , page 18	1		1		1	
	2002777	MODULE, MP W/O IQ valve, PSM, 25, CER; See Module, 25 cc, 2002776 and 2002777 , page 18		1		1		1
2*	----	VALVE; See Dispense Valve Module , page 44	1	1	1	1	1	1
3	2002837	CONTROL, PSM, PCB; See Control Box , page 42	1	1	1	1	1	1

* See *IQ Dispense Valve Manual (333585)* for details of the valves. When ordering the valve, order the valve and part 18D702 (see 45) together as a group.

System, 50 cc, 25S142, 25S167, 2000830, 2000831, 2001635, and 2001636



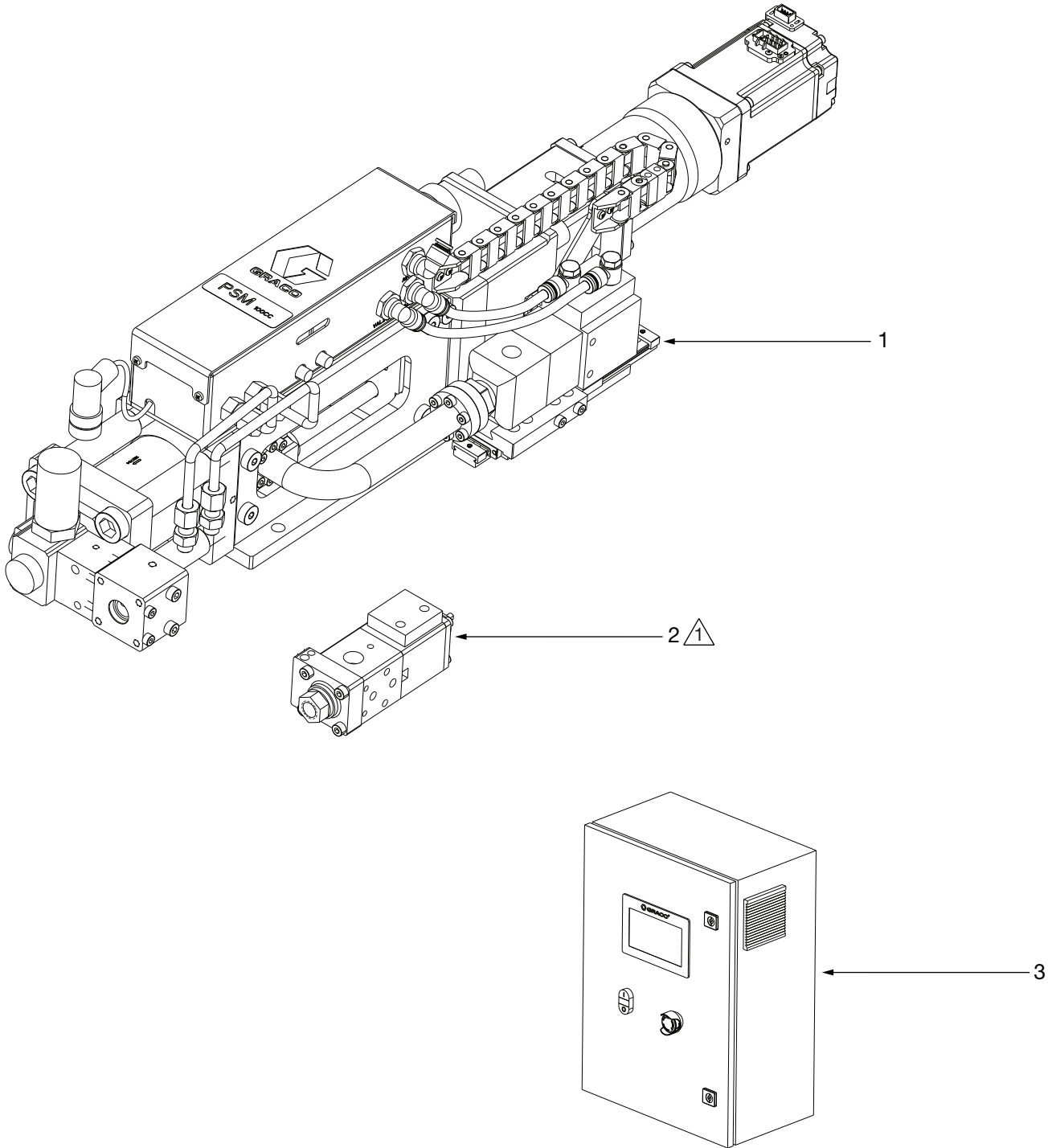
 Apply sealant, Anaerobic, blue.


System Parts List, 50 cc

Ref.	Part	Description	Qty.					
			25S142	25S167	2000830	2000831	2001635	2001636
1	2002778	MODULE, MP W/O IQ valve, PSM, 50, SST; See Module, 50 cc, 2002778 and 2002779 , page 20	1		1		1	
	2002779	MODULE, MP W/O IQ valve, PSM, 50, CER; See Module, 50 cc, 2002778 and 2002779 , page 20		1		1		1
2*	----	VALVE; See Dispense Valve Module , page 44	1	1	1	1	1	1
3	2002837	CONTROL, PSM, PCB; See Control Box , page 42	1	1	1	1	1	1

* See *IQ Dispense Valve Manual (333585)* for details of the valves. When ordering the valve, order the valve and part 18D702 (see 45) together as a group.

System, 100 cc, 25S143, 25S170, 2000832, 2000833, 2001637, and 2001638



 Apply sealant, Anaerobic, blue.

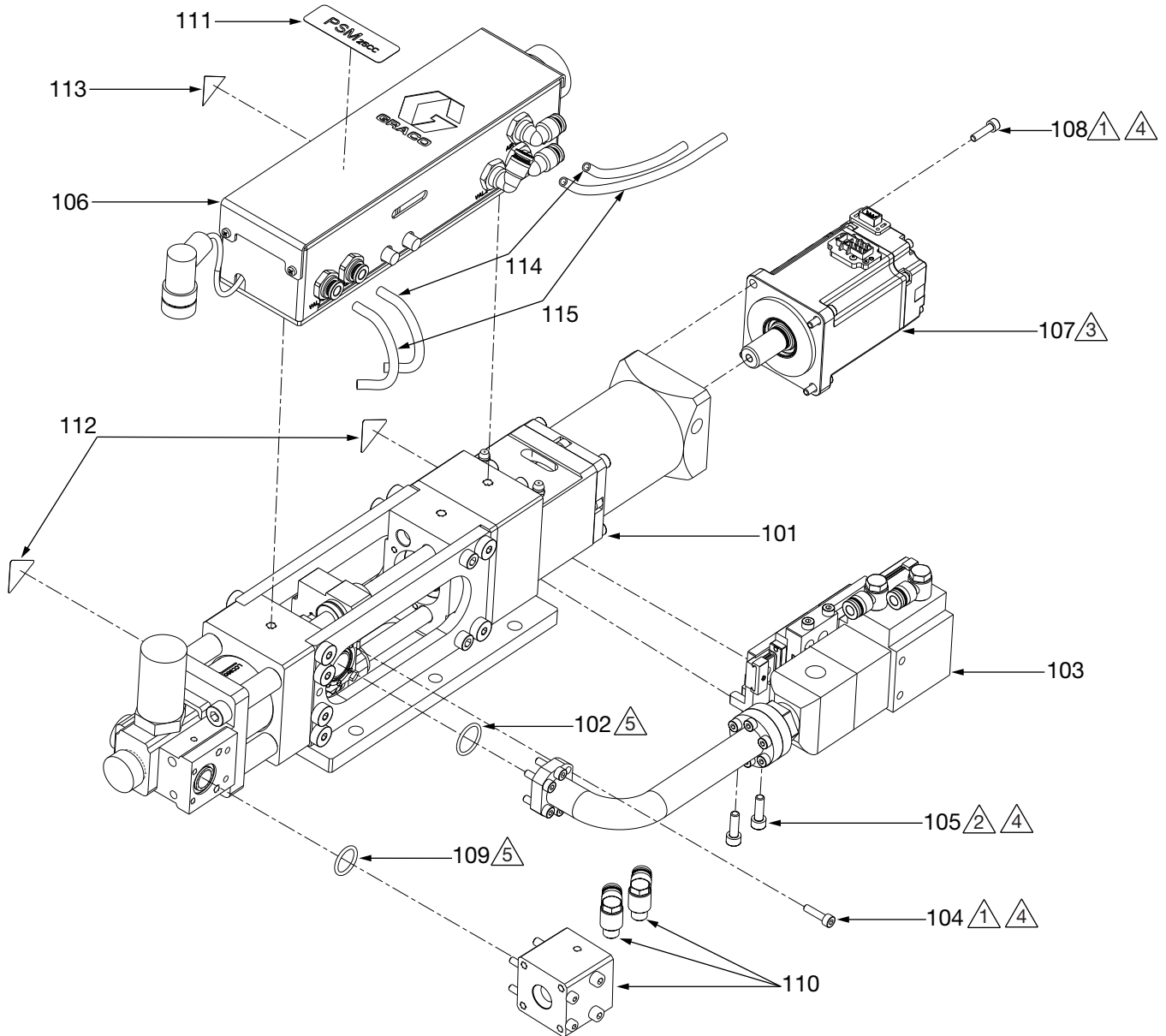
System Parts List, 100 cc

Ref.	Part	Description	Qty.					
			25S143	25S170	2000832	2000833	2001637	2001638
1	2002780	MODULE, MP W/O IQ valve, PSM, 100, SST; See Module, 50 cc, 2002778 and 2002779 , page 20	1		1		1	
	2002781	MODULE, MP W/O IQ valve, PSM, 100, CER; See Module, 50 cc, 2002778 and 2002779 , page 20		1		1		1
2*	----	VALVE; See Dispense Valve Module , page 44	1	1	1	1	1	1
3	2002837	CONTROL, PSM, PCB; See Control Box , page 42	1	1	1	1	1	1

* See *IQ Dispense Valve Manual (333585)* for details of the valves. When ordering the valve, order the valve and part 18D702 (see 45) together as a group.

Module

Module, 25 cc, 2002776 and 2002777



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

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

Installation direction as show.

Apply sealant, Anaerobic, blue.

Apply fluid, TSL 8 oz bottle.

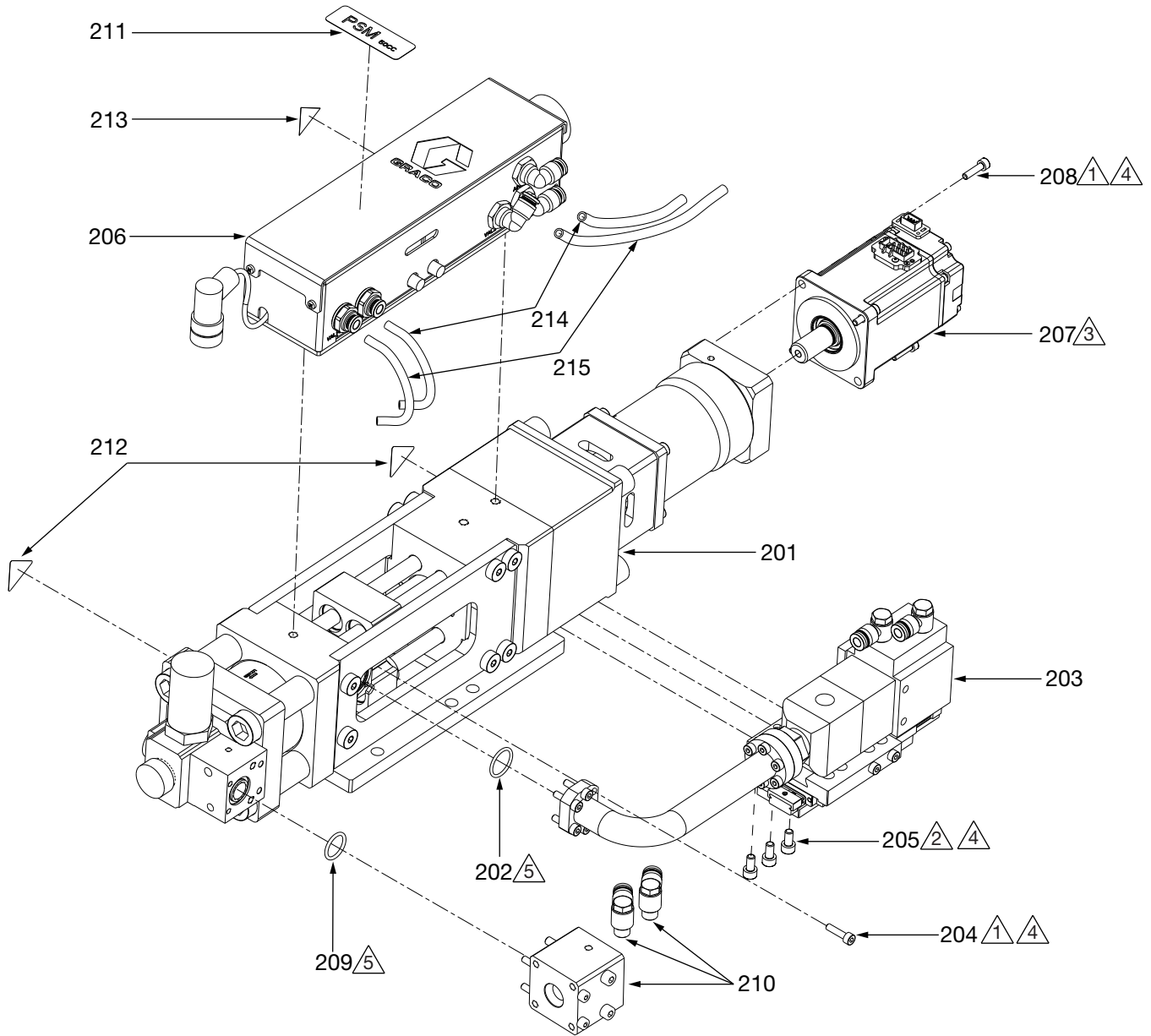
Module Parts List, 25 cc






Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
101	----	BASE, PSM, 25, SST; See Base, 25 cc , page 24	1		1		1	
	----	BASE, PSM, 25, CER; See Base, 25 cc , page 24		1		1		1
102	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1
103	----	MODULE, supply, pump, PSM25, SST; See Supply Pump Module, 25 cc , page 36	1		1		1	
	----	MODULE, supply, pump, PSM25, HW; See Supply Pump Module, 25 cc , page 36		1		1		1
104	----	SCREW, M6 x 1.0-16, socket head	6	6	6	6	6	6
105	----	SCREW, M5 x 0.8-16, socket head, SST	2	2	2	2	2	2
106	25S119	JUNCTION BOX, PSM25; See Junction Box , page 40	1	1	1	1	1	1
107	18D881	MOTOR, servo, 220 V, 400 W, INO	1	1	1	1	1	1
108	----	SCREW, M4 x 0.7-16, socket head, SST	4	4	4	4	4	4
109	18D698 ⁽¹⁾	O-RING	1	1	1	1	1	1
*110	----	MODULE, direct, IQ valve, PSM25, 50	1	1	1	1	1	1
111	2000317	IDENTIFICATION, PSM25	1	1	1	1	1	1
112▲	15H108	LABEL, safety, warning, pinch	2	2	2	2	2	2
113▲	189930	LABEL, caution	1	1	1	1	1	1
114	----	TUBE, 6 mm OD x 4 mm ID, PU, black	1	1	1	1	1	1
115	----	TUBE, 6 mm OD X 4 mm ID, PU, blue	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 Kit 2000921 when ordering this part.

Module, 50 cc, 2002778 and 2002779



-  Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
-  Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
-  Installation direction as show.
-  Apply sealant, Anaerobic, blue.
-  Apply fluid, TSL 8 oz bottle.

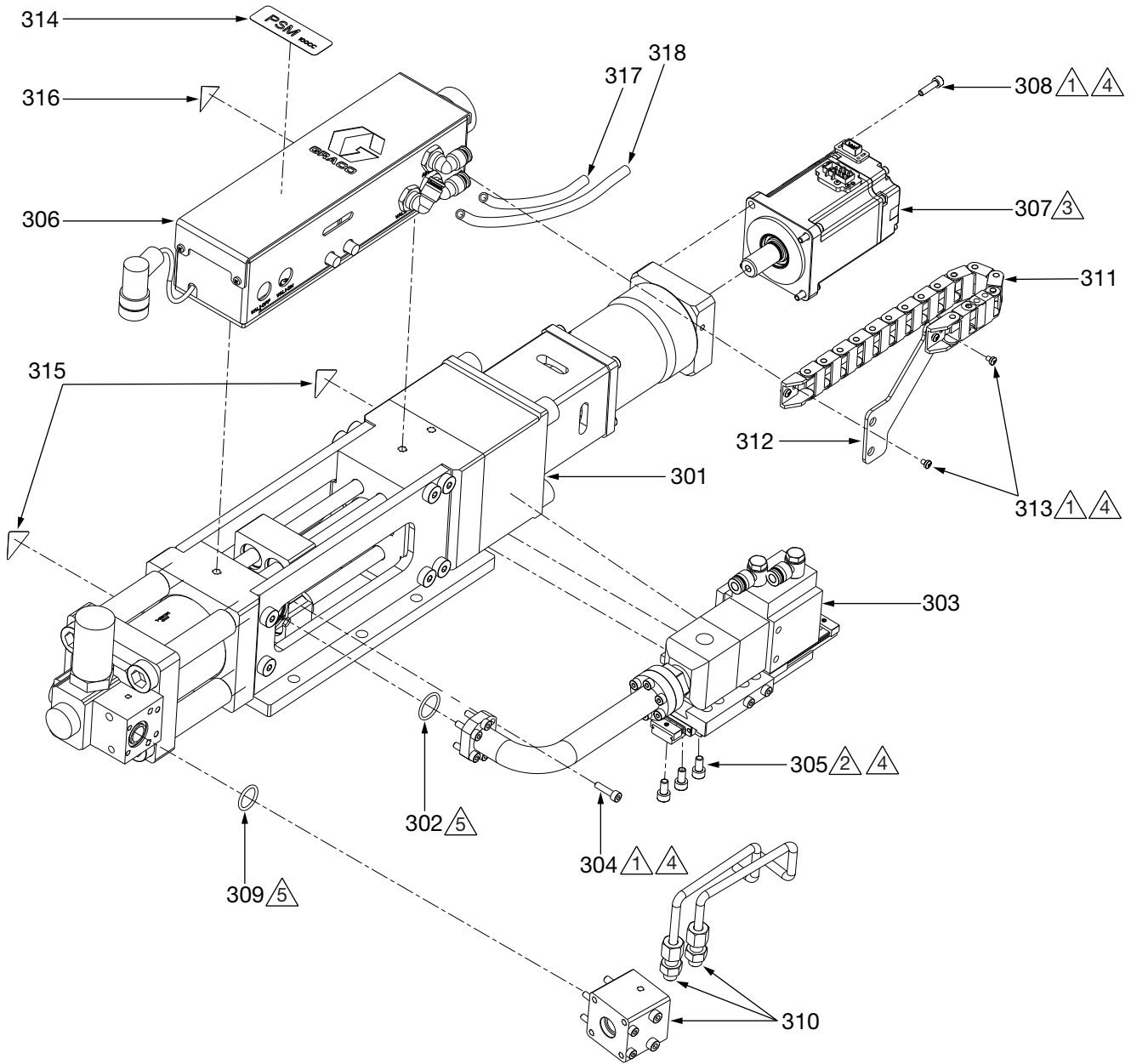
Module Parts List, 50 cc

Ref.	Part	Description	Qty.					
			25S142	25S167	2000830	2000831	2001635	2001636
201	----	BASE, PSM, 50, SST; See Base, 50 cc and 100 cc , page 26	1		1		1	
	----	BASE, PSM, 50, CER; See Base, 50 cc and 100 cc , page 26		1		1		1
202	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1
203	----	MODULE, supply, pump, PSM50, SST; See Supply Pump Module, 50 cc and 100 cc , page 38	1		1		1	
	----	MODULE, supply, pump, PSM50, HW; See Supply Pump Module, 50 cc and 100 cc , page 38		1		1		1
204	----	SCREW, M6 x 1.0-16, socket head	6	6	6	6	6	6
205	----	SCREW, M5 x 0.8-10, socket head, SST	3	3	3	3	3	3
206	25S120	JUNCTION BOX, PSM50; See Junction Box , page 40	1	1	1	1	1	1
207	18D881	MOTOR, servo, 220 V, 400 W, INO	1	1	1	1	1	1
208	----	SCREW, M4 x 0.7-16, socket head, SST	4	4	4	4	4	4
209	18D698 ⁽¹⁾	O-RING	1	1	1	1	1	1
*210	----	MODULE, direct, IQ valve, PSM25, 50	1	1	1	1	1	1
211	2000318	IDENTIFICATION, PSM50	1	1	1	1	1	1
212▲	15H108	LABEL, safety, warning, pinch	2	2	2	2	2	2
213▲	189930	LABEL, caution	1	1	1	1	1	1
214	----	TUBE, 6 mm OD x 4 mm ID, PU, black	1	1	1	1	1	1
215	----	TUBE, 6 mm OD X 4 mm ID, PU, blue	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 Kit 2000922 when ordering this part.

Module, 100 cc, 2002780 and 2002781



- ⚠️ Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- ⚠️ Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
- ⚠️ Installation direction as show.
- ⚠️ Apply sealant, Anaerobic, blue.
- ⚠️ Apply fluid, TSL 8 oz bottle.

Machine Parts List, 100 cc

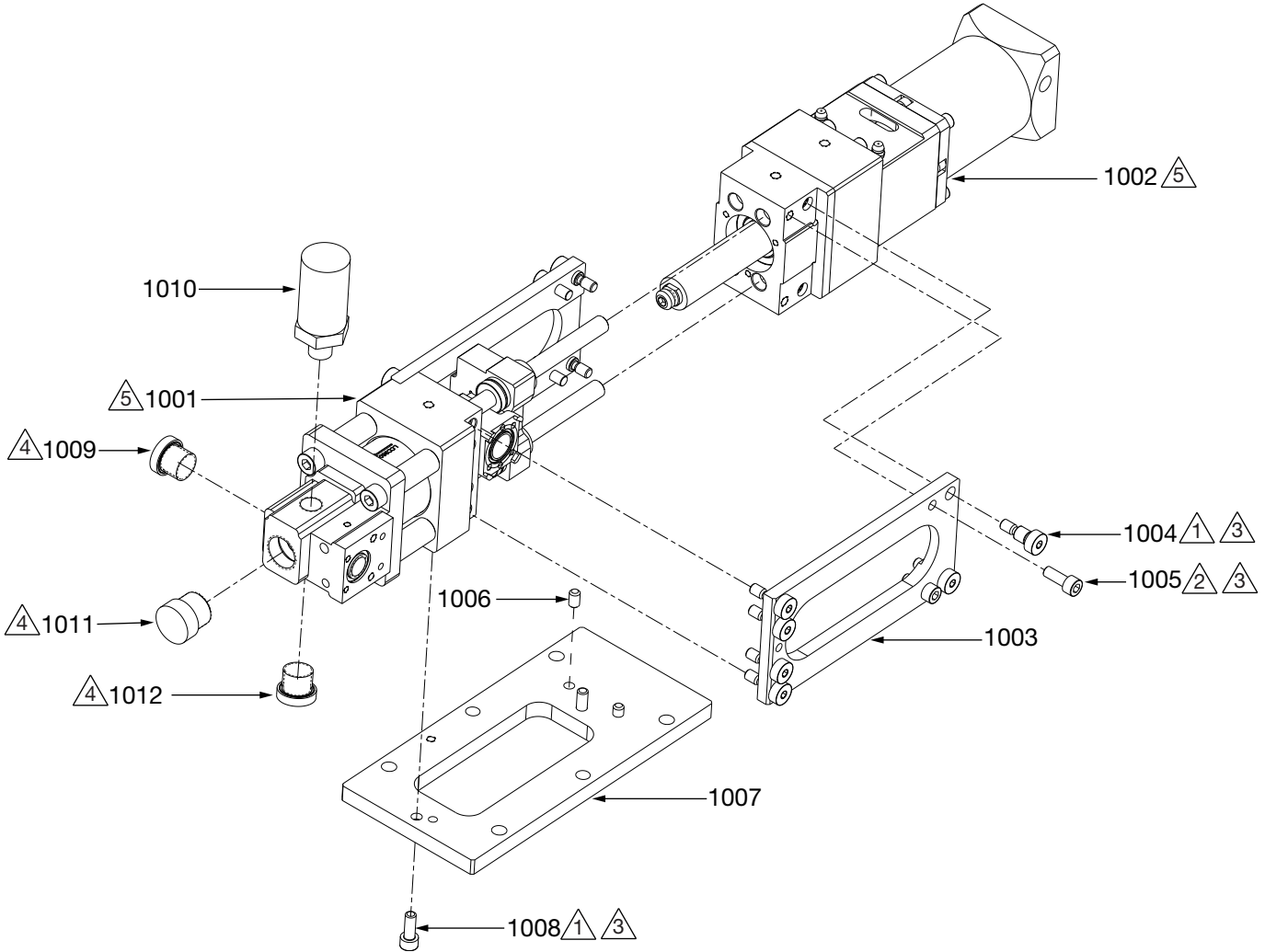
Ref.	Part	Description	Qty.					
			25S143	25S170	2000832	2000833	2001637	2001638
301	----	BASE, PSM, 100, SST; See Base, 50 cc and 100 cc , page 26	1		1		1	
	----	BASE, PSM, 100, CER; See Base, 50 cc and 100 cc , page 26		1		1		1
302	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1
303	----	MODULE, supply, pump, PSM100, SST; See Supply Pump Module, 50 cc and 100 cc , page 38	1		1		1	
	----	MODULE, supply, pump, PSM100, HW; See Supply Pump Module, 50 cc and 100 cc , page 38		1		1		1
304	----	SCREW, M6 x 1.0-16, socket head	6	6	6	6	6	6
305	----	SCREW, M5 x 0.8-10, socket head, SST	3	3	3	3	3	3
306	25S121	JUNCTION BOX, PSM100; See Junction Box , page 40	1	1	1	1	1	1
307	18D881	MOTOR, servo, 220V, 400W, INO	1	1	1	1	1	1
308	----	SCREW, M4 x 0.7-16, socket head, SST	4	4	4	4	4	4
309	18D698 ⁽¹⁾	O-ring	1	1	1	1	1	1
*310	----	MODULE, direct, IQ valve, PSM100; Dispense Valve Module , page 44	1	1	1	1	1	1
311	18D795	CHAIN, valve, PSM100	1	1	1	1	1	1
312	18D721	PLATE, PSM100	1	1	1	1	1	1
313	----	SCREW, M3 x 0.5-4, Phillips	4	4	4	4	4	4
314	2000319	IDENTIFICATION, PSM100	1	1	1	1	1	1
315▲	15H108	LABEL, safety, warning, pinch	2	2	2	2	2	2
316▲	189930	LABEL, caution	1	1	1	1	1	1
317	----	TUBE, 6 mm OD x 4 mm ID, PU, black	1	1	1	1	1	1
318	----	TUBE, 6 mm OD X 4 mm ID, PU, blue	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 Kit 2000922 when ordering this part.

Base

Base, 25 cc



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

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

△3 Apply sealant, Anaerobic, blue.

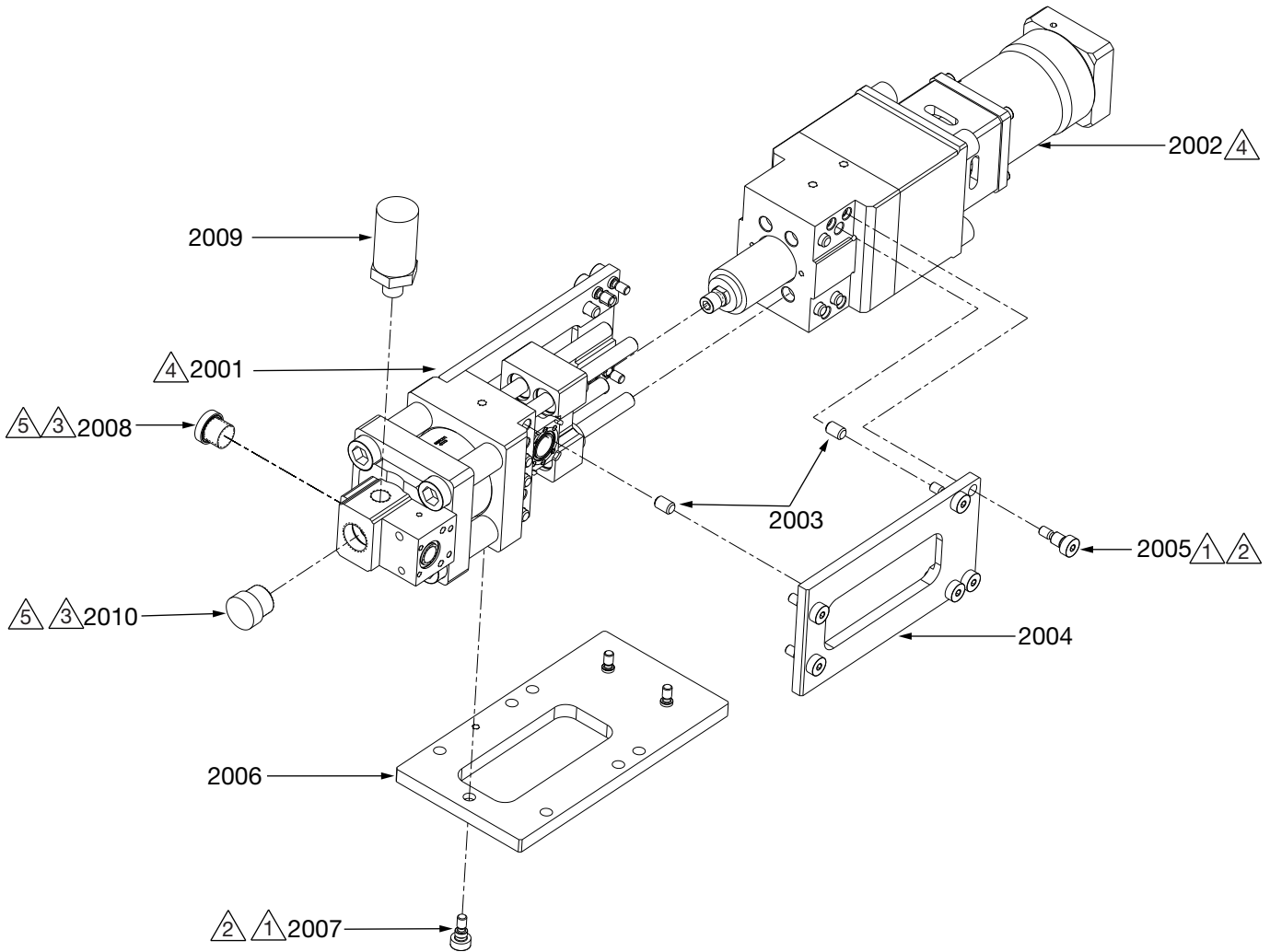
△4 Apply sealant, pipe, SST.

△5 Apply lubricant, synthetic, grease, 3 oz.

Base Parts List, 25 cc

Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
1001	25S134	MODULE, metering, SST, PSM25; See Metering Module, 25 cc, 25S134 and 25S164, page 28	1		1		1	
	25S164	MODULE, metering, CER, PSM25; See Metering Module, 25 cc, 25S134 and 25S164, page 28		1		1		1
1002	----	MODULE, power transmission, PSM25; See Power Transmission Module, 25 cc, page 32	1	1	1	1	1	1
1003	18D647	PLATE, side, base, pump, PSM25	2	2	2	2	2	2
1004	----	SCREW, shoulder, DIA 8, M6	12	12	12	12	12	12
1005	----	SCREW, M6 x 1-16, socket, SST	4	4	4	4	4	4
1006	18D657	PIN, dowel, DIA 6-10	2	2	2	2	2	2
1007	18D644	PLATE, bottom, base, pump, PSM25	1	1	1	1	1	1
1008	----	SCREW, M6 x 1.0-16, socket head	2	2	2	2	2	2
1009	18D732	PLUG, blind flange, G 3/8	1	1	1	1	1	1
1010	18C018	TRANSMITTER, pressure	1	1	1	1	1	1
1011	18D886	PLUG, UN 13/16-16	1	1	1	1	1	1
1012	18D615	PLUG, blind flange, G 1/4	1	1	1	1	1	1

Base, 50 cc and 100 cc



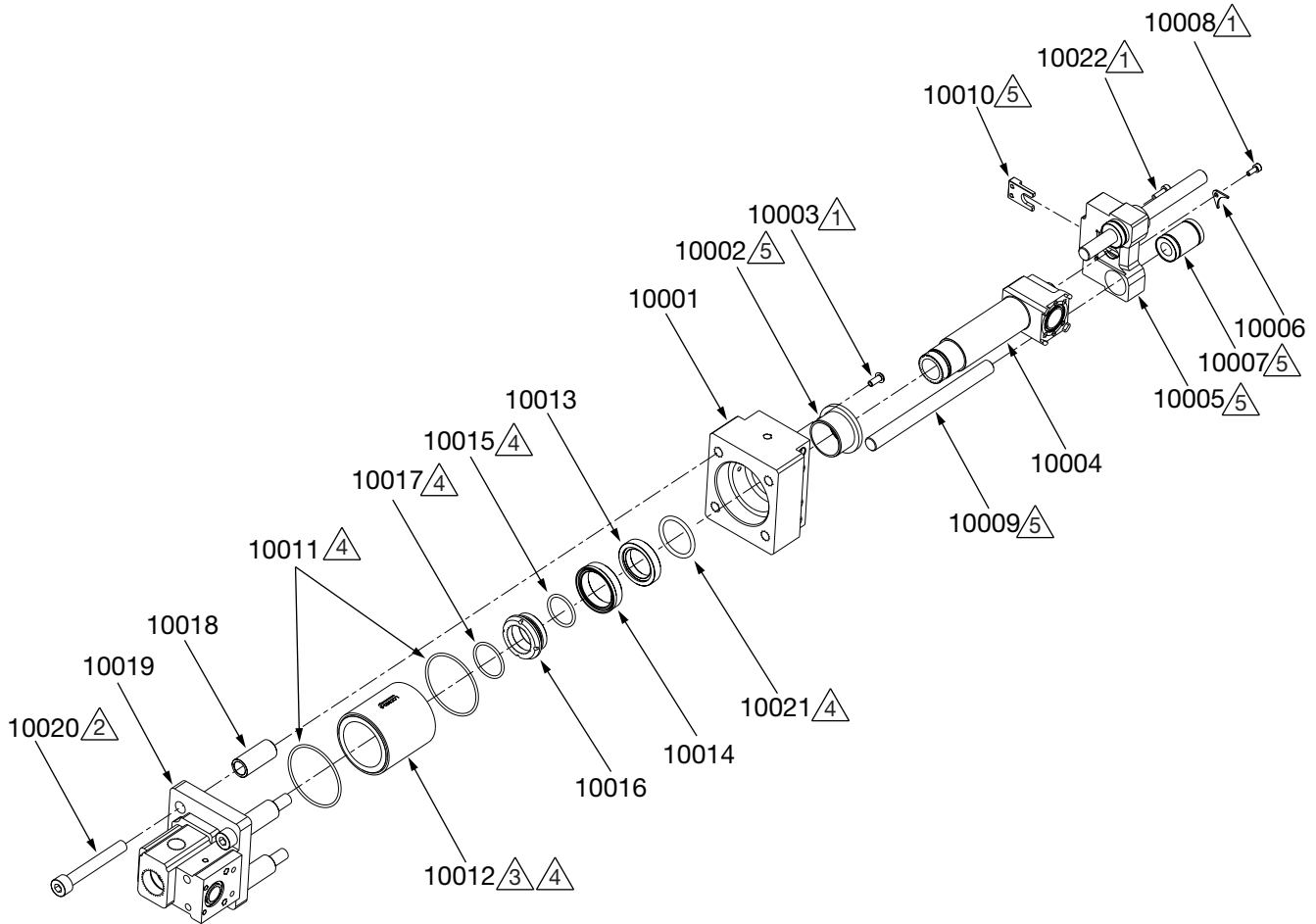
- △1 Torque to 5.16-6.64 ft-lb (7.0-9.0 N•m).
- △2 Apply sealant, Anaerobic, blue.
- △3 Apply sealant, pipe, SST.
- △4 Apply lubricant, synthetic, grease, 3 oz.

Base Parts List, 50 cc and 100 cc

Ref.	Part	Description	Qty.											
			25S 142	25S 167	2000 830	2000 831	2001 635	2001 636	25S 143	25S 170	2000 832	2000 833	2001 637	2001 638
2001	25S135	MODULE, metering, SST, PSM50; See Metering Module, 50 cc and 100 cc, 25S135, 25S165, 25S136 and 25S166 , page 30	1		1		1							
	25S165	MODULE, metering, CER, PSM50; See Metering Module, 50 cc and 100 cc, 25S135, 25S165, 25S136 and 25S166 , page 30		1		1		1						
	25S136	MODULE, metering, SST, PSM100; See Metering Module, 50 cc and 100 cc, 25S135, 25S165, 25S136 and 25S166 , page 30							1		1		1	
	25S166	MODULE, metering, CER, PSM100; See Metering Module, 50 cc and 100 cc, 25S135, 25S165, 25S136 and 25S166 , page 30								1		1		1
2002	----	MODULE, power transmission, PSM50; See Power Transmission Module, 50 cc and 100 cc , page 34	1	1	1	1	1	1						
	----	MODULE, Power transmission, PSM100; See Power Transmission Module, 50 cc and 100 cc , page 34							1	1	1	1	1	1
2003	18D920	PIN, dowel, DIA 8-12	16	16	16	16	16	16	16	16	16	16	16	16
2004	18D648	PLATE, side, base, pump, PSM50	2	2	2	2	2	2						
	18D649	PLATE, side, base, pump, PSM100							2	2	2	2	2	2
2005	----	SCREW, shoulder, DIA 8, M6	12	12	12	12	12	12	12	12	12	12	12	12
2006	18D645	PLATE, bottom, base, pump, PSM50	1	1	1	1	1	1						
	18D646	PLATE, bottom, base, pump, PSM100							1	1	1	1	1	1
2007	----	SCREW, DIA 8, M6	3	3	3	3	3	3	3	3	3	3	3	3
2008	18D732	PLUG, blind flange, G 3/8	1	1	1	1	1	1	1	1	1	1	1	1
2009	18C018	TRANSMITTER, pressure	1	1	1	1	1	1	1	1	1	1	1	1
2010	18D886	PLUG, UN 13/16-16	1	1	1	1	1	1	1	1	1	1	1	1

Metering Module

Metering Module, 25 cc, 25S134 and 25S164



- △1 Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- △2 Torque to 5.16-6.64 ft-lb (7.0-9.0 N•m).
- △3 Metering tube direction should be appointing as shown.
- △4 Apply fluid, TSL 8 oz bottle.
- △5 Apply lubricant, synthetic, grease, 3 oz.

Metering Module Parts List, 25 cc

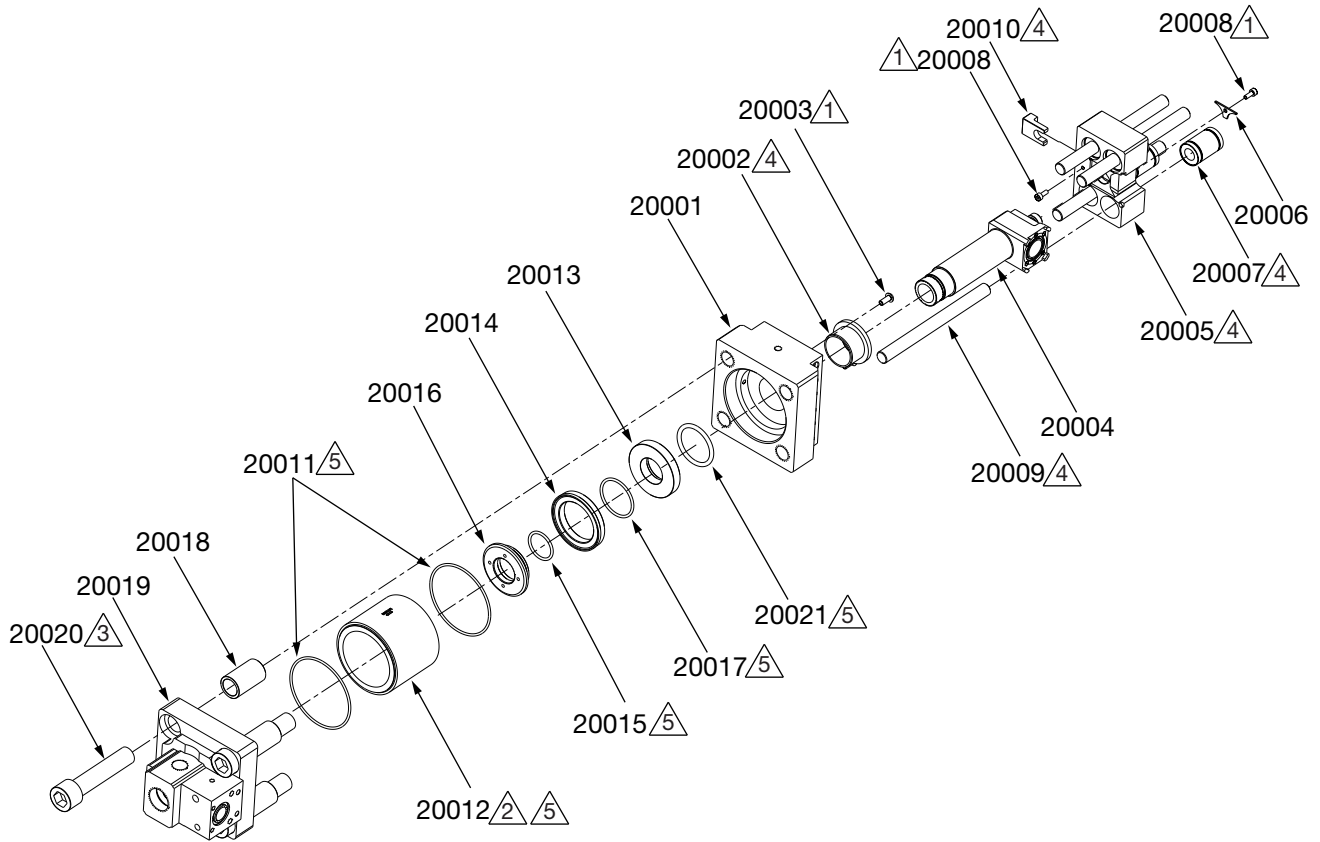
Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
10001	18D719	BLOCK, tube, PSM25	1	1	1	1	1	1
10002	18D718	SLEEVE, guide, PSM	1	1	1	1	1	1
10003	----	SCREW, M4 x 0.7-10, button head, SST	2	2	2	2	2	2
10004	18D715	ROD, piston, PSM25	1	1	1	1	1	1
10005	18D713	BLOCK, push, PSM25	1	1	1	1	1	1
10006	18D711	BRACKET, bearing limit, PSM25	2	2	2	2	2	2
10007	18B942	BEARING	2	2	2	2	2	2
10008	----	SCREW, M3 x 0.5-8, socket	2	2	2	2	2	2
10009	18D708	ROD, guide, PSM25	2	2	2	2	2	2
10010	18D706	HINGE, PSM25	1	1	1	1	1	1
10011❖❖	120874 ⁽¹⁾	O-RING	2	2	2	2	2	2
10012❖	18F875	CYLINDER, 25, SST	1		1		1	
❖	18F876	CYLINDER, 25, CER		1		1		1
10013❖❖	18D699	WASHER, support back, PSM25	1	1	1	1	1	1
10014❖	18D609	PISTON, 960, PSM25, PE	1		1		1	
❖	18D695	PISTON, 960, PSM25, M22		1		1		1
10015❖❖	18D751 ⁽¹⁾	O-RING	1	1	1	1	1	1
10016❖❖	18D692	NUT, support front, PSM25	1	1	1	1	1	1
10017❖❖	18D765 ⁽¹⁾	O-RING	1	1	1	1	1	1
10018	18D687	SLEEVE, bolt, M8, PSM25	4	4	4	4	4	4
10019	18D685	BLOCK, support, PSM25	1	1	1	1	1	1
10020	----	SCREW, M8 x 1.25-60, socket head	4	4	4	4	4	4
10021	18D955 ⁽¹⁾	O-RING, 25 x 2.65	1	1	1	1	1	1
10022	----	SCREW, M3 x 0.5-10, socket head, SST	1	1	1	1	1	1

❖ Parts included in Kit 2000914 (purchase separately).

❖ Parts included in Kit 2000915 (purchase separately).

(1) This part is not sold separately. Order Kit 2000921 when ordering this part.

Metering Module, 50 cc and 100 cc, 25S135, 25S165, 25S136 and 25S166



- ⚠ Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- ⚠ Metering tube direction should be appointing as shown.
- ⚠ Torque to 6.64-7.38 ft-lb (9-10 N•m).
- ⚠ Apply lubricant, synthetic, grease, 3 oz.
- ⚠ Apply fluid, TSL 8 oz bottle.

Metering Module Parts List, 50 cc and 100 cc

Ref.	Part	Description	Qty.											
			25S 142	25S 167	2000 830	2000 831	2001 635	2001 636	25S 143	25S 170	2000 832	2000 833	2001 637	2001 638
20001	18D720	BLOCK, tube, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20002	18D718	SLEEVE, guide, PSM	1	1	1	1	1	1	1	1	1	1	1	1
20003	----	SCREW, M4 x 0.7-10, button head, SST	2	2	2	2	2	2	2	2	2	2	2	2
20004	18D716	ROD, piston, PSM50	1	1	1	1	1	1						
	18D717	ROD, piston, PSM100							1	1	1	1	1	1
20005	18D714	BLOCK, push, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20006	18D712	BRACKET, bearing limit, PSM50,100	2	2	2	2	2	2	2	2	2	2	2	2
20007	18B942	BEARING	4	4	4	4	4	4	4	4	4	4	4	4
20008	----	SCREW, M3 x 0.5-8, socket	3	3	3	3	3	3	3	3	3	3	3	3
20009	18D709	ROD, guide, PSM50	4	4	4	4	4	4						
	18D710	ROD, guide, PSM100							4	4	4	4	4	4
20010	18D707	HINGE, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20011*◆★☼	18D690 ⁽¹⁾	O-RING	2	2	2	2	2	2	2	2	2	2	2	2
20012*	18D703	CYLINDER, 50, SST, PSM	1		1		1							
◆	18D606	CYLINDER, 50, CER, PSM		1		1		1						
★	18D704	CYLINDER, 100, SST, PSM							1		1		1	
☼	18D607	CYLINDER, 100, CER, PSM								1		1		1
20013*◆★☼	18D701	WASHER, support back, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20014*◆★☼	18D697	PISTON, 1800, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20015*◆★☼	18D751 ⁽¹⁾	O-RING	1	1	1	1	1	1	1	1	1	1	1	1
20016*◆★☼	18D694	NUT, support front, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20017*◆★☼	2002505 ⁽¹⁾	O-RING	1	1	1	1	1	1	1	1	1	1	1	1
20018	18D679	SLEEVE, bolt, M10, PSM50	4	4	4	4	4	4						
	18D688	SLEEVE, bolt, M10, PSM100							4	4	4	4	4	4
20019	18D686	BLOCK, support, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
20020	----	SCREW, M14 x 2.0-65, socket head	4	4	4	4	4	4						
	----	SCREW, M14 x 2.0-95, socket head							4	4	4	4	4	4
20021	18D955 ⁽¹⁾	O-RING, 25 x 2.65	1	1	1	1	1	1	1	1	1	1	1	1

* Parts included in Kit 2000916 (purchase separately).

◆ Parts included in Kit 2000917 (purchase separately).

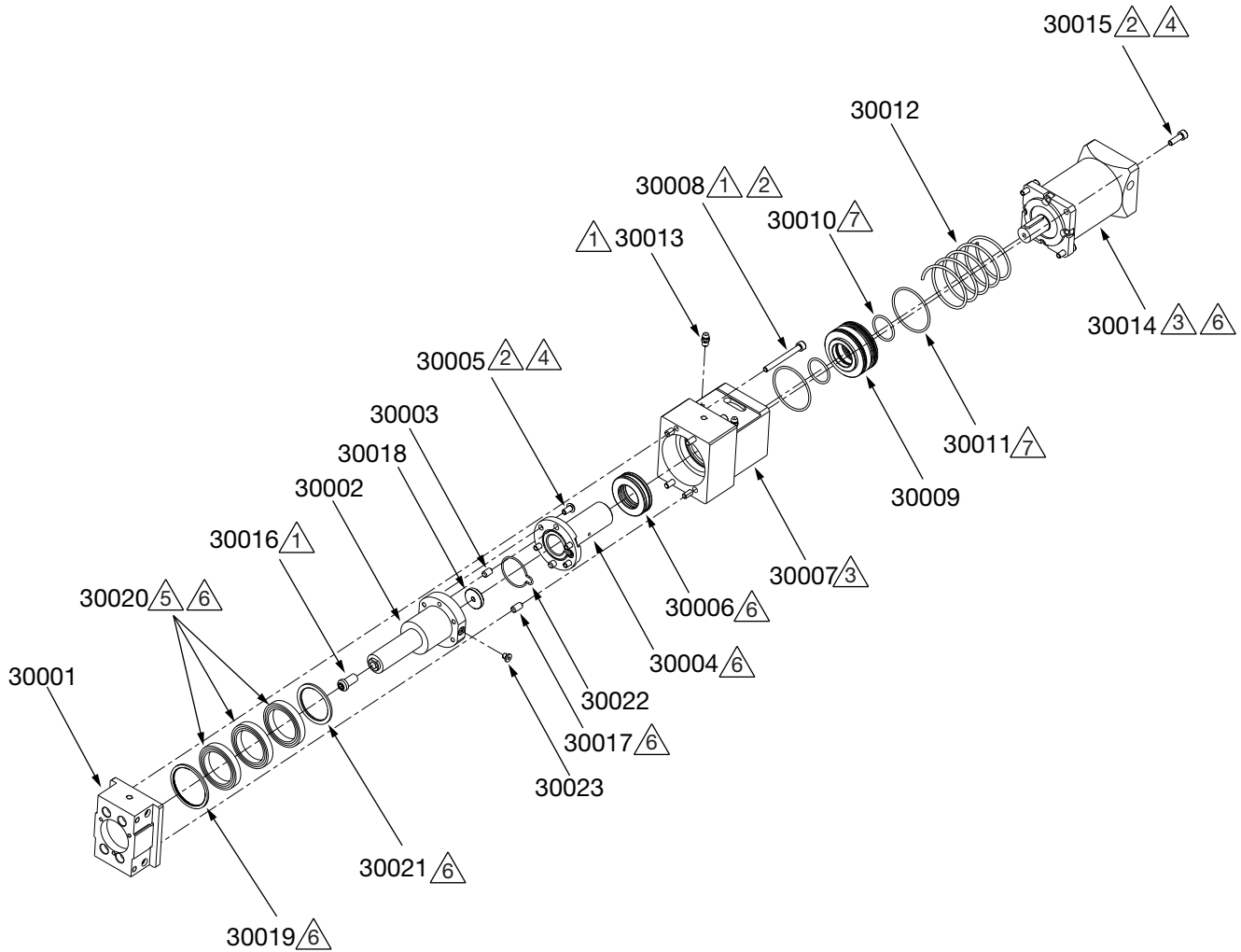
★ Parts included in Kit 2000918 (purchase separately).

☼ Parts included in Kit 2000919 (purchase separately).

⁽¹⁾ This part is not sold separately. Order Kit 2000922 when ordering this part.

Power Transmission Module

Power Transmission Module, 25 cc



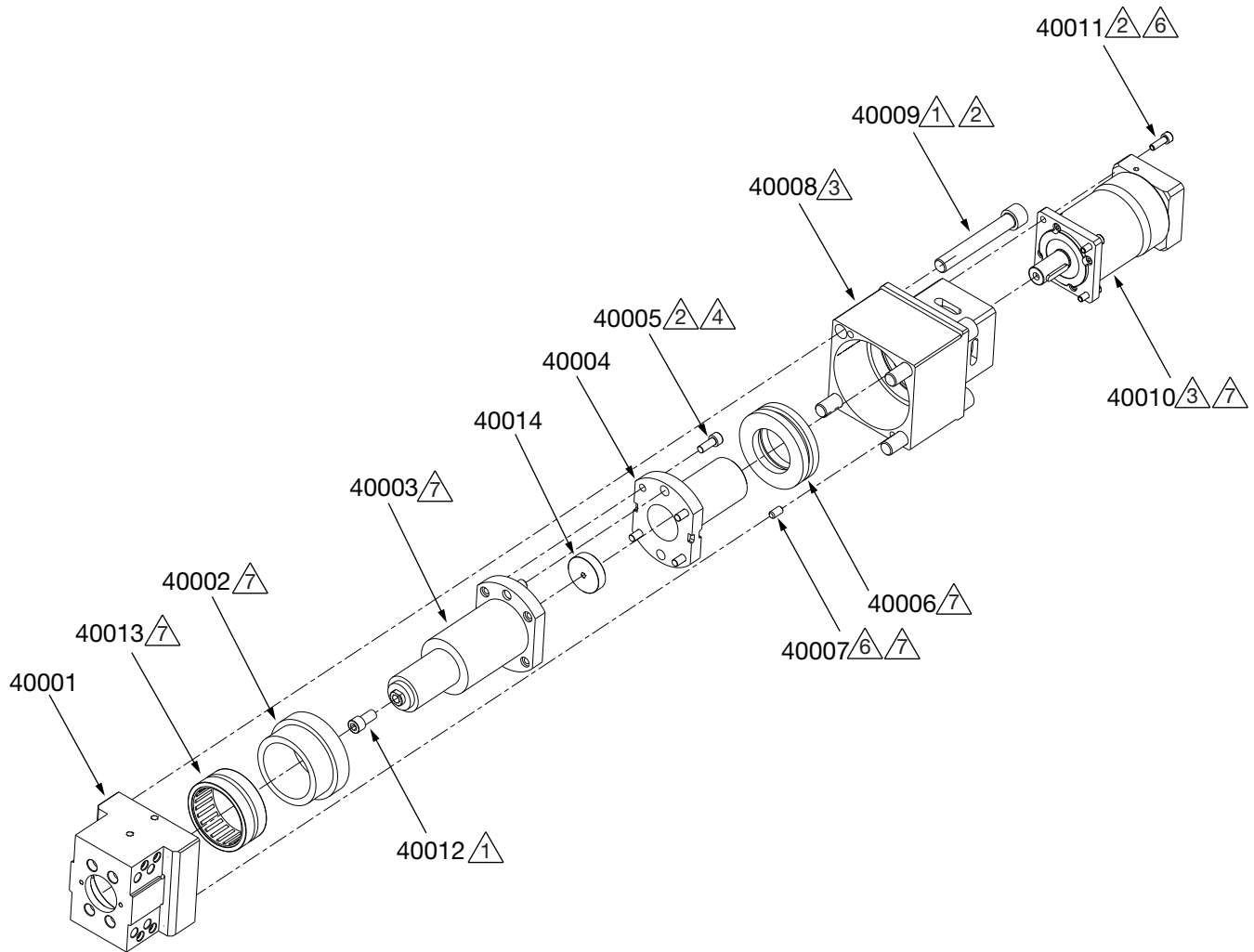
- 1** Torque to 1.7-2.2 ft-lb (2.3-3.0 N•m).
- 2** Apply sealant, Anaerobic, blue.
- 3** Installation direction as show.
- 4** Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
- 5** Open direction face to motor side.
- 6** Apply lubricant, synthetic, grease, 3 oz.
- 7** Apply fluid, TSL 8 oz bottle.








Power Transmission Module Parts List, 25 cc

Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
30001	18D673	BLOCK, sleeve, PSM25	1	1	1	1	1	1
30002	2002386	KIT, ball screw, nut, PSM25	1	1	1	1	1	1
30003	18D657	PIN, dowel, DIA 6-10	2	2	2	2	2	2
30004	18D661	ADAPTER, axle sleeve, PSM25	1	1	1	1	1	1
30005	----	SCREW, hexagon socket flat round head, M5 x 10	4	4	4	4	4	4
30006	18D659	BEARING, single thrust	1	1	1	1	1	1
30007	18D654	HOUSING, reduction box, PSM25	1	1	1	1	1	1
30008	----	SCREW, M5 x 0.8-50, socket head	4	4	4	4	4	4
30009	18D878	GUIDE, ring, PSM25	1	1	1	1	1	1
30010	18D763 ⁽¹⁾	O-RING	2	2	2	2	2	2
30011	18D764 ⁽¹⁾	O-RING	2	2	2	2	2	2
30012	18D880	SPRING, PSM25	1	1	1	1	1	1
30013	18D879	FITTING, zerk, PSM25	2	2	2	2	2	2
30014	18B973	BOX, reduction, ratio 20	1	1	1	1	1	1
30015	----	SCREW, M5 x 0.8-16, socket head, SST	4	4	4	4	4	4
30016	----	SCREW, M8 x 1.25-16, button head	2	2	2	2	2	2
30017	18D898	PIN, dowel, DIA 6-12	2	2	2	2	2	2
30018	2001215	GASKET, axle sleeve, PSM25	1	1	1	1	1	1
30019	2002401	RING, axle bumper, outer	1	1	1	1	1	1
30020	2002404	BEARING, 7807C, angular contact ball	3	3	3	3	3	3
30021	2002402	RING, axle bumper, inner	1	1	1	1	1	1
30022	----	O-RING, 33.6 x 1.5	1	1	1	1	1	1
30023	----	SCREW, M5 x 0.8-6.0, flat head, with o-ring	1	1	1	1	1	1

(1) This part is not sold separately. Order Kit 2000921 when ordering this part.

Power Transmission Module, 50 cc and 100 cc



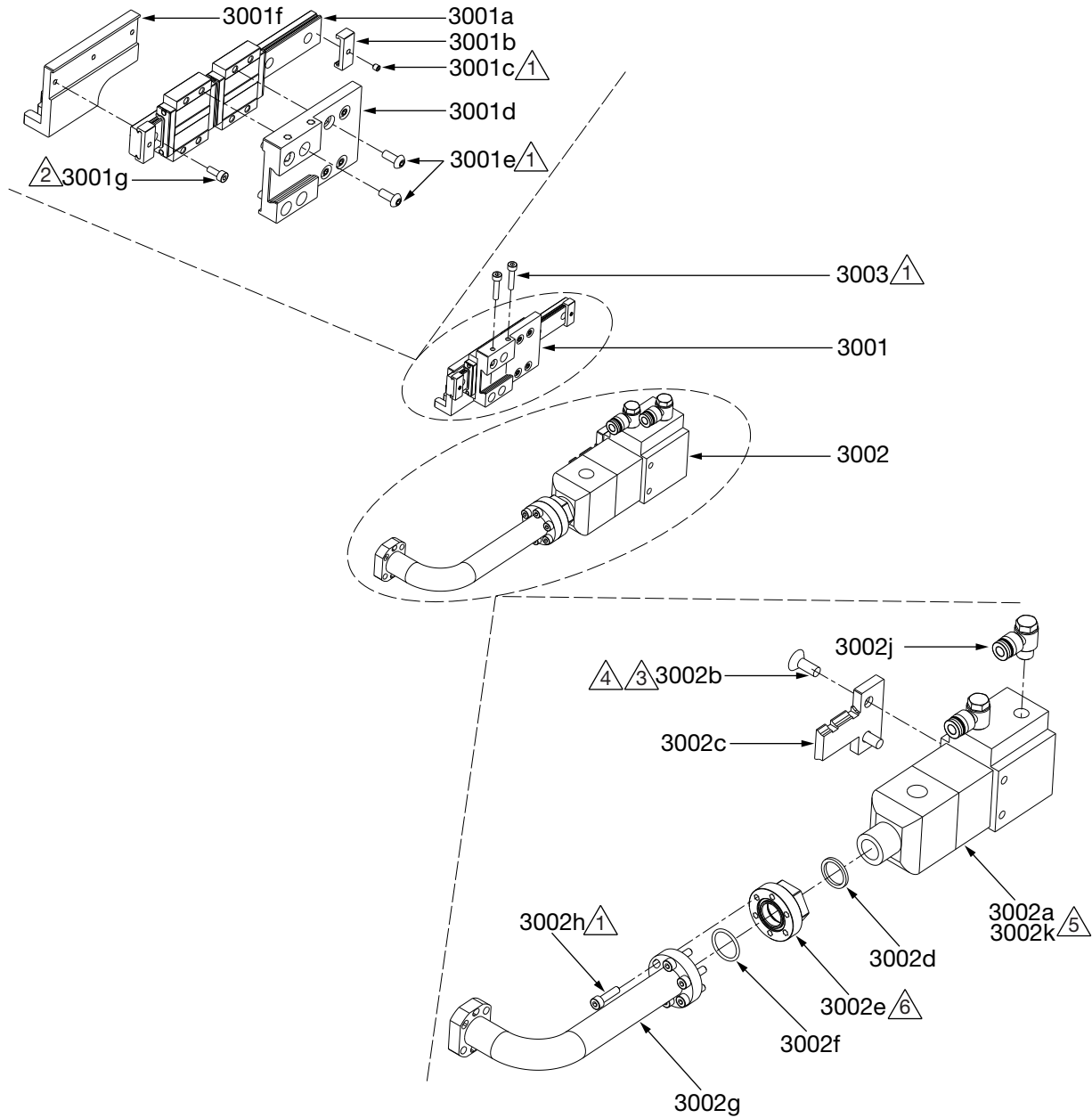
-  Torque to 5.90-6.64 ft-lb (8.0-9.0 N•m).
-  Apply sealant, Anaerobic, blue.
-  Installation direction as show.
-  Torque to 2.21-2.95 ft-lb (3.0-4.0 N•m).
-  Open direction face to motor side.
-  Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
-  Apply lubricant, synthetic, grease, 3 oz.

Power Transmission Module Parts List, 50 cc and 100 cc

Ref.	Part	Description	Qty.											
			25S 142	25S 167	2000 830	2000 831	2001 635	2001 636	25S 143	25S 170	2000 832	2000 833	2001 637	2001 638
40001	18D674	BLOCK, sleeve, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
40002	18D672	BEARING, composite	1	1	1	1	1	1	1	1	1	1	1	1
40003	2002387	KIT, ball screw, nut, PSM50	1	1	1	1	1	1						
	2002388	KIT, ball screw, nut, PSM100							1	1	1	1	1	1
40004	18D663	ADAPTER, axle sleeve, PSM50	1	1	1	1	1	1						
	18D667	ADAPTER, axle sleeve, PSM100							1	1	1	1	1	1
40005	----	SCREW, M6 x 1.0-16, socket, SST	4	4	4	4	4	4	4	4	4	4	4	4
40006	18D660	BEARING, single thrust	1	1	1	1	1	1	1	1	1	1	1	1
40007	18D898	PIN, dowel, DIA 6-12	2	2	2	2	2	2	2	2	2	2	2	2
40008	18D655	HOUSING, reduction box, PSM50	1	1	1	1	1	1						
	18D656	HOUSING, reduction box, PSM100							1	1	1	1	1	1
40009	----	SCREW, M12 x 1.75-85, socket head	4	4	4	4	4	4	4	4	4	4	4	4
40010	18D723	BOX, reduction, ratio 60	1	1	1	1	1	1	1	1	1	1	1	1
40011	----	SCREW, M5 x 0.8-16, socket head, SST	4	4	4	4	4	4	4	4	4	4	4	4
40012	----	SCREW, M8 x 1.25-16, socket head	2	2	2	2	2	2	2	2	2	2	2	2
40013	18D895	BEARING, needle bearing	1	1	1	1	1	1	1	1	1	1	1	1
40014	2000786	GASKET, axle sleeve, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1

Supply Pump Module

Supply Pump Module, 25 cc



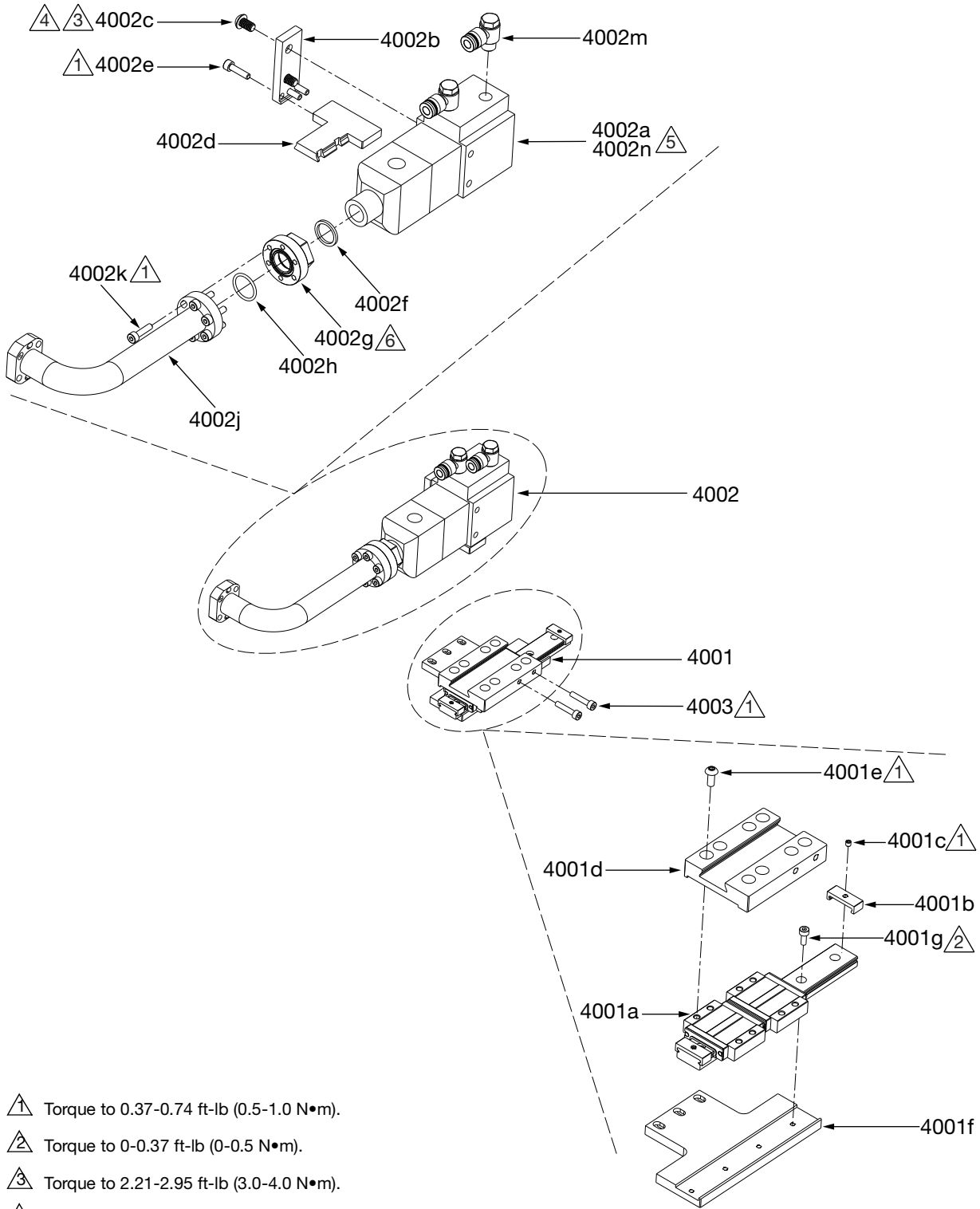
- △ Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- △ Torque to 0-0.37 ft-lb (0-0.5 N•m).
- △ Torque to 2.21-2.95 ft-lb (3.0-4.0 N•m).
- △ Apply sealant, Anaerobic, blue.
- △ Adjust the direction to keep fitting thread as top surface.
- △ Apply sealant, pipe, SST.

Supply Pump Module Parts List, 25 cc

Ref.	Part	Description	Qty.					
			25S141	25S148	2000828	2000829	2001633	2001634
3001	25S124	MODULE, slide track, PSM25	1	1	1	1	1	1
3001a	18D638	GUIDE, rail, sliders, PSM25,50	1	1	1	1	1	1
3001b	18D637	BLOCK, stop, done stop, PSM	2	2	2	2	2	2
3001c	----	SCREW, set, M3 x 0.5-3, flat	2	2	2	2	2	2
3001d	18D635	PLATE, mounting, base, PSM25	1	1	1	1	1	1
3001e	----	SCREW, M4 x 0.7-10, button head, SST	8	8	8	8	8	8
3001f	18D633	PLATE, mounting, valve, PSM25	1	1	1	1	1	1
3001g	----	SCREW, M3 x 0.5-8, socket	3	3	3	3	3	3
3002	----	MODULE, 1K valve, PSM25, SST	1		1		1	
	----	MODULE, 1K valve, PSM25, HW		1		1		1
3002a	----	VALVE, 1K	1	1	1	1	1	1
3002b	----	SCREW, M6 x 1.0-16, flat head	2	2	2	2	2	2
3002c	18D628	PLATE, mounting, valve, PSM25	1	1	1	1	1	1
3002d	18D683	SEAL, inlet valve, PSM	1	1	1	1	1	1
3002e	18D627	ADAPTER, 3/4-16 UNF, PSM	1	1	1	1	1	1
3002f	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1
3002g	18D625	PIPE, bend, PSM	1	1	1	1	1	1
3002h	----	SCREW, M6 x 1.0-16, socket head	6	6	6	6	6	6
3002j	18C103	FITTING, DIA 6, PT1/8, PV	2	2	2	2	2	2
3002k	----	VALVE, elite 1K, no-snaffback		1		1		1
3003	----	SCREW, M4 x 0.7-20, socket	2	2	2	2	2	2

(1) This part is not sold separately. Order Kit 2000921 when ordering this part.

Supply Pump Module, 50 cc and 100 cc



- ⚠ Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- ⚠ Torque to 0-0.37 ft-lb (0-0.5 N•m).
- ⚠ Torque to 2.21-2.95 ft-lb (3.0-4.0 N•m).
- ⚠ Apply sealant, Anaerobic, blue.
- ⚠ Adjust the direction to keep fitting thread as top surface.
- ⚠ Apply sealant, pipe, SST.

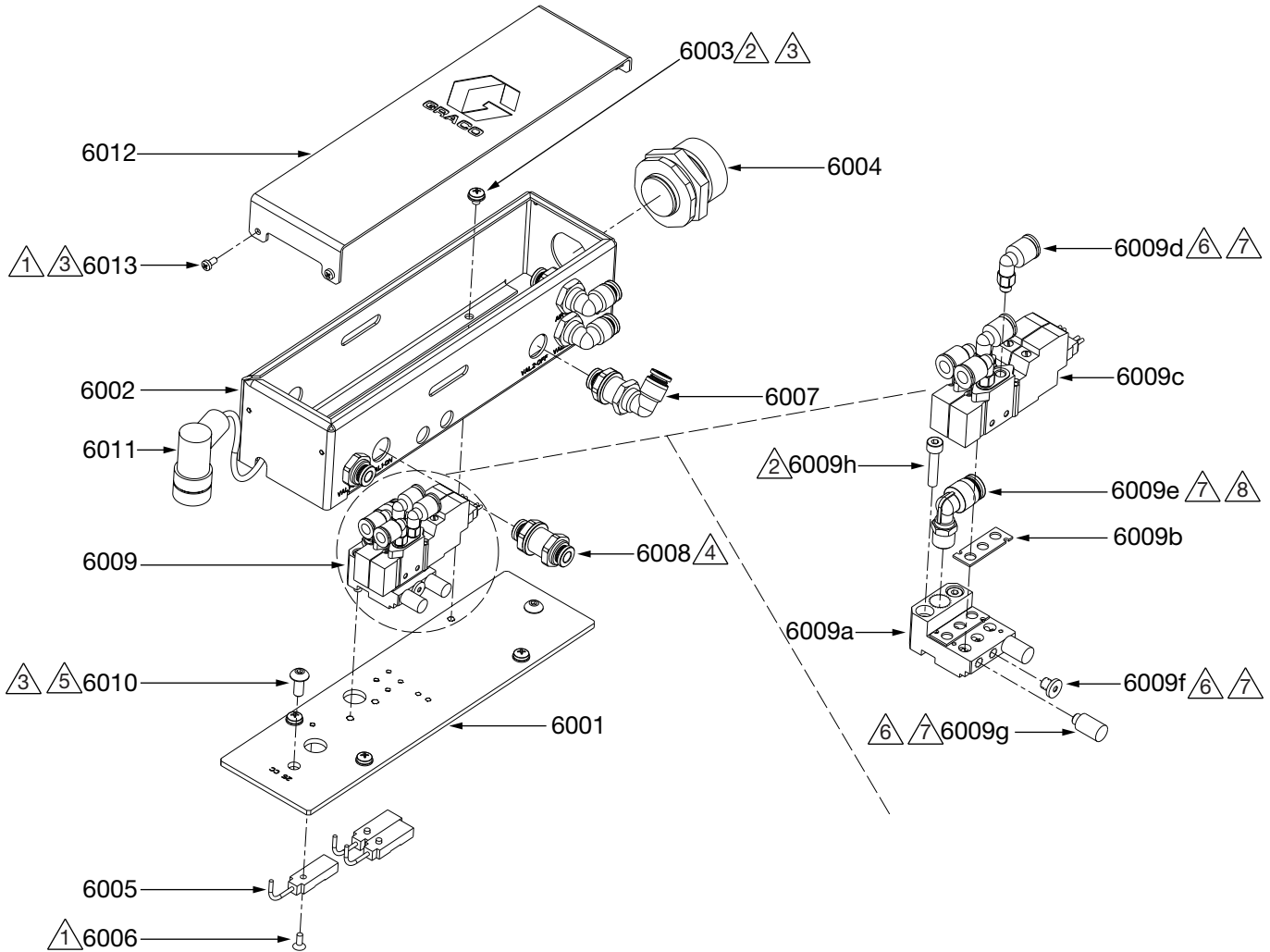
Supply Pump Module Parts List, 50 cc and 100 cc

Ref.	Part	Description	Qty.											
			25S 142	25S 167	2000 830	2000 831	2001 635	2001 636	25S 143	25S 170	2000 832	2000 833	2001 637	2001 638
4001	25S125	MODULE, slide track, PSM50	1	1	1	1	1	1						
	25S126	MODULE, slide track, PSM100							1	1	1	1	1	1
4001a	18D638	GUIDE, rail, sliders, PSM25,50	1	1	1	1	1	1						
	18D640	GUIDE, rail, sliders, PSM100							1	1	1	1	1	1
4001b	18D637	BLOCK, stop, done stop, PSM	2	2	2	2	2	2	2	2	2	2	2	2
4001c	----	SCREW, set, M3 x 0.5-3, flat	2	2	2	2	2	2	2	2	2	2	2	2
4001d	18D636	PLATE, mounting, base, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
4001e	----	SCREW, M4 x 0.7-10, button head, SST	8	8	8	8	8	8	8	8	8	8	8	8
4001f	18D634	PLATE, mounting, base, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
4001g	----	SCREW, M3 x 0.5-8, socket	4	4	4	4	4	4	4	4	4	4	4	4
4002	----	MODULE, 1K valve, PSM50, 100, SST	1		1		1		1		1		1	
	----	MODULE, 1K valve, PSM50, 100, HW		1		1		1		1		1		1
4002a	----	VALVE, 1K	1	1	1	1	1	1	1	1	1	1	1	1
4002b	18D630	PLATE, mounting, valve, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
4002c	----	SCREW, M6 x 1-10, button head, hex	2	2	2	2	2	2	2	2	2	2	2	2
4002d	18D629	PLATE, mounting, valve, PSM50,100	1	1	1	1	1	1	1	1	1	1	1	1
4002e	----	SCREW, M4 x 0.7-16, socket head, SST	3	3	3	3	3	3	3	3	3	3	3	3
4002f	18D683	SEAL, inlet valve, PSM	1	1	1	1	1	1	1	1	1	1	1	1
4002g	18D627	ADAPTER, 3/4-16 UNF, PSM	1	1	1	1	1	1	1	1	1	1	1	1
4002h	18D626 ⁽¹⁾	O-RING	1	1	1	1	1	1	1	1	1	1	1	1
4002j	18D625	PIPE, bend, PSM	1	1	1	1	1	1	1	1	1	1	1	1
4002k	----	SCREW, M6 x 1.0-16, socket head	6	6	6	6	6	6	6	6	6	6	6	6
4002m	18C103	FITTING, DIA 6, PT1/8, PV	2	2	2	2	2	2	2	2	2	2	2	2
4002n	----	VALVE, elite 1K, no-snaffback		1		1		1		1		1		1
4003	----	SCREW, M4 x 0.7-20, socket	2	2	2	2	2	2	2	2	2	2	2	2

(1) This part is not sold separately. Order Kit 2000922
when ordering this part.

Junction Box

25S119, 25S120, and 25S121



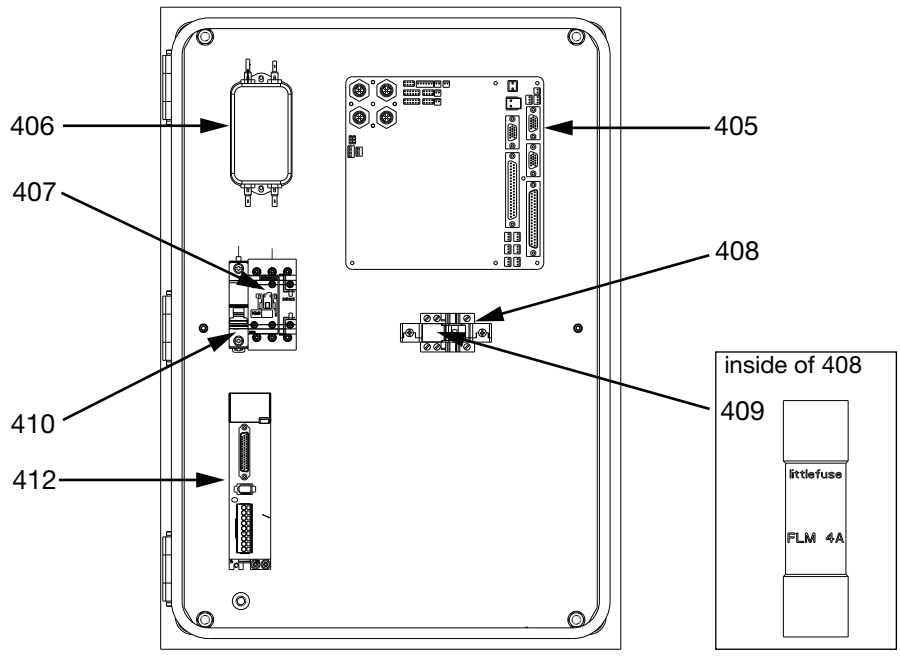
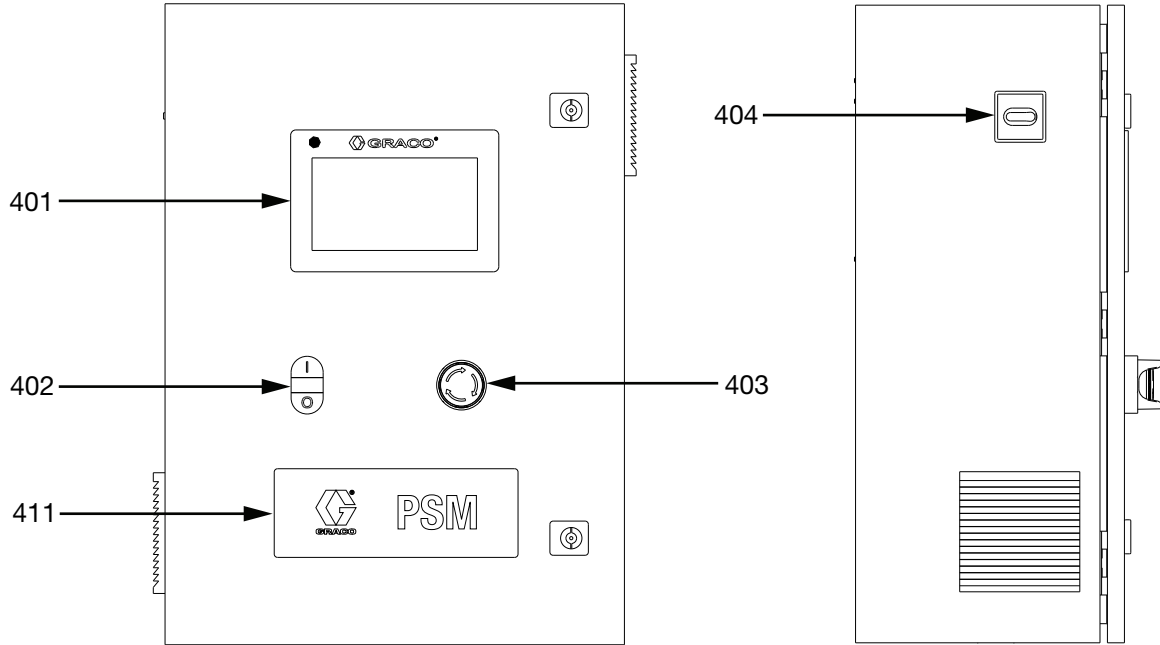
- △1 Torque to 0-0.37 ft-lb (0-0.5 N•m).
- △2 Torque to 0.37-0.74 ft-lb (0.5-1.0 N•m).
- △3 Apply sealant, Anaerobic, blue.
- △4 Rubber gasket should be assembled on the outer surface.
- △5 Torque to 1.25-1.7 ft-lb (1.7-2.3 N•m).
- △6 Torque to 1.70-2.58 ft-lb (2.3-3.5 N•m).
- △7 Apply sealant, pipe, SST.
- △8 Torque to 4.43-5.16 ft-lb (6.0-7.0 N•m).

Junction Box Parts List

Ref.	Part	Description	Qty.																	
			25 S1 41	25 S1 48	200 08 8	200 08 9	200 16 3	200 16 3	25 S1 42	25 S1 67	200 08 0	200 08 1	200 16 5	200 16 6	25 S1 43	25 S1 70	200 08 2	200 08 3	200 16 7	200 16 8
6001	----	PLATE, junction box, PSM25	1	1	1	1	1	1												
	----	PLATE, junction box, PSM50							1	1	1	1	1	1						
	----	PLATE, junction box, PSM100													1	1	1	1	1	1
6002	----	FRAME, control, PSM25	1	1	1	1	1	1												
	----	FRAME, control, PSM50,100							1	1	1	1	1	1	1	1	1	1	1	1
6003	----	SCREW, M4 x 0.7-5, Phillips, with washer	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6004	----	ADAPTER, WF20, M26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6005	----	SENSOR, position	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
6006	----	SCREW, M3 x 0.5-8, flat head, SST	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
6007	----	FITTING, DIA 6, M14, PLM6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
6008	----	FITTING, DIA 6, M14 x 1, PSM 25, 50	2	2	2	2	2	2	2	2	2	2	2							
	----	FITTING, DIA 6, M14 x 1, PSM 100												2	2	2	2	2	2	2
6009	25S118	MODULE, solenoid valve, PSM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6009a	----	BLOCK, support, PSM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6009b	----	GASKET, rubber, PSM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6009c	----	KIT, solenoid valve, PSM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6009d	----	FITTING, DIA 6, M5 x 0.8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6009e	----	FITTING, DIA 6, PT1/8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6009f	----	PLUG, blind flange, M5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6009g	----	MUFFLER, M5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6009h	----	SCREW, M4 x 0.7-20, socket	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6010	----	SCREW, M5 x 0.8-12, button head, SST	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6011	----	FITTING, transmitter, pressure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6012	----	COVER, control, PSM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6013	----	SCREW, M3 x 0.5-6, pan head, SST	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Control Box

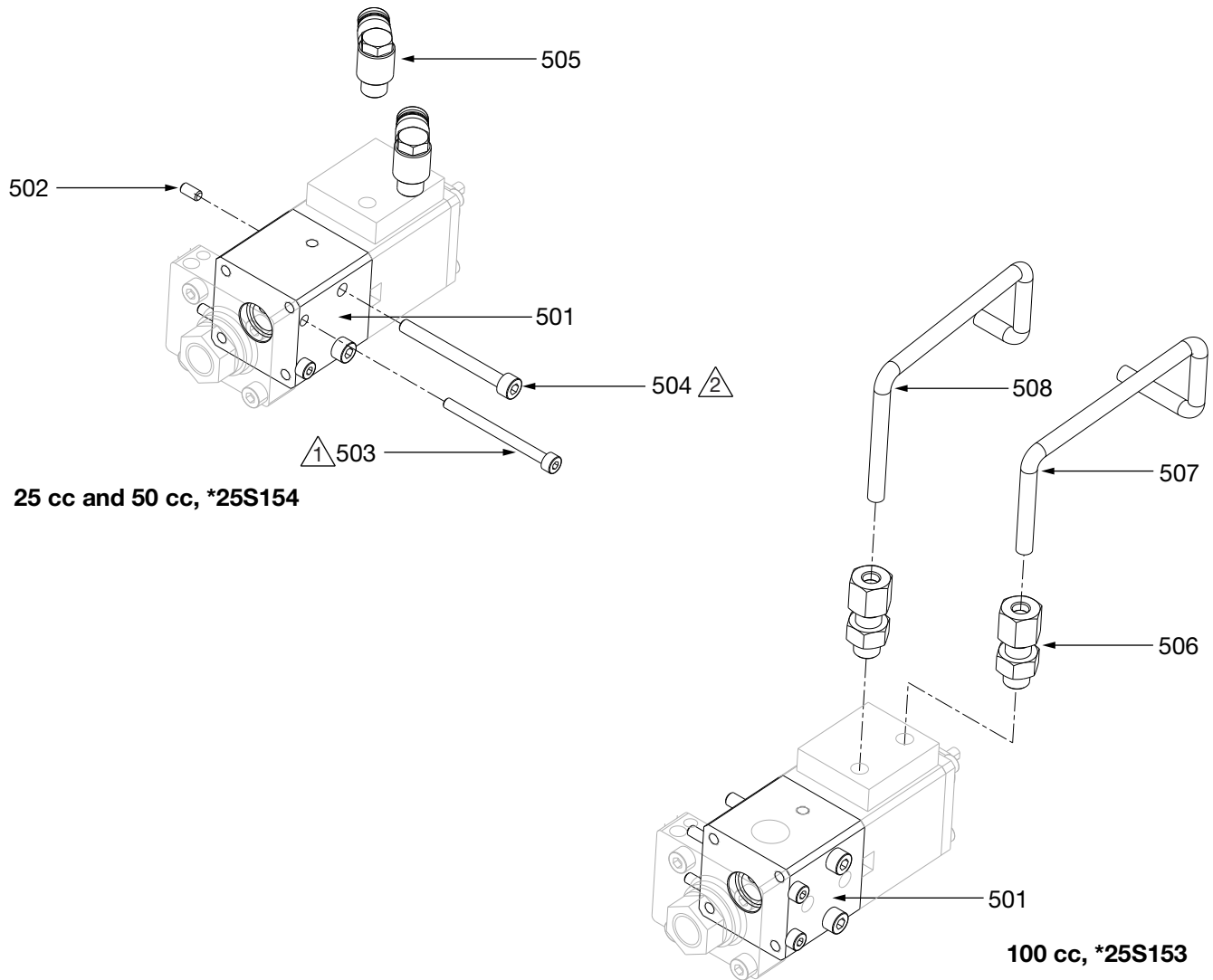
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Control Box Parts List

Ref.	Part	Description	Qty.
401	CU7788	DISPLAY, PCB	1
402	2000178	STARTER, operation	1
403	2000176	EMERGENCY STOPER	1
404	2000179	SWITCH, power	1
405	2000267	BOARD, PCBA	1
406	CU0014	CABLE, power supply	1
407	CU0017	CONNECTOR, 3P, 1NO-1NC, Siemens	1
408	CU0018	HOLDER, fuse, ABB	1
409	CU0341	FUSE, FLM-4A	1
410	CU0022	CIRCUIT BRKR, 1P, 6A, Schneider	1
411	2000316	BRAND, PSM	1
412	2000343	DRIVER, servo, INNOVANCE	1

Dispense Valve Module



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

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

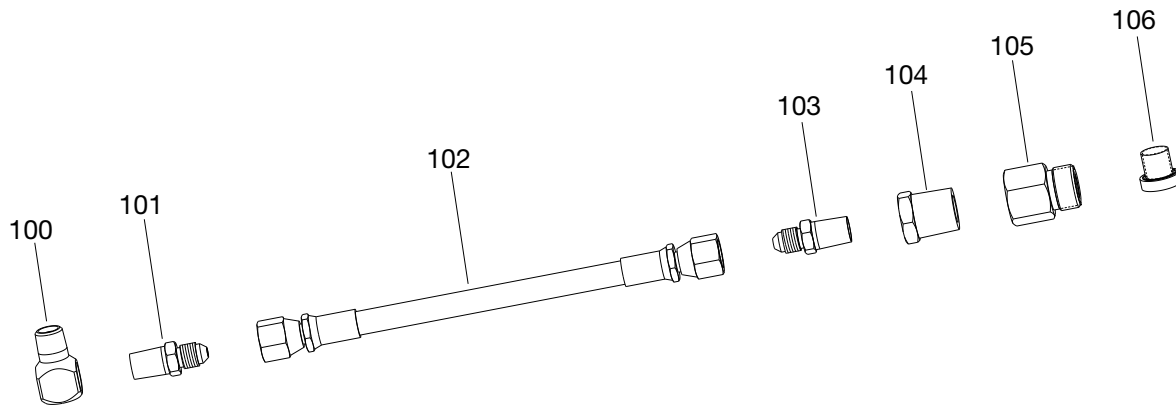
* The valve sketches are 25S154 and 25S153.
 For more details of valves of 2000814,
 2000815, 2001639 and 2001640, refer to the
 related manual of IQ Dispense Valve. See
Related Manuals, page 2.

Dispense Valve Module Parts List

Ref.	Part	Description	Qty.																	
			25S 141	25S 148	200 082 8	200 082 9	200 163 3	200 163 4	25S 142	25S 167	200 083 0	200 083 1	200 163 5	200 163 6	25S 143	25S 170	200 083 2	200 083 3	200 163 7	200 163 8
501	18D702	BLOCK, IQ valve	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
502	18D684	PIN, dowel, DIA 4-8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
503	----	SCREW, M5 x 0.8-50, socket head	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
504	----	SCREW, M4 x 0.7-50, socket head	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
505	18C103	FITTING, DIA 6, PT1/8, PV	2	2	2	2	2	2	2	2	2	2	2							
506	18D793	FITTING, DIA 4, PT1/8, PV												2	2	2	2	2	2	2
507	18D696	PIPE, steel, PSM100, open												1	1	1	1	1	1	1
508	18D700	PIPE, steel, PSM100, close												1	1	1	1	1	1	1

Kits and Accessories

Remote Kits



Kits	Description	100	101	102	103	104	105	106
2000712	KIT, remote connection, ORFS, PSM	----	----	----	----	----	----	----
2000842	KIT, hose, ASSY, JIC fitting, PSM, 3/32 x 60	166866	124961	16W047	124961	102022		
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	18D958	18D615
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		16C520	112100	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			16C522				
2000856	KIT, hose, ASSY, JIC fitting, PSM, 1/2 x 36	116703		16C530	C20700	----		
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				

Sealing Kits

Part	Description	Qty.
2000921	KIT, sealing, PSM, 25 cc	1
2000922	KIT, sealing, PSM, 50/100 cc	1

Cables

Part	Description	Qty.
2000277	CABLE, servo motor, 10 m	1
2000274	CABLE, servo encode, 10 m	1
2000270	CABLE, junction box, 10 m	1

Technical Specifications

PSM System		
	US	Metric
Maximum Inlet Fluid Pressure	25 cc: 1200 psi 50 cc: 3000 psi 100 cc: 3000 psi	25 cc: 8.3 MPa, 83 bar 50 cc: 20.7 MPa, 207 bar 100 cc: 20.7 MPa, 207 bar
Maximum Working Fluid Pressure	25 cc: 1200 psi 50 cc: 3000 psi 100 cc: 3000 psi	25 cc: 8.3 MPa, 83 bar 50 cc: 20.7 MPa, 207 bar 100 cc: 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	303/304 Stainless Steel, Hard Chrome, Ceramic, UHMWPE, NBR, PTFE	
Shot Size Range ⁽¹⁾	25 cc: 0.01–25 cc 50 cc: 0.2–50 cc 100 cc: 0.5–100 cc	
Shot Size Repeatability	1%	
Maximum Flowrate ⁽²⁾	25 cc: 10 cc/s 50 cc: 18 cc/s 100 cc: 20 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 Size	1/4 in. npt (f)	
Weight		
PSM Machine	25 cc: 24 lb 50 cc: 28 lb 100 cc: 35 lb	25 cc: 11 kg 50 cc: 13 kg 100 cc: 16 kg
PSM Control Box	71 lb	32 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 3A9277C

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