

# Tandem Supply Systems

313529P

EN

***For use with non-heated bulk supply of medium to high viscosity sealants and adhesive materials. For professional use only.***

**Not approved for use in European explosive atmosphere locations.**

*125 psi (0.9 MPa, 9 bar) Maximum Air Inlet Pressure - S20 3 in. rams*

*150 psi (1.0 MPa, 10 bar) Maximum Air Inlet Pressure - D60 and D200 3 in. rams*

*125 psi (0.9 MPa, 9 bar) Maximum Air Inlet Pressure - D200S 6.5 in. rams*

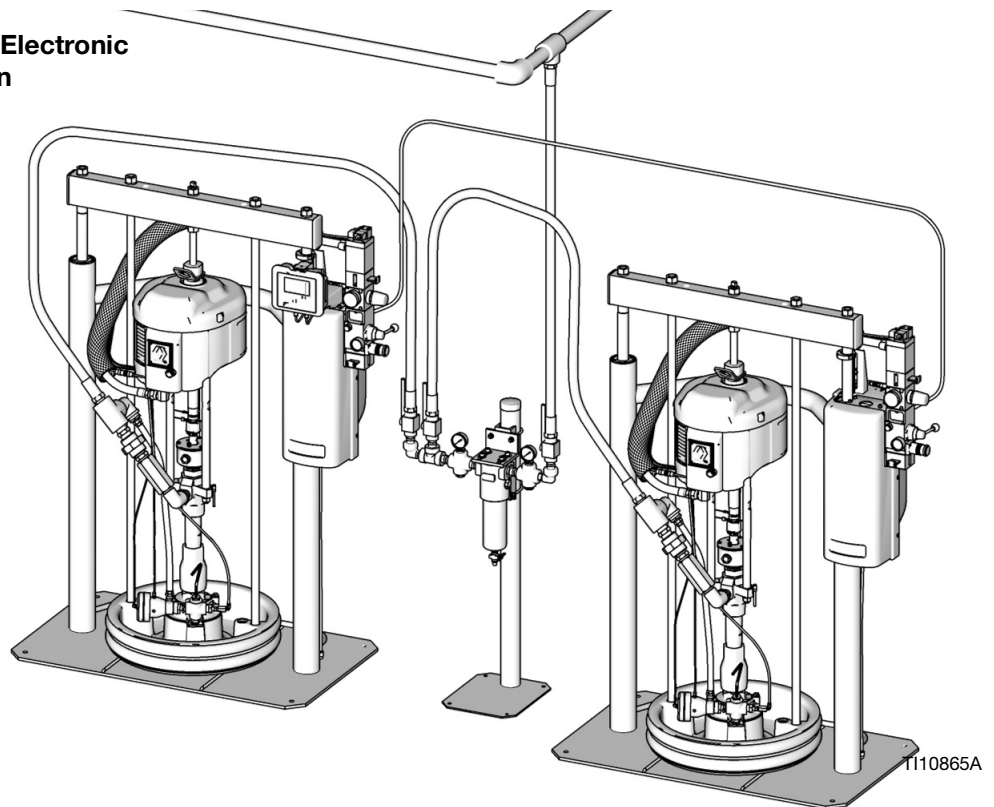


**Important Safety Instructions**

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

The Graco Control Architecture Electric Components are Listed in Intertek's Directory of Listed Products.

**D200 Rams with Electronic Crossover Shown**



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## Related Manuals

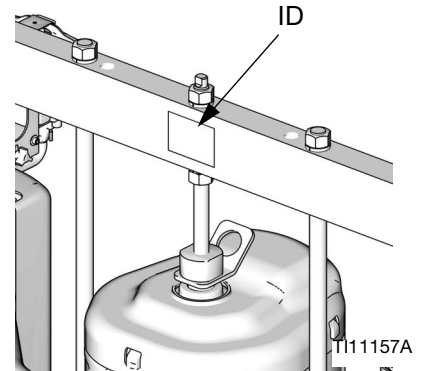
Component Manuals in U.S. English:

Manual	Description
313529	Tandem Supply Systems Repair-Parts
313526	Supply Systems Operation
313527	Supply Systems Repair-Parts
334198	55 Gallon (200 Liter), 16 Gallon (60 Liter), and 5 Gallon (20 Liter) Ram Modules Repair-Parts
312375	Check-Mate® Displacement Pumps Instructions-Parts
312376	Check-Mate® Pump Packages Instruction-Parts
311827	Dura-Flo™ Displacement Pumps (145cc, 180cc, 220cc, 290cc) Instructions-Parts Manual
311825	Dura-Flo™ Displacement Pumps (430cc, 580cc) Instructions-Parts Manual
311717	Carbon Steel Displacement Pump (1000cc) Instructions-Parts Manual
311828	Dura-Flo™ Pump Packages (145cc, 180cc, 220cc, 290cc) Instructions-Parts Manual
311826	Dura-Flo™ Pump Packages (430cc, 580cc) Instructions-Parts Manual
311833	Two-Ball NXT™ Pump Packages (1000cc) Instructions-Parts Manual
312889	60 cc Check-Mate Displacement Pump Repair Parts Manual

Manual	Description
312467	100 cc Check-Mate Displacement Pump Repair Parts Manual
312468	200 cc Check-Mate Displacement Pump Repair Parts Manual
312469	250 cc Check-Mate Displacement Pump Repair Parts Manual
312470	500 cc Check-Mate Displacement Pump Repair Parts Manual
311238	NXT™ Air Motor (Nxxxxx models) Instructions-Parts
312796	NXT™ Air Motor (Mxxxxx models) Instructions-Parts
312374	Air Controls Instructions-Parts
312491	Pump Fluid Purge Kit
312492	Drum Roller Kit Instruction
312493	Light Tower Kit Instruction
312864	Communications Gateway Module, Instructions-Parts
313138	Supply System Communications Gateway Module Installation Kit, Instructions-Parts
406681	Platen Cover Kit
334048	EPDM Hose Wiper Kit
334644	Xtreme® XL Air Motor, Instructions-Parts

# Models

Check the identification plate (ID) for the 6-digit part number of your tandem system. Use the following matrix to define the construction of your system, based on the six digits. For example, Tandem Part No. **TC2414** represents a Check-Mate tandem system (**TC**), pump (**24**), crossover option (**1**), and platen/ram option (**4**).



**NOTE:**

Systems with the TD as the first and second digits are Dura-Flo tandem systems.

Some configurations in the following matrix cannot be built. See the Product Selection Guide for available systems.

To order replacement parts, see Parts on page 16. The digits in the matrix do not correspond to the Ref. Nos. in the Parts drawings and lists.

TC	24	1						4	
First and Second Digit	Third and Fourth Digit	Fifth Digit							Sixth Digit
		Crossover Options							Platen/Ram Options
		Pump Code	Electronic Crossover (Smart Motors only)	Pneumatic Crossover (Standard Motors only)	Fluid Filter	Depressurize/ Recirculate Valve Material		Ram Size	See Table 1 for Selections
Carbon Steel	SST								
TC (Tandem System with Check-Mate displacement pump)	(See Table 2 for 2-digit Check-Mate pump code)	1						n/a	
		2						n/a	
		3						n/a	
		4						n/a	
		5						n/a	
		6						n/a	
TD (Tandem System with Dura-Flo displacement pump)	(See Table 3 for 2-digit Dura-Flo pump code)	7						S20, D60, D200, (3 in.)	
		8						D200S, (6.5 in.)	

All supply systems with DataTrak and 24 VDC or 100-240 VAC power supplies are ETL approved.



Table 1: Platen/Ram Options

Sixth Digit	Platen Size	Platen Style	Platen Material	Seal Material	Ram Size	Voltage
<b>2</b>	20 L (5 Gal)	Flat, Single Wiper	CS	Polyurethane	S20, 3 in.	none
<b>3</b>	20 L (5 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	S20, 3 in.	none
<b>7</b>	20 L (5 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	none
<b>8</b>	20 L (5 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	100-240 VAC
<b>9</b>	20 L (5 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	24 VDC
<b>0</b>	30 L (8 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	none
<b>D</b>	30 L (8 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	100-240 VAC
<b>E</b>	30 L (8 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	24 VDC
<b>K</b>	30 L (8 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	none
<b>N</b>	30 L (8 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	100-240 VAC
<b>P</b>	30 L (8 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	24 VDC
<b>U</b>	60 L (16 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	none
<b>V</b>	60 L (16 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	100-240 VAC
<b>W</b>	60 L (16 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D60, 3 in.	24 VDC
<b>X</b>	60 L (16 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	none
<b>Y</b>	60 L (16 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	100-240 VAC
<b>Z</b>	60 L (16 Gal)	Flat, Dual Wiper	CS	Polyurethane	D60, 3 in.	24 VDC
<b>4</b>	115L (30 Gal)	D Style	CS	EPDM	D200, 3 in.	none
<b>1</b>	20 L (5 Gal)	Flat, Single Wiper	SST	PTFE-Coated Nitrile	D200, 3 in.	none
<b>6</b>	20 L (5 Gal)	Flat, Dual Wiper	CS	Polyurethane	D200, 3 in.	none
<b>A</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200, 3 in.	none
<b>B</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200, 3 in.	100-240 VAC
<b>C</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200, 3 in.	24 VDC
<b>F</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200S, 6.5 in.	none
<b>G</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200S, 6.5 in.	100-240 VAC
<b>H</b>	200 L (55 Gal)	Dual O-ring	AL	PTFE-Coated EPDM	D200S, 6.5 in.	24 VDC
<b>J</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200, 3 in.	none
<b>L</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200, 3 in.	100-240 VAC
<b>M</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200, 3 in.	24 VDC
<b>R</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200S, 6.5 in.	none
<b>S</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200S, 6.5 in.	100-240 VAC
<b>T</b>	200 L (55 Gal)	Dual O-ring	AL	EPDM	D200S, 6.5 in.	24 VDC

Table 2: Check-Mate Pump Identification Code/Part No. Index

Pump Code	Pump Part No. (see manual 312376)	Pump Code	Pump Part No. (see manual 312376)	Pump Code	Pump Part No. (see manual 312376)	Pump Code	Pump Part No. (see manual 312376)
<b>NXT 200/CM 60</b>		81	P38SCS	<b>NXT 2200/CM 200</b>		<b>NXT 6500/CM 250</b>	
4A	P05LCS	82	P38SCM	21	P23LCS	39	P55LCS
4B	P05LCM	83	P38SSS	22	P23LCM	3A	P55LCM
4C	P05LSS	84	P38SSM	23	P23RCS	3B	P55RCS
4F	P05LSM	<b>NXT 1800/CM 60</b>		24	P23RCM	3C	P55RCM
<b>NXT 400/CM 60</b>		9A	P61LCS	25	P23LSS	3F	P55LSS
6A	P11LCS	9B	P61LCM	26	P23LSM	3G	P55LSM
6B	P11LCM	9C	P61LSS	27	P23RSS	3H	P55RSS
6C	P11LSS	9F	P61LSM	28	P23RSM	3J	P55RSM
6F	P11LSM	9G	P61RCS	<b>NXT 3400/CM 200</b>		<b>Xtreme XL/CM 250</b>	
6G	P11RCS	9H	P61RCM	29	P36LCS	3L	P85LCS
6H	P11RCM	9J	P61RSS	2A	P36LCM	3M	P85LCM
6J	P11RSS	9K	P61RSM	2B	P36RCS	3R	P85LSS
6K	P11RSM	91	P61SCS	2C	P36RCM	3S	P85LSM
61	P11SCS	92	P61SCM	2F	P36LSS	<b>NXT 3400/CM 500</b>	
62	P11SCM	93	P61SSS	2G	P36LSM	51	P14LCS
63	P11SSS	94	P61SSM	2H	P36RSS	52	P14LCM
64	P11SSM	<b>NXT 2200/CM 100</b>		2J	P36RSM	53	P14RCS
<b>NXT 700/CM 60</b>		11	P40LCS	<b>NXT 6500/CM 200</b>		54	P14RCM
7A	P20LCS	12	P40LCM	2L	P68LCS	55	P14LSS
7B	P20LCM	1F	P40LSS	2M	P68LCM	56	P14LSM
7C	P20LSS	1G	P40LSM	2R	P68RCS	57	P14RSS
7F	P20LSM	13	P40RCS	2S	P68RCM	58	P14RSM
7G	P20RCS	14	P40RCM	2T	P68LSS	<b>NXT 6500/CM 500</b>	
7H	P20RCM	1H	P40RSS	2U	P68LSM	59	P26LCS
7J	P20RSS	1J	P40RSM	2W	P68RSS	5A	P26LCM
7K	P20RSM	10	P40SSS	2Y	P68RSM	5B	P26RCS
71	P20SCS	1A	P40SSM	20	P68SCS	5C	P26RCM
72	P20SCM	19	P40SCS	<b>NXT 3400/CM 250</b>		5F	P26LSS
73	P20SSS	<b>NXT 3400/CM 100</b>		31	P29LCS	5G	P26LSM
74	P20SSM	15	P63LCS	32	P29LCM	5H	P26RSS
<b>NXT 1200/CM 60</b>		16	P63LCM	33	P29RCS	5J	P26RSM
8A	P38LCS	1T	P63LSS	34	P29RCM	<b>Xtreme XL/CM 500</b>	
8B	P38LCM	1U	P63LSM	35	P29LSS	5L	P42LCS
8C	P38LSS	17	P63RCS	36	P29LSM	5M	P42LCM
8F	P38LSM	18	P63RCM	37	P29RSS	5R	P42LSS
8G	P38RCS	1W	P63RSM	38	P29RSM	5S	P42LSM
8H	P38RCM	1Y	P63RSM	<b>No Pump</b>			
8J	P38RSS	1B	P63SSS	NN			
8K	P38RSM	1C	P63SSM				

**Table 3: Dura-Flo Pump Identification Code/Part No. Index**




Pump Code	Pump Part No. (see manual 311828)	Pump Code	Pump Part No. (see manual 311826)	Pump Code	Pump Part No. (see manual 311826)	Pump Code	Pump Part No. (see manual 311833)
<b>NXT 2200/DF 145SS</b>		<b>NXT 3400/DF 430CS</b>		<b>NXT 6500/DF 580CS</b>		<b>NXT 3400/DF 1000CS</b>	
A1	P31LSS	E1	P15LCS	F9	P22LCS	G1	P06LCS
A2	P31LSM	E2	P15LCM	FA	P22LCM	G2	P06LCM
A3	P31HSS	E3	P15HCS	FB	P22HCS	G3	P06HCS
A4	P31HSM	E4	P15HCM	FC	P22HCM	G4	P06HCM
<b>NXT 3400/DF 145SS</b>		<b>NXT 3400/DF 430SS</b>		<b>NXT 6500/DF 580SS</b>		<b>NXT 3400/DF 1000SS</b>	
B1	P46LSS	E5	P15LSS	FF	P22LSS	G5	P06LSS
B2	P46LSM	E6	P15LSM	FG	P22LSM	G6	P06LSM
B3	P46HSS	E7	P15HSS	FH	P22HSS	G7	P06HSS
B4	P46HSM	E8	P15HSM	FJ	P22HSM	G8	P06HSM
<b>NXT 3400/DF 180SS</b>		<b>NXT 6500/DF 430CS</b>		<b>Xtreme XL/DF 580CS</b>		<b>NXT 6500/DF 1000CS</b>	
B5	P41LSS	E9	P32LCS	FL	P35LSS	G9	P10LCS
B6	P41LSM	EA	P32LCM	FM	P35LSM	GA	P10LCM
B7	P41HSS	EB	P32HCS	FR	P35LCS	GB	P10HCS
B8	P41HSM	EC	P32HCM	FS	P35LCM	OC	P10HCM
<b>NXT 3400/DF 220SS</b>		<b>NXT 6500/DF 430SS</b>				<b>NXT 6500/DF 1000SS</b>	
C1	P30LSS	EF	P32LSS			GF	P10LSS
C2	P30LSM	EG	P32LSM			GG	P10LSM
C3	P30HSS	EH	P32HSS			GH	P10HSS
C4	P30HSM	EJ	P32HSM			GJ	P10HSM
<b>NXT 6500/DF 220SS</b>		<b>Xtreme XL/DF 430</b>				<b>Xtreme XL/DF 1000</b>	
CA	P57LSS	EL	P47LSS			GL	NR
CB	P57LSM	EM	P47LSM			GM	NR
CC	P57HSS	ER	P47LCS			GR	NR
CD	P57HSM	ES	P47LCM			GS	NR
<b>NXT 6500/DF 290SS</b>		<b>NXT 3400/DF 580CS</b>					
D1	P45LSS	F1	P12LCS				
D2	P45LSM	F2	P12LCM				
D3	P45HSS	F3	P12HCS				
D4	P45HSM	F4	P12HCM				
<b>Xtreme XL/DF 290SS</b>		<b>NXT 3400/DF 580SS</b>					
DL	P71LSS	F5	P12LSS				
DM	P71LSM	F6	P12LSM				
DR	P71HSS	F7	P12HSS				
DS	P71HSM	F8	P12HSM				
		FN	P12RCS				

NR = Not released

# Warnings






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

## WARNING

	<p><b>SKIN INJECTION HAZARD</b></p> <p>High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. <b>Get immediate surgical treatment.</b></p> <ul style="list-style-type: none"> <li>• Do not point gun at anyone or at any part of the body.</li> <li>• Do not put your hand over the spray tip.</li> <li>• Do not stop or deflect leaks with your hand, body, glove, or rag.</li> <li>• Do not spray without tip guard and trigger guard installed.</li> <li>• Engage trigger lock when not spraying.</li> <li>• Follow <b>Pressure Relief Procedure</b> in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.</li> </ul>
	<p><b>MOVING PARTS HAZARD</b></p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> <li>• Keep clear of moving parts.</li> <li>• Do not operate equipment with protective guards or covers removed.</li> <li>• Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the <b>Pressure Relief Procedure</b> in this manual. Disconnect power or air supply.</li> </ul>
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in <b>work area</b> can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags and gasoline.</li> <li>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</li> <li>• Ground all equipment in the work area. See <b>Grounding</b> instructions.</li> <li>• Use only grounded hoses.</li> <li>• Hold gun firmly to side of grounded pail when triggering into pail.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> <li>• Keep a working fire extinguisher in the work area.</li> </ul>



# ! WARNING

	<p><b>EQUIPMENT MISUSE HAZARD</b></p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not operate the unit when fatigued or under the influence of drugs or alcohol.</li> <li>• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.</li> <li>• Do not alter or modify equipment.</li> <li>• Use equipment only for its intended purpose. Call your distributor for information.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Do not kink or over bend hoses or use hoses to pull equipment.</li> <li>• Keep children and animals away from work area.</li> <li>• Comply with all applicable safety regulations.</li> </ul>
	<p><b>ELECTRIC SHOCK HAZARD</b></p> <p>Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none"> <li>• Turn off and disconnect power cord before servicing equipment.</li> <li>• Use only grounded electrical outlets.</li> <li>• Use only 3-wire extension cords.</li> <li>• Ensure ground prongs are intact on sprayer and extension cords.</li> <li>• Do not expose to rain. Store indoors.</li> </ul>
	<p><b>SPLATTER HAZARD</b></p> <p>During blowoff of platen splatter may occur.</p> <ul style="list-style-type: none"> <li>• Use minimum drum removal air pressure.</li> </ul>
	<p><b>TOXIC FLUID OR FUMES HAZARD</b></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"> <li>• Read MSDS's to know the specific hazards of the fluids you are using.</li> <li>• Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.</li> <li>• Always wear impervious gloves when spraying or cleaning equipment.</li> </ul>
	<p><b>PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Protective eyewear</li> <li>• Clothing and respirator as recommended by the fluid and solvent manufacturer</li> <li>• Gloves</li> <li>• Hearing protection</li> </ul>

# Troubleshooting



**NOTE:** Refer to the **Supply System Repair-Parts manual** for specific ram troubleshooting. Refer to the **Check-Mate Pump Packages manual** for pump troubleshooting.

1. Follow **Pressure Relief Procedure**, page 13, before disassembling any part of the supply system.
2. Disconnect power before repairing the supply system.
3. Check all possible problems and causes before disassembling the supply system.

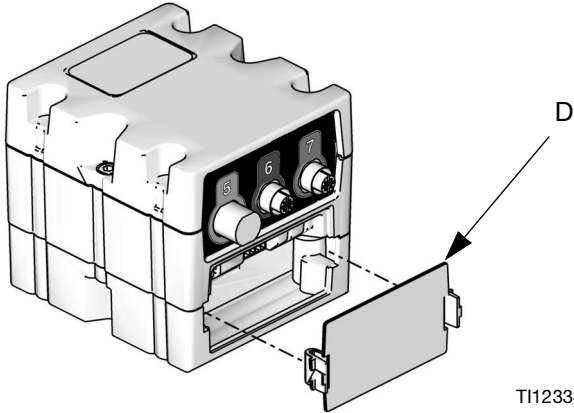
Problem	Cause	Verification	Solution
No power.	Customer supplied main circuit breaker tripped.	Measure voltage across disconnect switch; voltage should measure between 190 and 250 VAC.	Determine cause of the tripped circuit breaker. Then repair fault and reset main circuit breaker.
No graphics on screen.	No graphics are shown on display screen.	Verify green LED on bottom of display is illuminated.	If green LED is not illuminated: <ol style="list-style-type: none"> <li>1. Check for DC power at display. Replace faulty cable/component.</li> <li>2. Replace faulty display module.</li> </ol> If green LED is illuminated, check red LED. If red LED is illuminated, replace display module.
	Backlight does not power up.	Can see display, but backlight is not illuminated when a button is pressed.	Replace display module.

Problem	Cause	Verification	Solution
Missing module.	Modules not on network.	Verify attached modules through Advanced Setup screens 4 and 5.	Enter Setup screen and scroll to Advanced Setup screens 4 and 5. These screens lists all components corresponding software revision number on network.
	Cable disconnected.	Verify all green LEDs are illuminated and yellow LEDs are flashing.	Reconnect/replace faulty cable.
	Module with wrong selector switch setting.	Verify selector switch is set correctly.	<ol style="list-style-type: none"> <li>1. Remove power from unit.</li> <li>2. Remove access cover and visually check rotary switch setting.</li> <li>3. If incorrect, set to correct setting. See <b>Selector Switch</b>, page 12, for selector switch locations.</li> <li>4. Replace access cover.</li> </ol>
Does not crossover.	Alternate ram has an empty sensor activated.	Verify ram has material.	Replace empty drum.
	Alternate pump is not primed.	Verify alternate ram is ready to run.	Prime pump.
	Alternate pump has an active alarm.	See <b>Alarm Codes and Troubleshooting</b> in the Tandem Supply Systems Operation manual.	See <b>Alarm Codes and Troubleshooting</b> in the Tandem Supply Systems Operation manual.

## Selector Switch

Ensure the selector switch (inside the fluid control module) is set correctly for each ram.

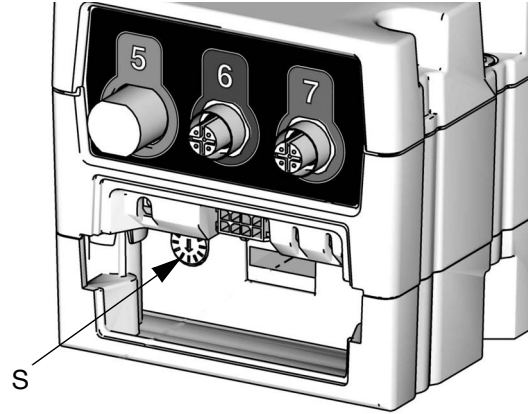
1. Turn power off.
2. Remove access cover (D).



**FIG. 1:**

3. For ram A, ensure the selector switch (S) is set to "A". If it is not, use a flat head screwdriver to adjust the switch to "A".

4. For ram B, ensure the selector switch (S) is set to "B". If it is not, use a flat head screwdriver to adjust the switch to "B".






**FIG. 2:**

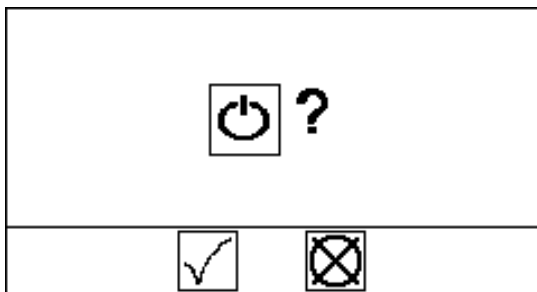
5. Replace access cover.
6. Turn power on.

# Repair

## Pressure Relief Procedure



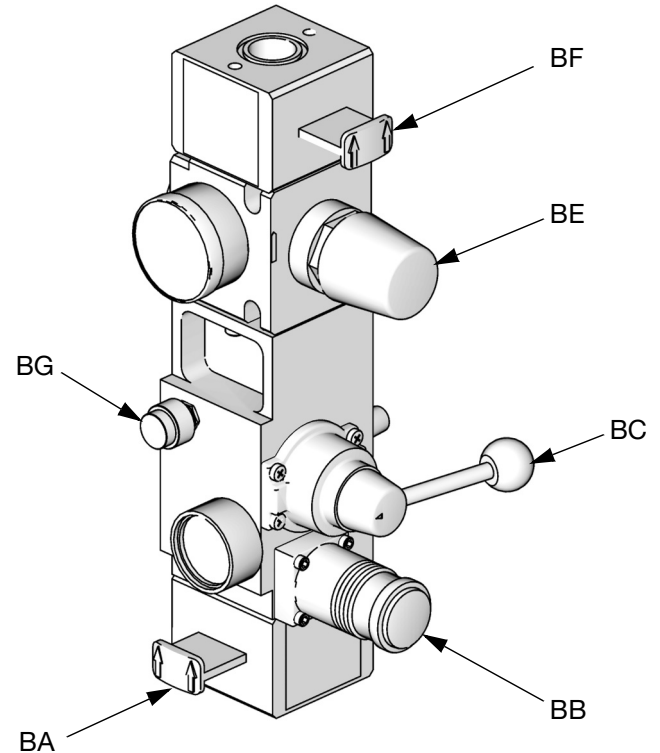
1. Lock the gun/valve trigger.
2. Press On/Off key . If system is On, display will highlight . Select  to turn off.



**FIG. 3: System Function Screen**

3. Turn off the air motor slider valve (BF) on both ram A and B.
4. On both ram A and B, turn off the main air slider valve (BA). Set the ram director valve (BC) to the down position. The ram will slowly drop.
5. Unlock the gun/valve trigger.
6. Hold a metal part of the gun/valve firmly to the side of a grounded metal pail, and trigger the gun/valve to relieve pressure.
7. Lock the gun/valve trigger.
8. On both ram A and B, open the drain valve and/or the pump bleed port. Have a container ready to catch the drainage.

*If you suspect that the spray tip/nozzle or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, very slowly loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip/nozzle or hose.*



T110438A

**FIG. 4: Integrated Air Controls**

## Ram Repair

See manual 313527 for ram and platen repair procedures and replacement parts.

## Pump Repair

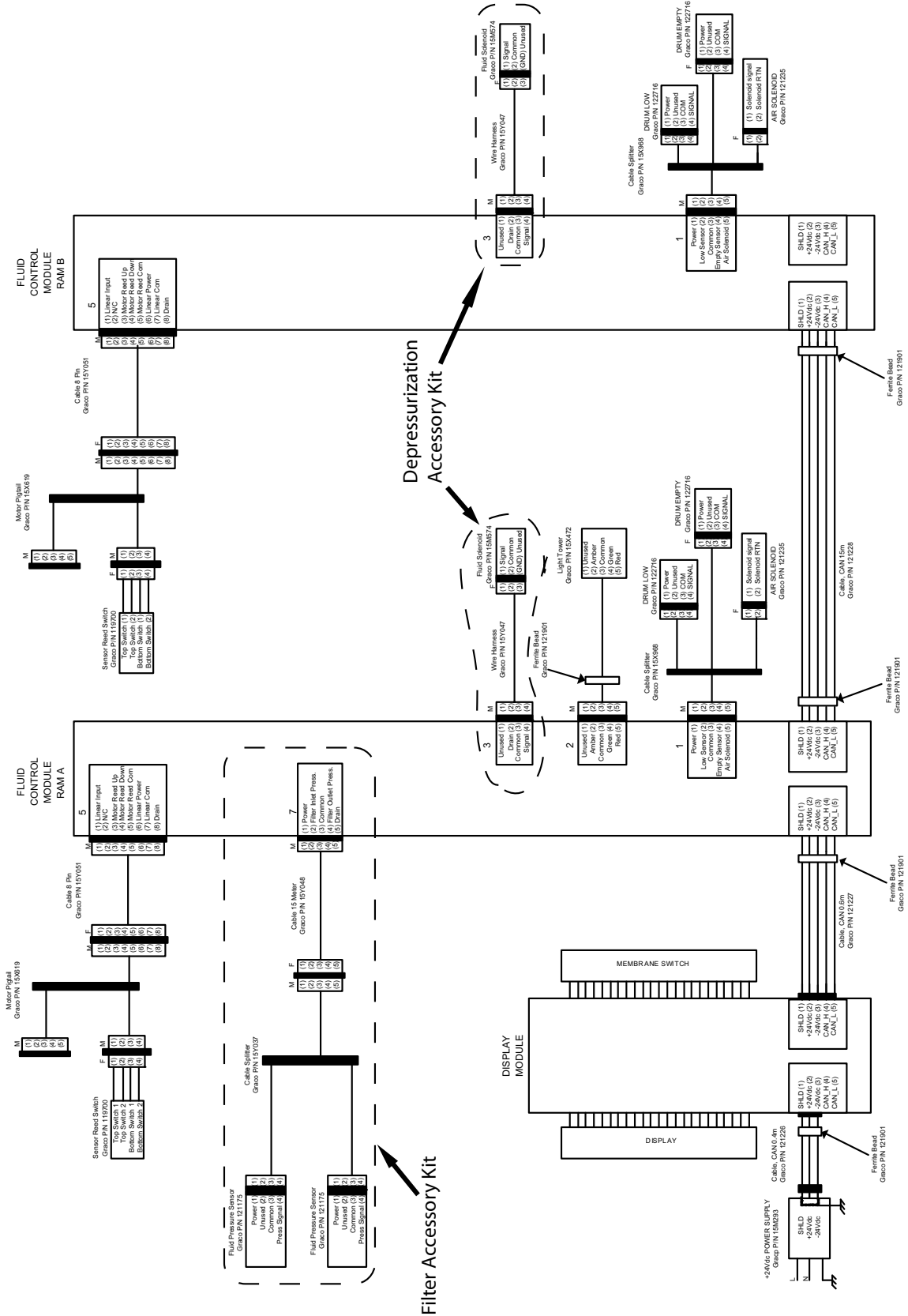
See pump manuals for pump repair procedures and replacement parts.

See manual 311238 (Nxxxxx NXT models), 312796 (Mxxxxx NXT models), or 334644 (Xtreme XL) for air motor repair procedures and replacement parts.

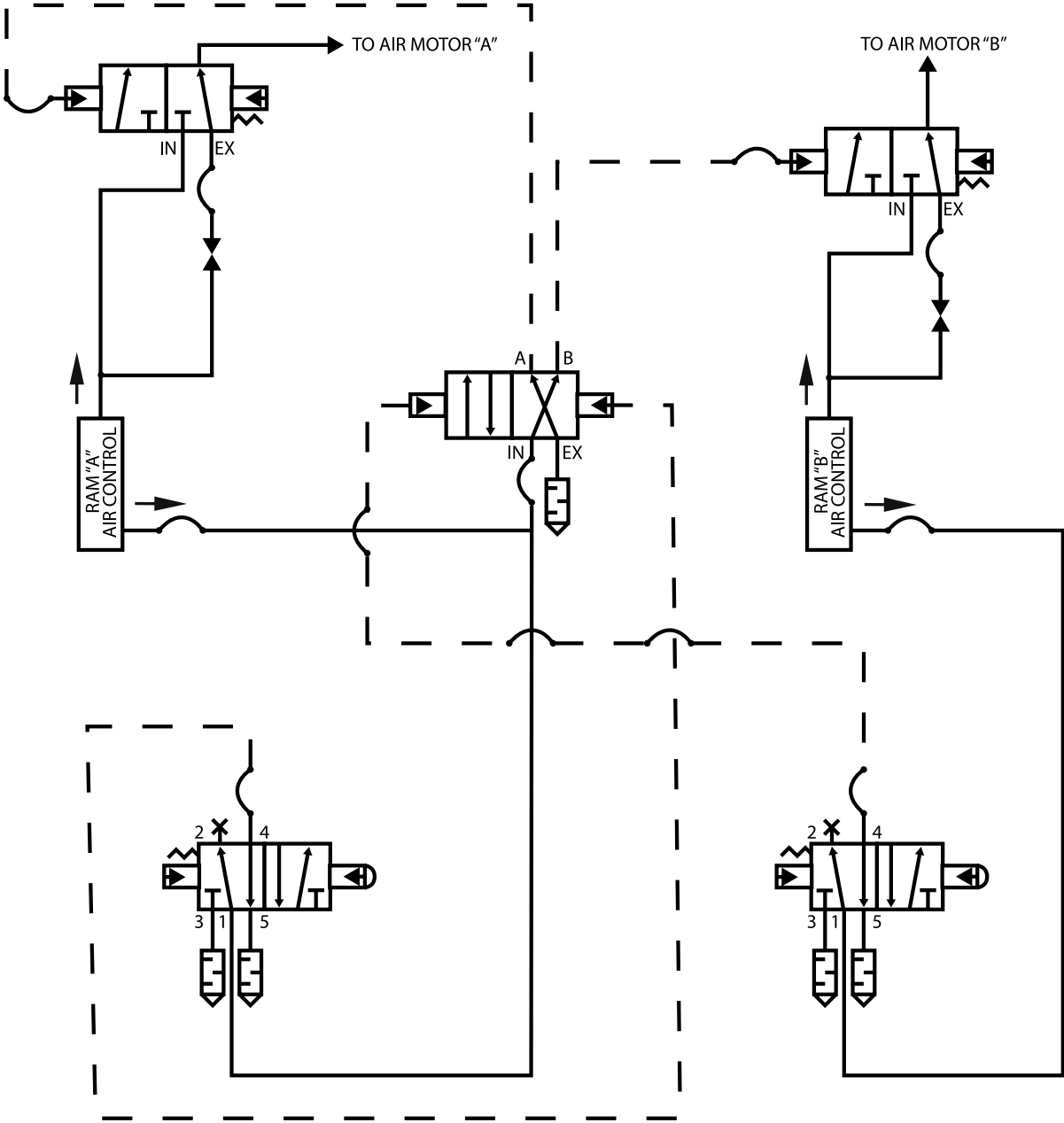
## Crossover Schematics

See page 14 for a schematic of electronic crossover systems and page 15 for a schematic of pneumatic crossover systems.

# Electronic Crossover Schematic



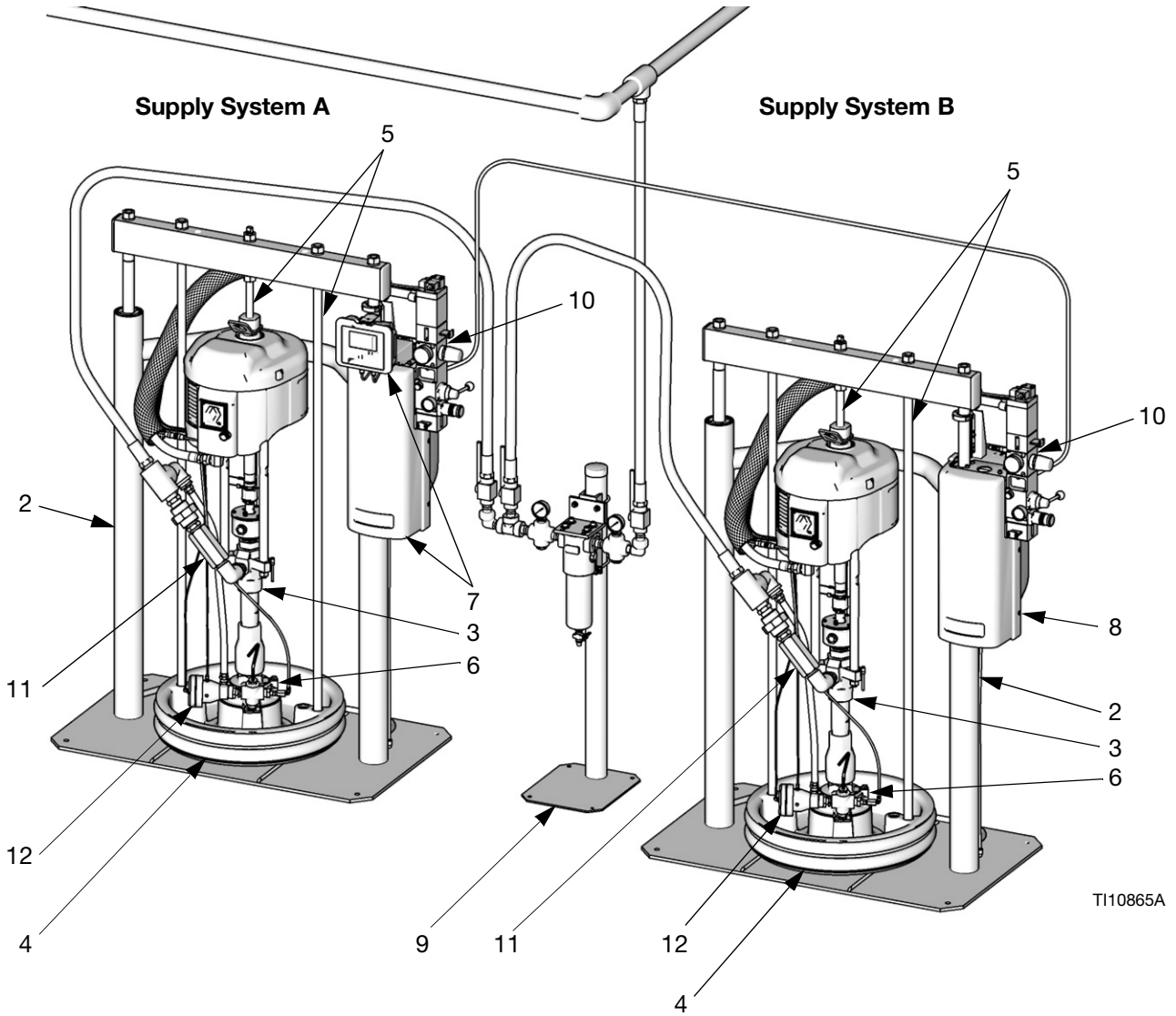
# Pneumatic Crossover Schematic



# Parts

## Tandem Supply System; Electronic Crossover Model Shown

D200 Rams Shown



TI10865A



**NOTE:**

See Models on page 4 to identify the components included in your Tandem Supply System.

Ref. Part	Description	Qty.
2	255648* RAM ASSEMBLY, D200, 3 in.	2
	255688* RAM ASSEMBLY, D200s, 6.5 in.	2
	257620* RAM ASSEMBLY, S20, 3 in.	2
	257621* RAM ASSEMBLY, D60, 3 in.	2
3	see Table PUMP, Check-Mate; see manual 312375 2, page 6 for parts	2
4	255662* PLATEN, 55 gal., o-ring, PTFE	2
	255663* PLATEN, 55 gal., o-ring, EPDM	2
	255661* PLATEN, 30 gal., D-style, EPDM	2
	257728* PLATEN, 20 liter, single wiper, polyurethane	2
	257729* PLATEN, 20 liter, single wiper, PTFE	2
	257731* PLATEN, 20 liter, double wiper, polyurethane	2
	257734* PLATEN, 30 liter, single wiper, PTFE	2
	257736* PLATEN, 30 liter, double wiper, polyurethane	2
	257738* PLATEN, 60 liter, single wiper, PTFE	2
	257741* PLATEN, 60 liter, double wiper, polyurethane	2
5	255305* KIT, mounting, pump; 3 in.; 55 gal.	2
	255308* KIT, mounting, pump; 3 in.; 20 liter and 30 gal.; for NXT 3400 and 6500 air motors	2
	255309* KIT, mounting, pump; 3 in.; 20 liter and 30 gal.; for NXT 2200 air motors	2
	255315* KIT, mounting, pump; 6.5 in.; 55 gal.	2
	255316* KIT, mounting, pump; 6.5 in.; 20 liter and 30 gal.; for NXT 3400 and 6500 air motors	2
	255317* KIT, mounting, pump; 6.5 in.; 20 liter and 30 gal.; for NXT 2200 air motors	2
	256235* KIT, mounting, pump; 3 in.; 55 gal.; for Dura-Flo pumps	2
	257666* KIT, mounting, pump; S20, 3 in.; 5 gal.; for NXT 2200 and 3400 air motors	2
	257664* KIT, mounting, pump; S20, 3 in.; 5 gal.; for NXT 200, 400, 700, 1200, and 1800 air motors	2
	257623* KIT, mounting, pump; D60, 3 in.; 5 gal.; for NXT 2200 air motors	2
	257624* KIT, mounting, pump; D60, 3 in.; 5 gal.; for NXT 3400 and 6500 air motors	2
6	255392* KIT, mounting; for all 55 gal. and 30 gal. platens	2
	257630* KIT, mounting; for DuraFlo pumps to 20, 30, 60 liter platens	2
7	255706+ KIT, electronic crossover, with display, VAC; for 3 in. D200 and D60 Ram A	1
	255759+ KIT, electronic crossover, with display, VDC; for 3 in. D200 and D60 Ram A	1
	255707+ KIT, electronic crossover, with display, VAC; for 6.5 in. D200s Ram A	1
	255760+ KIT, electronic crossover, with display, VDC; for 6.5 in. D200s Ram A	1
8	255708† KIT, electronic crossover, no display; for 3 in. D200 and D60 Ram B	1
	255709† KIT, electronic crossover, no display; for 6.5 in. D200s Ram B	1

Ref. Part	Description	Qty.
9	247504 KIT, fluid filter; included with electronic crossover models only; see page 27	
10	VALVE, safety relief; located out of view, on back side of air controls	2
	116643 For systems with pumps: P55xxx and P57xxx	
	103347 For systems with pumps: P05xxx, P06xxx, P10xxx, P11xxx, P12xxx, P14xxx, P15xxx, P20xxx, P22xxx, P23xxx, P26xxx, P29xxx, P30xxx, P31xxx, P32xxx, P34xxx, P36xxx, P38xxx, P40xxx, P41xxx, P42xxx, P45xxx, P46xxx, P47xxx	
	120306 For systems with pumps: P61xxx, P63xxx, and P71xxx	
	108124 For systems with pumps: P68xxx	
	110065 For systems with pumps: P85xxx	
11	255452♦ KIT, pump outlet check valve; used on cst Check-Mate 60 and 100 displacement pumps	2
	257377♦ KIT, pump outlet check valve; used on sst Check-Mate 60 and 100 displacement pumps	2
	255453♦ KIT, pump outlet check valve; used on cst Check-Mate 200 and 250 displacement pumps	2
	255454♦ KIT, pump outlet check valve; used on sst Check-Mate 200 and 250 displacement pumps	2
	255455♦ KIT, pump outlet check valve; used on cst Check-Mate 500 displacement pumps	2
	255456♦ KIT, pump outlet check valve; used on sst Check-Mate 500 displacement pumps	2
	256882♦ KIT, pump outlet check valve; used on cst Dura-Flo 430 and 580 displacement pumps	2
	25N026♦ KIT, pump outlet check valve; used on Dura-Flo 1000cc displacement pumps	2
12	255457❖ KIT, depressurization; cst; included with electronic crossover models only	2
	255458❖ KIT, depressurization; sst; included with electronic crossover models only	2
13★	255675✓ KIT, pneumatic crossover; for 3 in. D200 rams	1
	255676✓ KIT, pneumatic crossover; for 6.5 in. D200s rams	1
	257633✓ KIT, pneumatic crossover; for S20 rams	1
	257632✓ KIT, pneumatic crossover; for 3 in. D60 rams	1

★ Not shown.  
 \* See Supply Systems Repair-Parts manual 313527 for parts.  
 + See page 18 for parts.  
 † See page 22 for parts.  
 ♦ See page 28 for parts.  
 ❖ See page 30 for parts.  
 ✓ See page 24 for parts.

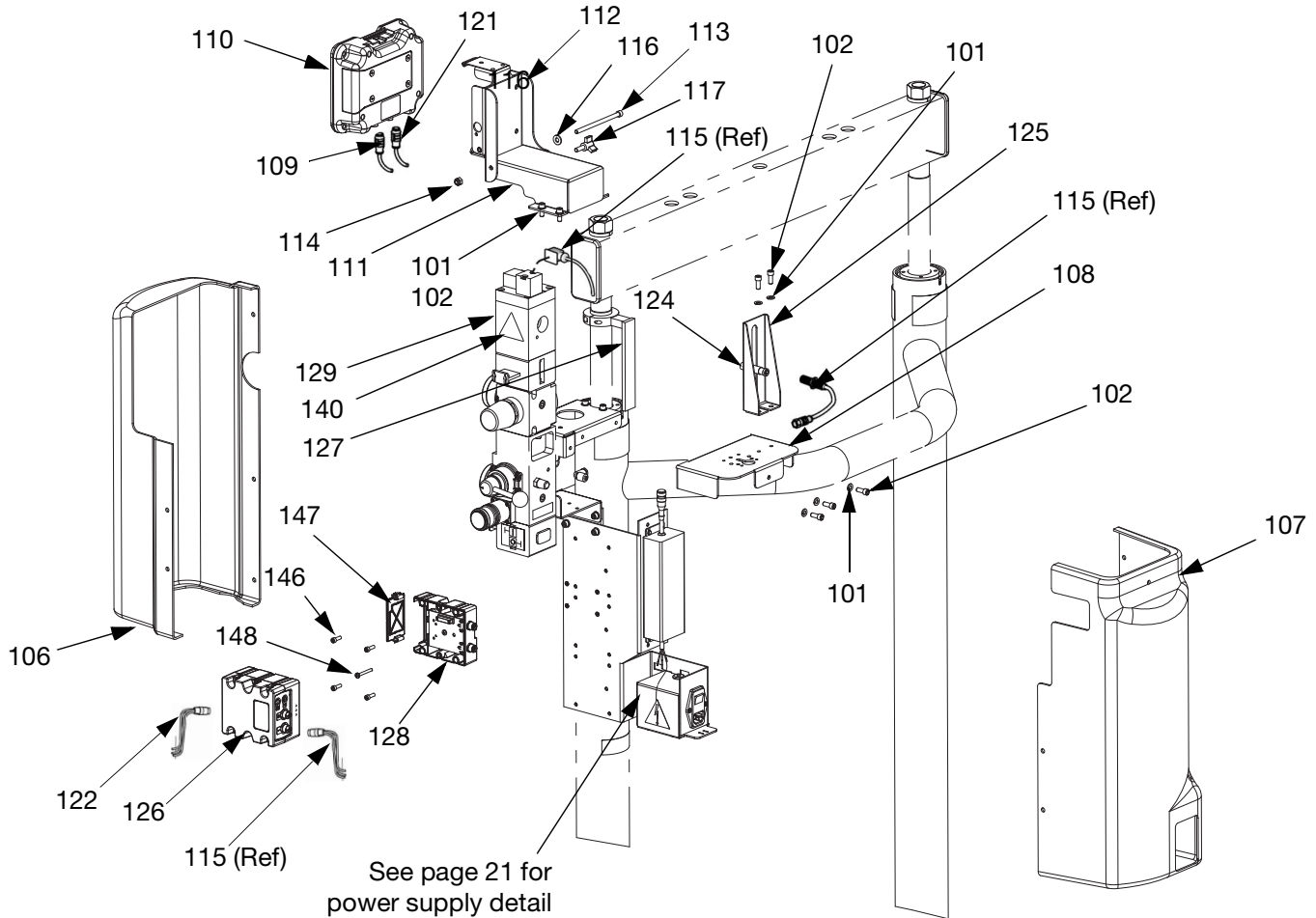
## Electronic Crossover Kits, with display

255706, with display, VAC, for 3 in. D200 and D60 Ram A

255759, with display, VDC, for 3 in. D200 and D60 Ram A

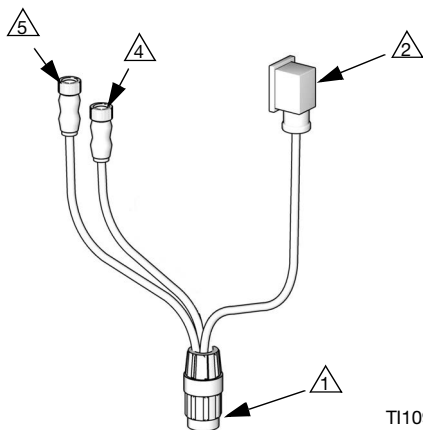
255707, with display, VAC, for 6.5 in. D200s Ram A

255760, with display, VDC, for 6.5 in. D200s Ram A



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### Harness (115) Detail



- ① To connection 1 on fluid control module (126).
- ② To air motor solenoid (129).
- ④ To drum empty sensor (124).
- ⑤ To accessory drum low sensor (if present).

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## Electronic Crossover Kits, with display

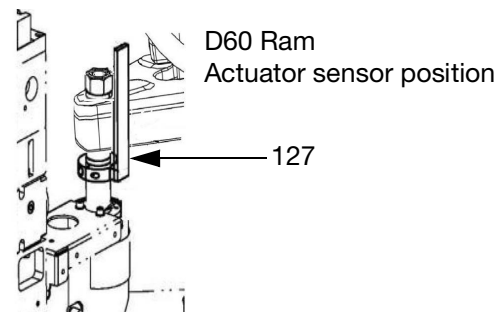
Ref.	Description	255706 (VAC, for D200 and D60 Rams; see pages 17 and 21)	255759 (VDC, for D200 and D60 Rams; see pages 17 and 21)	255707 (VAC, for D200s Ram; see pages 17 and 21)	255760 (VDC, for D200s Ram; see pages 17 and 21)	Qty.
101	WASHER, lock; 1/4	100016	100016	100016	100016	15
102	SCREW, cap, socket-hd; 1/4-20 x 5/8 in. (16 mm)	101682	101682	101682	101682	15
106	COVER, shroud front, 3 in.	n/a	n/a			1
	COVER, shroud front, 6.5 in.			n/a	n/a	1
107	COVER, shroud rear, 3 in.	n/a	n/a			1
	COVER, shroud rear, 6.5 in.			n/a	n/a	1
108	BRACKET, light tower, 3 in.	n/a	n/a			1
	BRACKET, light tower, 6.5 in.			n/a	n/a	1
109	CABLE, CAN, display/power sup- ply; m x f; 0.4 m	121226	121226	121226	121226	1
110*	MODULE, display	24F493	24F493	24F493	24F493	1
111	BRACKET, pivot	n/a	n/a	n/a	n/a	1
112	BRACKET, mounting, display mod- ule	n/a	n/a	n/a	n/a	1
113	SCREW, cap, socket-hd, 1/4-20 x 4.25 in. (108 mm)	121250	121250	121250	121250	1
114	NUT, lock, hex; 1/4-20	102040	102040	102040	102040	1
115	HARNESS, fluid control module	15X968	15X968	15X968	15X968	1
116	WASHER, plain	110755	110755	110755	110755	1
117	KNOB, display adjustment	121253	121253	121253	121253	1
121	CABLE, CAN, display/fluid control module; fbe; 0.6 m	121227	121227	121227	121227	1
122	CABLE, M12, 8 pin, air motor reed switch	15Y051	15Y051	15Y051	15Y051	1
124	SENSOR, inductive, low/empty	122716	122716	122716	122716	1
125	BRACKET, sensor, low/empty	n/a	n/a	n/a	n/a	1
126*	MODULE, fluid control	289696	289696	289696	289696	1
127‡	ACTUATOR, sensor, low/empty; 3 in.	n/a	n/a			1
	ACTUATOR, sensor, low/empty; 6.5 in.			n/a	n/a	1
128	MODULE, base, fluid control	n/a	n/a	n/a	n/a	1
129	SOLENOID, air motor	121235	121235	121235	121235	1
130★	LABEL, shutoff valve	15V954	15V954	15V954	15V954	1

Parts designated n/a are not available separately.

★ Not shown.

‡ D60 ram only: Position collar of actuator sensor  
down, near ram weldment, with bracket pointing up.

\* Requires Ref. 149 for programming.



Parts

Ref.	Description	255706 (VAC, for D200 and D60 Rams; see pages 17 and 21)	255759 (VDC, for D200 and D60 Rams; see pages 17 and 21)	255707 (VAC, for D200s Ram; see pages 17 and 21)	255760 (VDC, for D200s Ram; see pages 17 and 21)	Qty.
131	SCREW; 6-32 x 3/8 in. (10 mm)	121255	121255	121255	121255	6
132	ENCLOSURE, power supply	n/a	n/a	n/a	n/a	1
133	BRACKET, power supply, 3 in.	n/a	n/a			1
	BRACKET, power supply, 6.5 in.			n/a	n/a	1
134	POWER SUPPLY, 100-240 VAC	15M293		15M293		1
	POWER MODULE, 24 VDC, with switch		255649		255649	1
135a	SWITCH, power, 100-240 VAC	121254		121254		1
135b	COVER, switch mount, VDC		n/a		n/a	1
136	SCREW, self-tapping	101845		101845		6
137	COVER, power supply	n/a		n/a		1
138	FUSE, 250V, 1.2A	121261		121261		2
139	CABLE, power, female, 0.8 m		255673		255673	1
140▲	LABEL, warning; hot surface	189285	189285	189285	189285	1
141▲	LABEL, warning; electric	15J074	15J074	15J074	15J074	1
143▲	LABEL, warning; crush and pinch	196548	196548	196548	196548	1
144	GROMMET	112738	112738	112738	112738	1
145	WASHER, lock	100272	100272	100272	100272	2
146	SCREW	114417	114417	114417	114417	4
147	ENCLOSURE, door	277674	277674	277674	277674	1
148	SCREW, mach, pan hd, ground	121070	121070	121070	121070	1
149	TOKEN, upgrade	16C027	16C027	16C027	16C027	1

Parts designated n/a are not available separately.

★ Not shown.

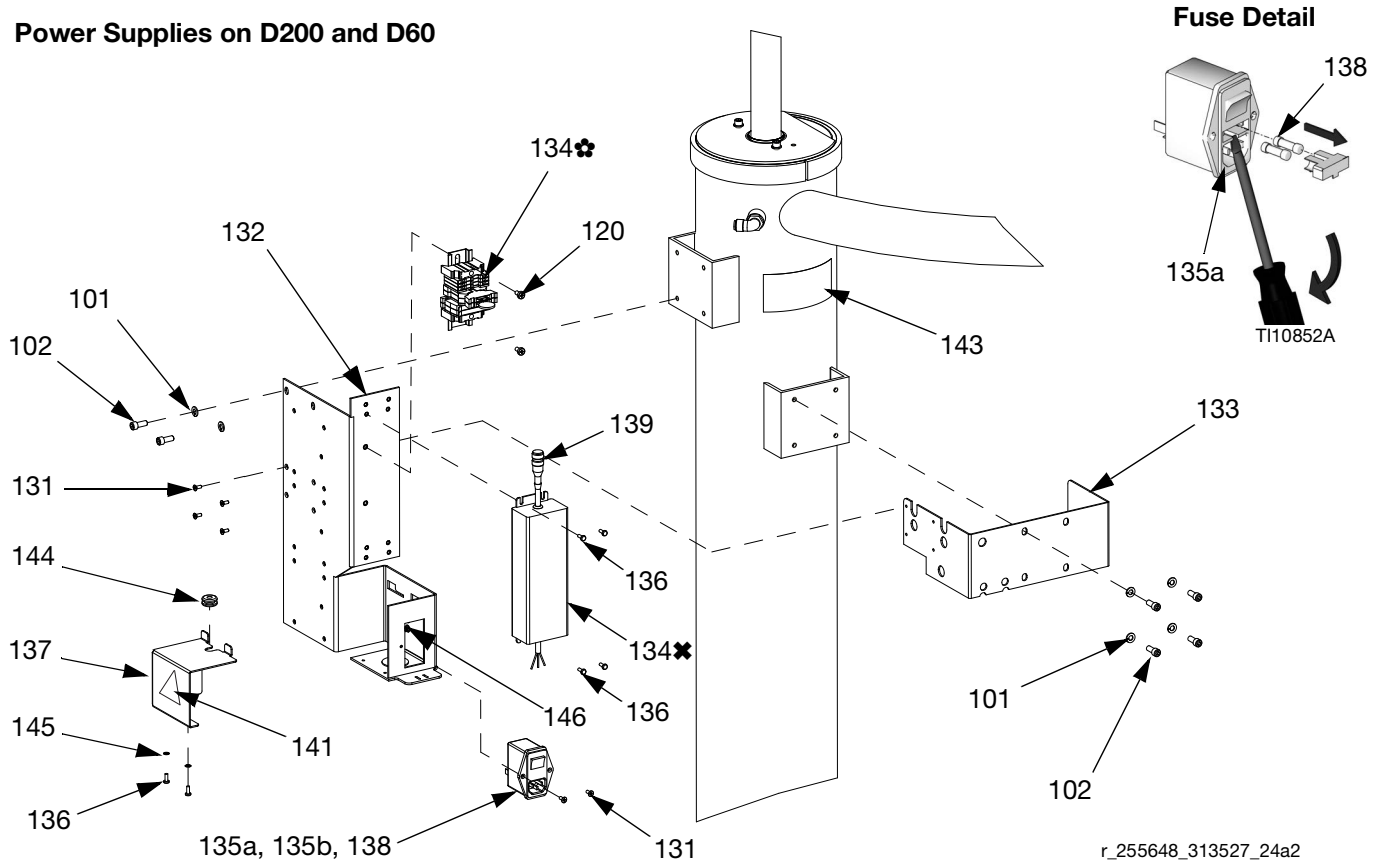
▲ Replacement Danger and Warning labels, tags and cards are available at no cost.

# Power Supply Detail

(Both 24 VDC and 100-240 VAC Power Supplies Shown)

See Supply Units Repair-Parts manual 313527 for power supply repair procedures. Part numbers listed on page 22.

## Power Supplies on D200 and D60



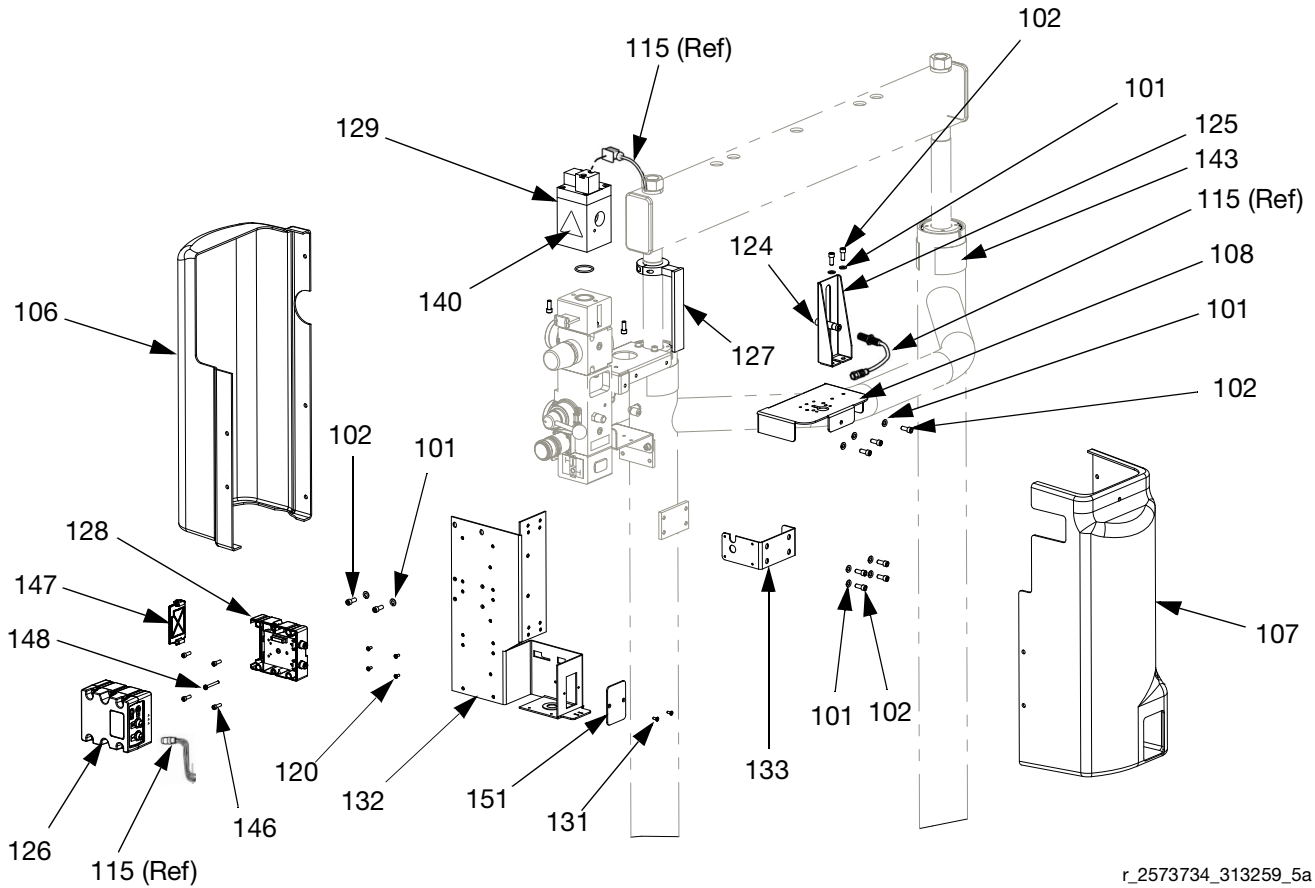
❁ 24 VDC Power Supply

✕ 120-240 VAC Power Supply

# Electronic Crossover Kits, without display

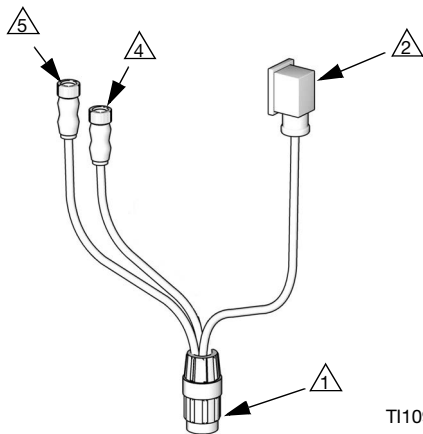
255708, without display, for 3 in. D200 and D60 Ram B

255709, without display, for 6.5 in. D200s Ram B



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## Harness (115) Detail



- ① To connection 1 on fluid control module (126).
- ② To air motor solenoid (129).
- ④ To drum empty sensor (124).
- ⑤ To accessory drum low sensor (if present).

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## Electronic Crossover Kits, without display

Ref.	Description	255708 (without display, for D200 and D60 Rams; see page 22)	255709 (without display, for D200s Ram; see page 22)	Qty.
101	WASHER, lock; 1/4	100016	100016	11
102	SCREW, cap, socket-hd; 1/4-20 x 5/8 in. (16 mm)	101682	101682	11
106	COVER, shroud front, 3 in.	n/a		1
	COVER, shroud front, 6.5 in.		n/a	1
107	COVER, shroud rear, 3 in.	n/a		1
	COVER, shroud rear, 6.5 in.		n/a	1
108	BRACKET, light tower, 3 in.	n/a		1
	BRACKET, light tower, 6.5 in.		n/a	1
115	HARNESS, fluid control module	15X968	15X968	1
120	SCREW, machine, pan-head; 10-24 x 3/8 in. (10 mm)	110637	110637	4
122★	CABLE, M12, 8 pin	15Y051	15Y051	1
124	SENSOR, inductive, low/empty	122716	122716	1
125	BRACKET, sensor, low/empty	n/a	n/a	1
126	MODULE, fluid control	289696	289696	1
127‡	ACTUATOR, sensor, low/empty; 3 in.	n/a		1
	ACTUATOR, sensor, low/empty; 6.5 in.		n/a	1
128*	MODULE, base, fluid control	n/a	n/a	1
129	SOLENOID, air motor	121235	121235	1
130★	LABEL, shutoff valve	15V954	15V954	1
131	SCREW; 6-32 x 3/8 in. (10 mm)	121255	121255	6
132	ENCLOSURE, power supply	n/a	n/a	1
133	BRACKET, power supply, 3 in.	n/a		1
	BRACKET, power supply, 6.5 in.		n/a	1
140▲	LABEL, warning; hot surface	189285	189285	1
143▲	LABEL, warning; crush and pinch	196548	196548	1
146	SCREW	114417	114417	4
147	ENCLOSURE, door	277674	277674	1
148	SCREW, mach, pan hd, grounding	121070	121070	1
150★	CABLE, CAN, unit A/unit B; fbe; 15 m	121228	121228	1
151	COVER, blank	n/a	n/a	1
152	TOKEN, upgrade	16C027	16C027	1

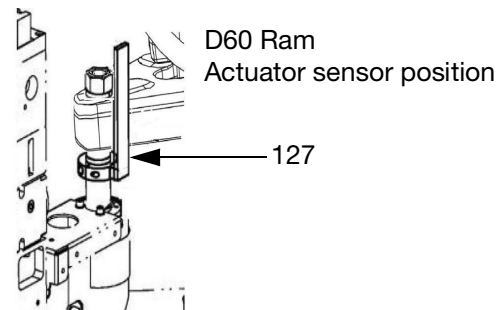
Parts designated n/a are not available separately.

★ Not shown.

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

‡ D60 ram only: Position collar of actuator sensor down, near ram weldment, with bracket pointing up.

\* Requires Ref. 152 for programming.



# Pneumatic Crossover Kits

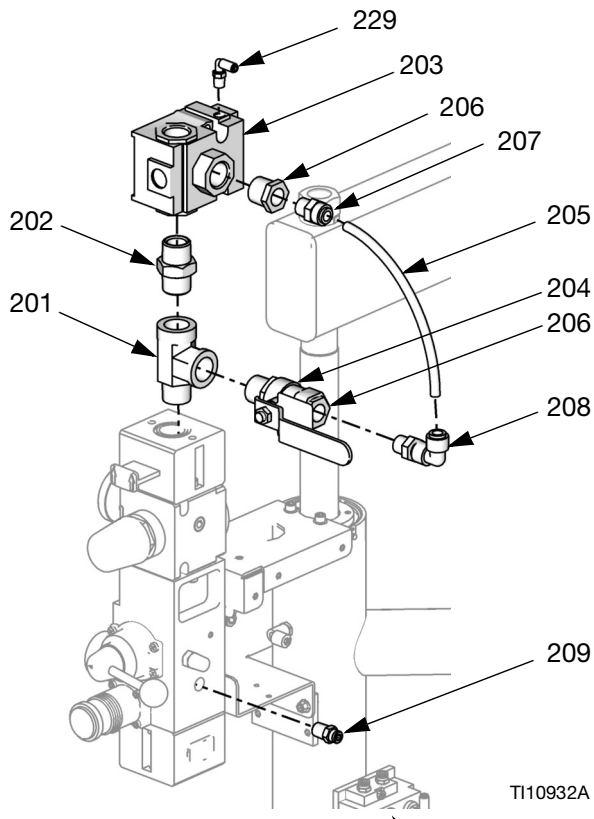
255675, for 3 in. D200 Rams

255676, for 6.5 in. D200s Rams

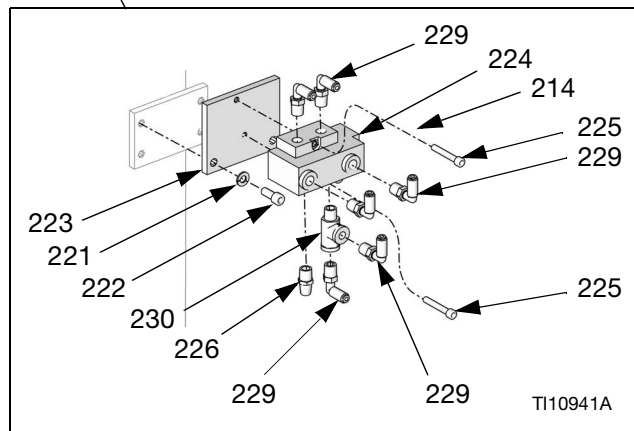
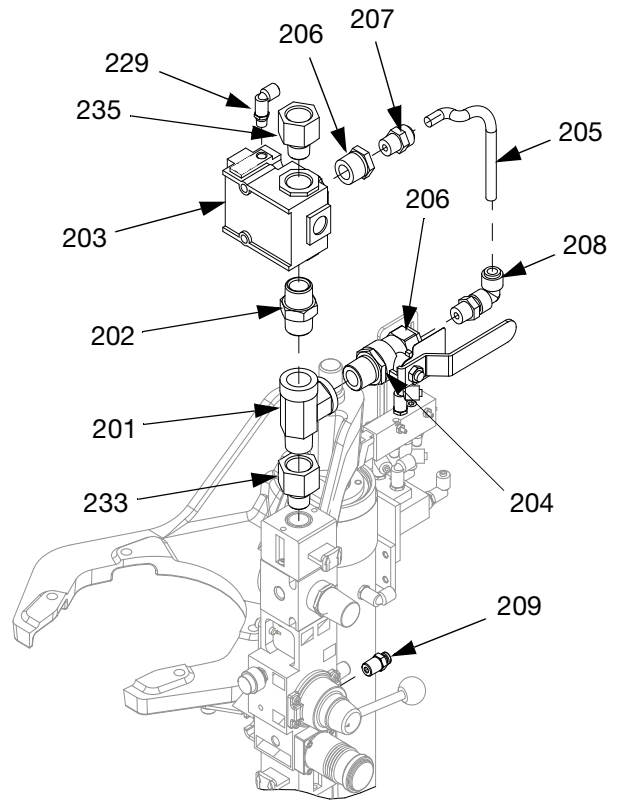
257633, for S20 Rams

257632, for 3 in. D60 Rams

## D60 and D200 Rams



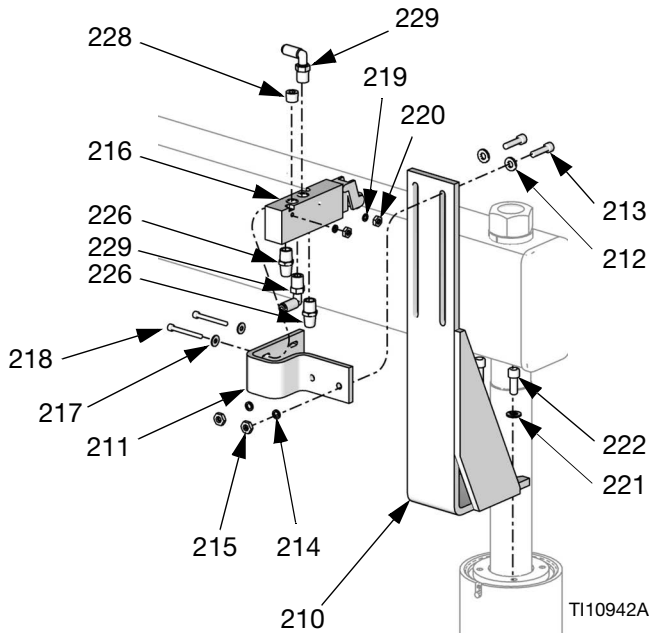
## S20 Rams



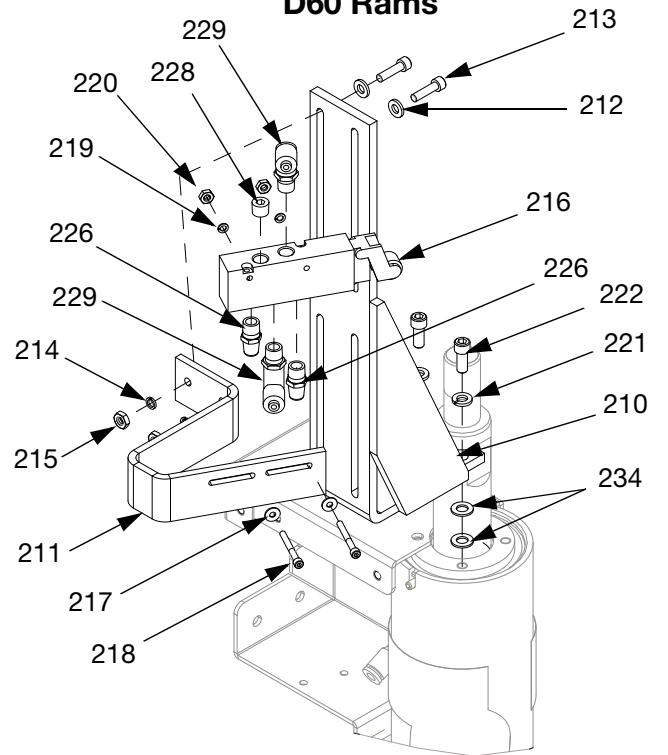


# Pneumatic Crossover Kits (continued)

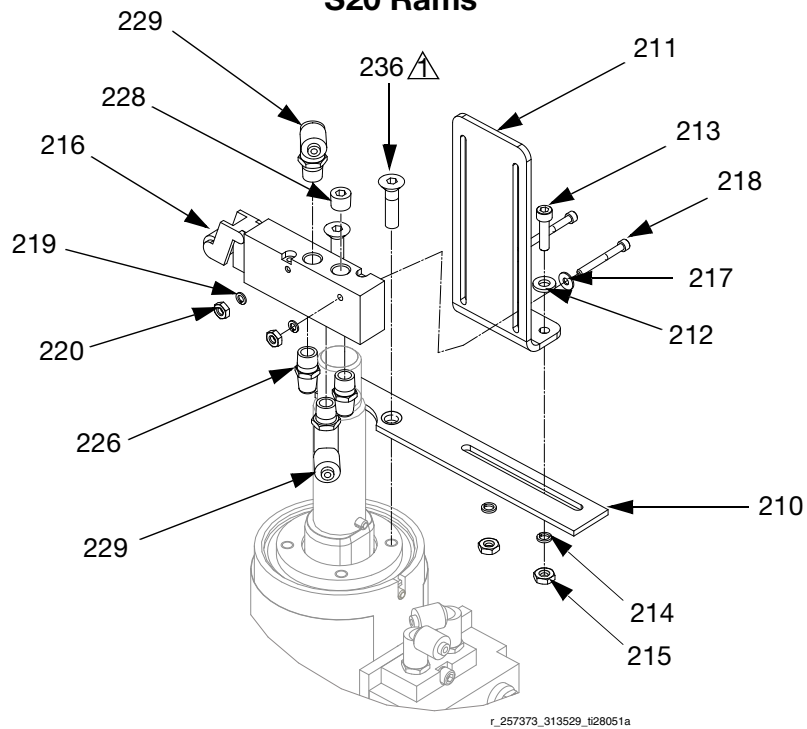
## D200 Rams




## D60 Rams



## S20 Rams



 Use Loctite® 242 or equivalent on threads.

## Pneumatic Crossover Kits

Ref.	Part	Description	Qty	Ref.	Part	Description	Qty
201	111337	TEE, street; 3/4 npt(m) x 3/4 npt(f) x 3/4 npt(f)	2	216	C06182	VALVE, limit, air	2
202	C20487	NIPPLE, hex; 3/4 npt	2	217	100813	WASHER, flat	4
203	C59752	VALVE, pneumatic, 3-way.	2	218	C19965	SCREW, cap, socket-hd; 6-32 x 1-1/4 in. (31 mm)	4
204	113218	VALVE, ball, vented; 3/4 npt (m x f)	2	219	100068	WASHER, lock, spring; #6	4
205	buy	HOSE, nylon; 3/8 in. (10 mm) OD; 6 in. (153 mm); black	1	220	100072	NUT, hex mscr; 6-32	4
206	C19683	BUSHING, reducing; 3/4 npt(m) x 3/8 npt(f)	4	221	100016	WASHER, lock; 1/4	4
207	115240	FITTING, tube; 3/8 npt(m) x 3/8 in. (10 mm) OD tube	2	222	101682	SCREW, cap, socket-hd; 1/4-20 x 5/8 in. (16 mm)	4
208	115436	ELBOW, tube, 90°; 3/8 npt(m) x 3/8 in. (10 mm) OD tube	2	223	n/a	PLATE, mounting, 4-way valve	1
209	116658	FITTING, tube; 1/4 npt(m) x 1/4 in. (6 mm) OD tube	2	224	113338	VALVE, air, remote, 4-way	1
210	n/a	BRACKET, crossover	2	225	123366	SCREW, cap, socket-hd; 10-24 x 1-1/8 in. (29 mm)	2
211	n/a	BRACKET, limit valve; for D200 rams	2	226	C06061	MUFFLER	5
	n/a	BRACKET, limit valve; for D60 rams	2	228	100139	PLUG, pipe; 1/8 npt	2
	n/a	BRACKET, limit valve; for S20 rams	2	229	597151	ELBOW, tube; 1/8 npt(m) x 1/4 in. OD tube	12
212	104116	WASHER, plain; #10	4	230	110475	TEE, street; 1/8 npt(m) x 1/8 npt(f) x 1/8 npt(f)	1
213	111820	SCREW, cap, socket hd; 10-24 x 3/4 in. (19 mm)	4	231	buy	TUBE, nylon; 1/4 in. (6 mm) OD; 52 ft (15.9 m); black	1
214	C19204	WASHER, lock; #10	6	232★	114958	STRAP, tie	4
215	100179	NUT, hex mscr; 10-24	4	233	104969	BUSHING, reducing; for S20 rams	2
				234	158223	WASHER	4
				235	100896	BUSING, reducing	2
				236	295679	SCREW, machine, socket head; 1/4-20 x 1/2 in. (13 mm)	2

*Parts designated n/a are not available separately.*

★ *Not shown.*

# Fluid Filter Kit

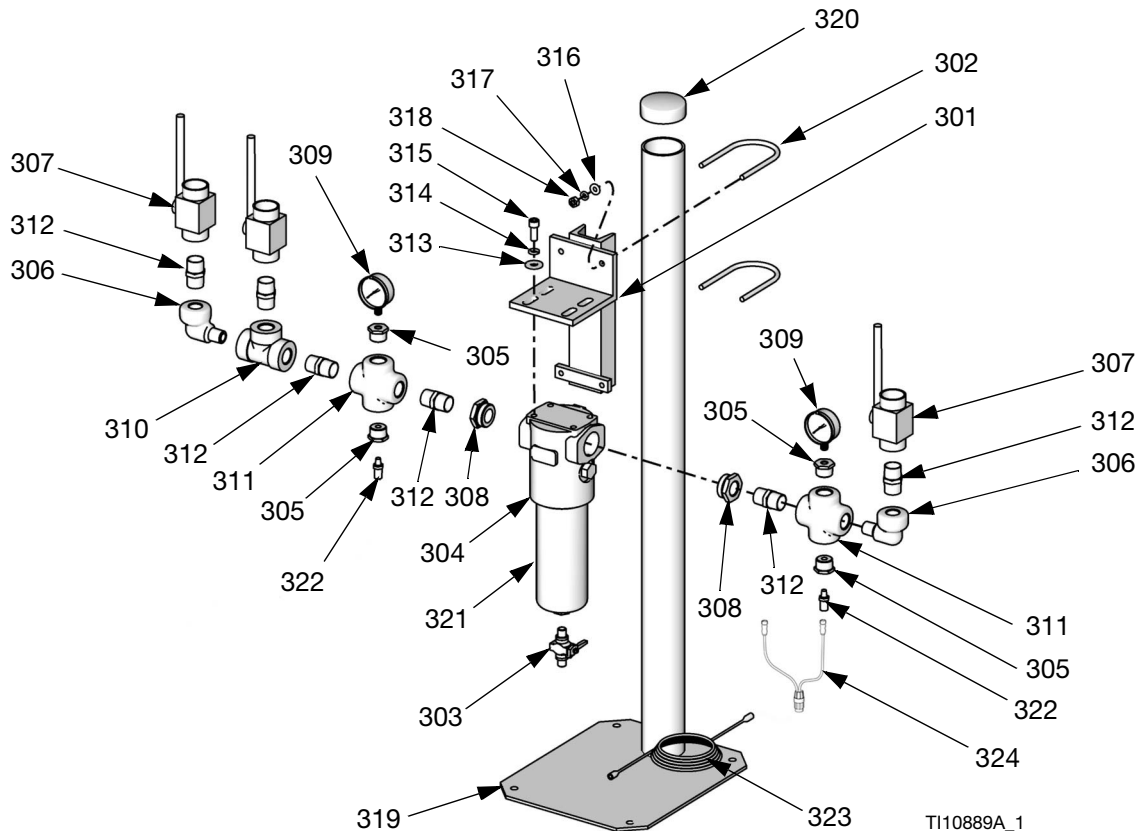
**NOTE:**

Fluid filter is rated for 5000 psi (35 MPa, 9 bar) maximum working pressure.

**247504 Fluid Filter and Stand, used with electronic crossover models only**

Ref.	Part	Description	Qty	Ref.	Part	Description	Qty
301	n/a	BASE, mounting	1	317	100133	WASHER, lock; 3/8	4
302	C30021	BOLT, U; 3/8-16	2	318	100131	NUT, full hex; 3/8-16	4
303	210658	VALVE, ball; 3/8 npt (mbe); see manual 306861	1	319	n/a	STAND	1
304	515216	HOUSING, filter	1	320	121190	CAP, plug	1
305	C19652	BUSHING, reducing; 1 in. npt(m) x 1/4 npt(f)	4	321	515222	ELEMENT, filter, 30 mesh; sst (see list below for other sizes)	1
306	121189	ELBOW, street, 90°; 1 in. npt (m x f)	2	322	121175	TRANSDUCER, pressure	2
307	521477	VALVE, ball; 1 in. npt (fbe)	3	323	15Y048	CABLE, filter, pressure sensor; 49 ft (15 m)	1
308	121182	ADAPTER, pipe	2	324	15Y037	CABLE, splitter, pressure sensor	1
309	102814	GAUGE, pressure, fluid	2				
310	C19488	TEE; 1 in. npt (f)	1				
311	121163	CROSS; 1 in. npt(f)	2				
312	158585	NIPPLE; 1 in. npt	6				
313	101044	WASHER, plain; 1/2	4				
314	100018	WASHER, lock, spring; 1/2	4				
315	C19853	SCREW, cap, socket-hd; 1/2-13 x 1-1/4 in. (31 mm)	4				
316	100023	WASHER, flat; 3/8	4				

*Parts designated n/a are not available separately.*  
*Replacement filter elements are available in the following sizes:*  
 Part No. 515219, 60 mesh  
 Part No. 515220, 50 mesh  
 Part No. 515221, 40 mesh  
 Part No. 515222, 30 mesh (standard)



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## Pump Outlet Check Valve Kits

**255452, used on carbon steel Check-Mate 60 and 100 Displacement Pumps (shown)**

**257377, used on stainless steel Check-Mate 60 and 100 Displacement Pumps**

**255453, used on carbon steel Check-Mate 200 and 250 Displacement Pumps**

**255454, used on stainless steel Check-Mate 200 and 250 Displacement Pumps**

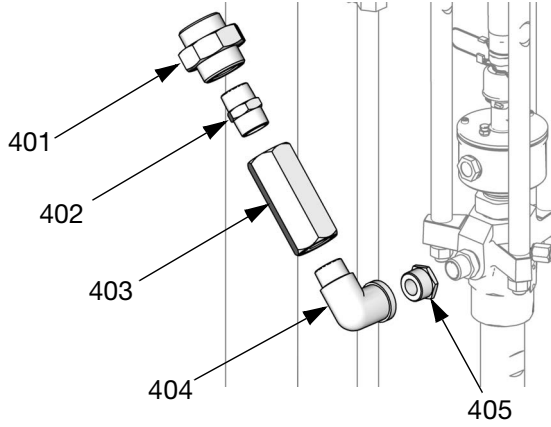
**255455, used on carbon steel Check-Mate 500 Displacement Pumps**

**255456, used on stainless steel Check-Mate 500 Displacement Pumps**

**256882, used on carbon steel Dura-Flo 430 and 580 Displacement Pumps**

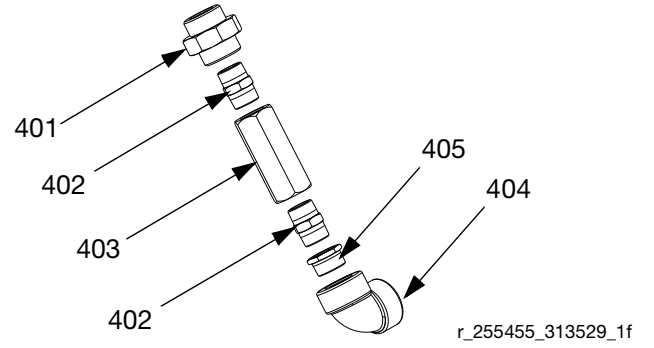
**25N026, used on carbon steel Dura-Flo 1000 Displacement Pumps**

Ref.	Description	255452	257377	255453	255454	255455	255456	256882	25N026	Qty
401	UNION, pipe; 1-1/4 in. npt(f)	521975		521975		521975		521975	521975	1
	CONNECTOR; 3/4 npt(m) x 1-1/16 in. unf		15M863		15M863		15M863			1
402	NIPPLE, hex; 1-1/4 in. npt	C20490		C20490				C20490	C20490	1
	NIPPLE, hex; 1-1/4 in. npt					C20490				2
	NIPPLE, reducing; 1 in. npt x 3/4 npt						15M805			1
403	VALVE, check; 1-1/4 in. npt (fbe)	521850		521850		521850		521850	521850	1
	VALVE, check; 3/4 npt (fbe)		C59546		C59546		C59546			1
404	ELBOW, street, 90°; 1-1/4 in. npt (m x f)	C38324		C38324				C38324		1
	ELBOW; 3/4 npt (m x f)		15M864		15M864		15M864			1
	ELBOW; 1-1/2 in. npt (f x f)					115129			115129	1
405	BUSHING, reducing; 1 in. npt(m) x 3/4 npt(f)	C19661								1
	NIPPLE, reducing; 1-1/4 in. npt x 1 in. npt			C38306						1
	NIPPLE, reducing; 1 in. npt x 3/4 npt				15M805					1
	BUSHING, reducing; 1-1/2 npt x 1-1/4 npt (fbe)					16A999			16A999	1
	COUPLING, reducing; 1-1/2 in. npt x 1 in. npt (fbe)						15M865			1



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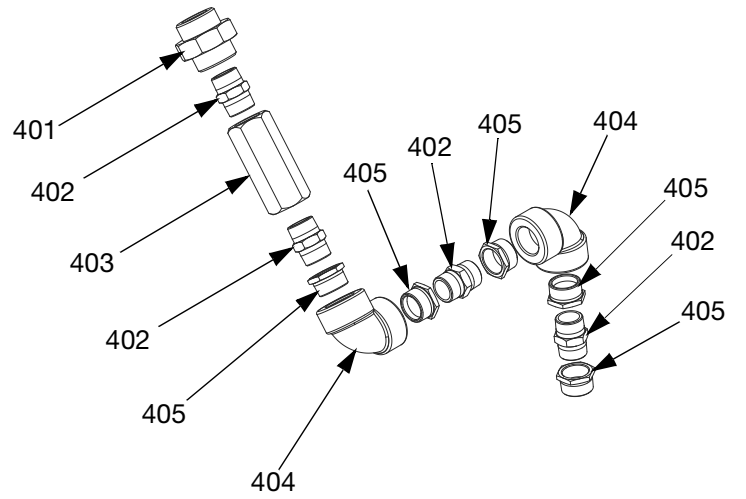
**255455 Shown**



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**25N026 Shown**



## Depressurization Kits

### 255457, carbon steel

### 255458, stainless steel

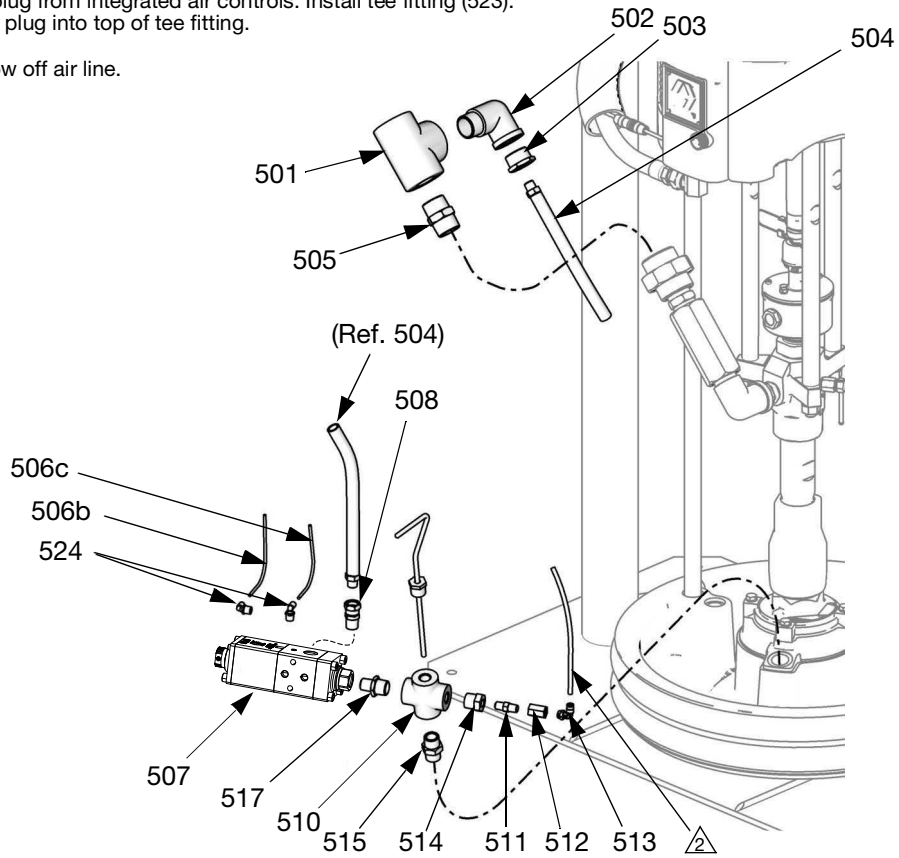
Ref.	Description	255457 (cst)	255458 (sst)	Qty .
501	TEE; 1-1/4 npt(f)	C19491		1
	TEE; 3/4 npt(f)		15M862	1
502	ELBOW, street; 1-1/4 npt (m x f)	C38324		1
	ELBOW; 3/4 npt (m x f)		15M864	1
503	BUSHING, reducing; 1-1/4 in. npt(m) x 3/4 npt(f)	C19660		1
	BUSHING, reducing; 3/4 npt(m) x 1/2 npt(f)		502033	1
504	HOSE; 1/2 npt (mbe) cst; 28 in. (712 mm); buna-N	n/a		1
	HOSE; 1/2 npt (mbe) sst; 28 in. (712 mm); ptfe		n/a	1
505	NIPPLE, hex; 1-1/4 npt	C20490		1
	NIPPLE, hex; 3/4 npt		190724	1
506	TUBE; nylon; 5/32 in. (4 mm) OD; 10 ft (3.05 m); black	buy locally	buy locally	2
507	VALVE, depressurization/recirculation, 1/2 npt port; see manual 310550 for parts	25R844	25R844	1
508	UNION, adapter, swivel; 1/2 npt (m x f)	156684	15M859	1
510	CROSS; 3/4 npt(f)	15M834	15M866	1

Ref.	Description	255457 (cst)	255458 (sst)	Qty .
511	VALVE, check; 1/4 npt(m)	15M867	15M867	1
512	CONNECTOR, pipe; 1/4 npt (fbe)	113093	113093	1
513	ELBOW, tube; 1/4 npt(m) x 1/4 in. (6 mm) OD tube	114109	114109	1
514	REDUCER, pipe; 3/4 npt(m) x 1/4 npt(f)	C19681	15M861	1
515	NIPPLE, hex; 3/4 npt	C20487	190724	1
517	ADAPTER; 1/2 npt(m) x 3/4 npt(m)	157191	15R232	1
520	VALVE, solenoid, 4-way	15M574	15M574	1
521	SCREW, cap, socket-hd; 6-32 x 1-1/4 in. (31 mm)	C19965	C19965	2
522	NUT, lock, hex; M4	C19862	C19862	2
523	TEE; 1/4 npt(m) x 1/4 npt(f) x 1/4 npt(f)	116504	116504	1
524	ELBOW, tube; 1/4 npt(m) x 5/32 in. (4 mm) OD tube	198178	198178	3
525	WIRE, harness	15Y047	15Y047	1

Parts designated n/a are not available separately.

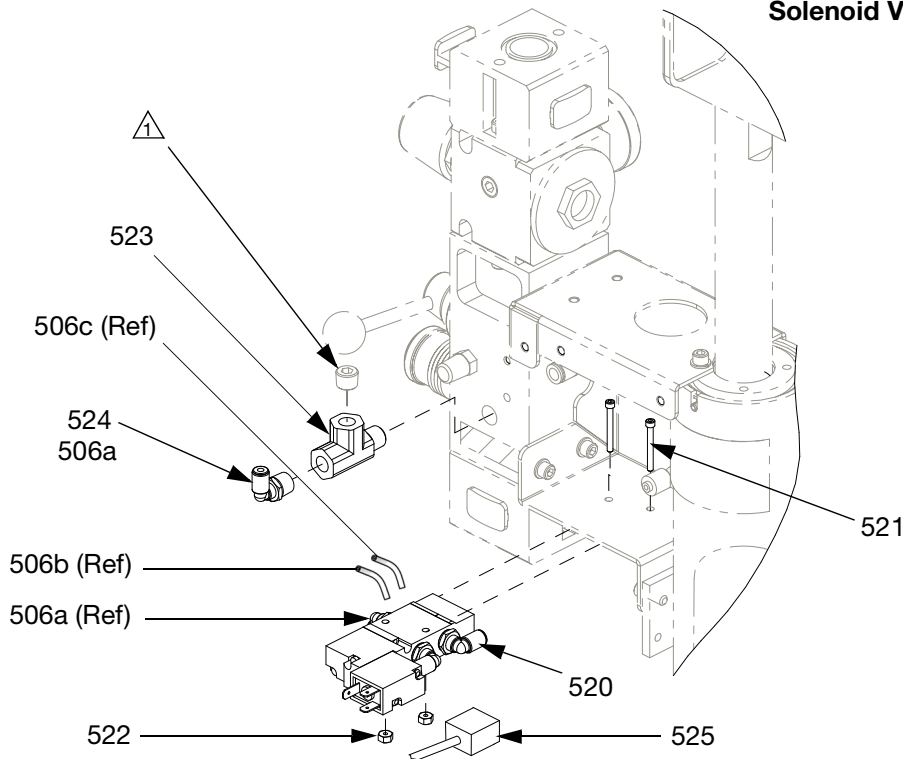
⚠ Remove plug from integrated air controls. Install tee fitting (523).  
Assemble plug into top of tee fitting.

⚠ Platen blow off air line.



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### Solenoid Valve Detail



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# Accessories

## Communications Gateway Module

Communications Gateway Module CGMxx0 requires **CGK010 Mounting Kit**. Use reference kit noted below for mounting a CGM on electric tandem supply system. See manual 313138 for installation and repair parts.

Communications Gateway Module Mounting Kit	Communications Gateway Module Part No.	Fieldbus
CGK010	CGMDN0	DeviceNet
	CGMEP0	EtherNet/IP
	CGMPB0	PROFIBUS
	CGMPN0	PROFINET

See manual 312864 for CGM setup instructions.

## Pressure Sensor Accessories

### Sensors

Part No.	Description
121175	Pressure sensor filter

### Cables

Part No.	Description
15Y049	M12 male/female reverse key cable
15Y037	Pressure sensor splitter cable



# Technical Data

Max air input pressure (supply system)	psi (MPa, bar) / Air inlet size
S20 - 3 in. single post, 5 gal. (20 L) . . . . .	125 psi (0.9 MPa, 9 bar) / 1/2 npt(f)
D60 - 3 in. dual post, 16 gal. (60 L), 8 gal. (30 L), 5 gal. (20 L), . . . . .	150 psi (1.0 MPa, 10 bar) / 3/4 npt(f)
D200 - 3 in. dual post, 55 gal. (200 L), 30 gal. (115 L), 16 gal. (60 L), 8 gal. (30 L), 5 gal. (20 L) . . . . .	150 psi (1.0 MPa, 10 bar) / 3/4 npt(f)
D200s - 6.5 in. dual post, 55 gal. (200 L), 30 gal. (115 L)	125 psi (0.9 MPa, 9 bar) / 3/4 npt(f)
Max fluid, air working pressure, and weight (displacement pump) . . . . .	For Check-Mate pump packages, see manual 312376. For Dura-Flo pump packages, see manuals 311826, 311828, 311833.
Pump Wetted parts . . . . .	For Check-Mate displacement pumps, see manual 312375. For Dura-Flo displacement pumps, see manuals 311717, 311825, 311827.
<b>Platen/Ram Codes</b> (page 5): Part number, size, platen; Wetted parts	
<b>A, B, C, F, G, H:</b> 255662, 55 gal. (200 L) . . . . .	PTFE, EPDM, PTFE coated aluminum, zinc plated carbon steel, 316 sst
<b>J, L, M, R, S, T:</b> 255663, 55 gal. (200 L) . . . . .	EPDM, aluminum, zinc plated carbon steel, 316 sst
<b>4:</b> 255661, 30 gal. (115 L) . . . . .	zinc plated carbon steel, EPDM, sst, fluoroelastomer
<b>2:</b> 257728, 5 gal. (20 L) . . . . .	Electroless nickel, polyurethane, carbon steel, polyethylene, nitrile, zinc plated carbon steel, buna, 316 sst, 17-4PH sst
<b>1, 3:</b> 257729, 5 gal. (20 L)	Stainless steel, polyurethane, PTFE coated nitrile, polyethylene, nitrile, PTFE, 303 sst, 304 sst, 316 sst, 17-4PH sst
<b>0, D, E:</b> 257734, 8 gal. (30 L)	
<b>U, V, W:</b> 257738, 16 gal. (60 L) . . . . .	
<b>6, 7, 8, 9:</b> 257731, 5 gal. (20 L)	Electroless nickel, aramind reinforced elastomer, rubber-based PSA, polyurethane, polyethylene, nitrile, zinc plated carbon steel, buna, 1018 carbon steel, 304 sst, 316 sst, 17-4PH sst
<b>K, N, P:</b> 257736, 8 gal. (30 L)	
<b>X, Y, Z:</b> 257741, 16 gal. (60 L) . . . . .	
Ambient operating temperature range (supply system)	32-120 °F (0- 49°C)
Sound data. . . . .	See separate air motor manual.
External power supply requirements (DatraTrak)	
AC power units . . . . .	100-240 VAC, 50/60 Hz, single phase, 1.2 amps max draw
DC power units . . . . .	24 VDC, 1.2 amps max draw

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Original instructions. This manual contains English. MM 313529

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