

# Air Controls

312374A

***Integrated and 2-Button Interlock Air Controls for use with Supply Systems.***



**Important Safety Instructions**

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

**255650**

Integrated Air Controls

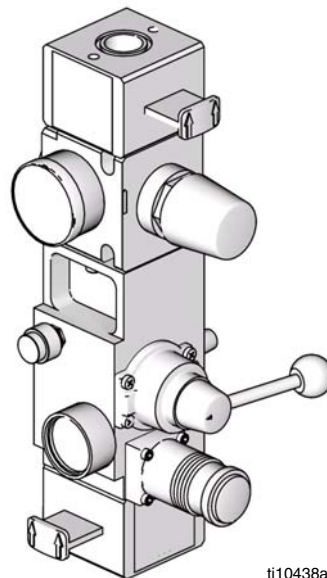
**255719**

Two-Button Interlock, For D200 3 in., 55 Gallon (200 Liter) Supply Systems

**255720**

Two-Button Interlock, For D200s 6.5 in., 55 Gallon (200 Liter) Supply Systems

*150 psi (0.69 MPa, 6.9 bar) Maximum Regulated Working Pressure*





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Integrated Air Controls

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# Integrated Air Controls

						
To reduce the risk of serious injury whenever you are instructed to relieve the pressure, follow the <b>Pressure Relief Procedure</b> .						

## Pressure Relief Procedure

1. Close the air motor slider valve (E) and the main air slider valve (F).
2. Set the ram director valve to DOWN. The ram will slowly drop.
3. Jog the director valve up and down to bleed air from ram cylinders.

## Disassembly

1. **Supply Systems with shrouds:** Loosen six captive screws (A) and disassemble shrouds (B) from supply system.

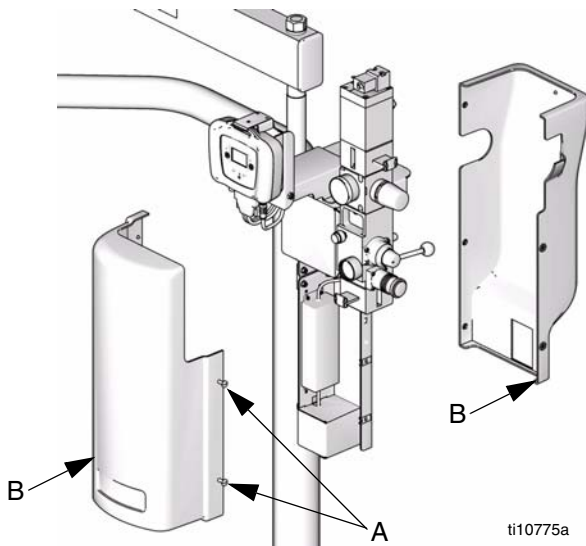


FIG. 1

2. Disconnect all hoses and tubing from existing air control.
3. Remove four screws (C) from the mounting bracket (D) and remove the integrated air controls from the supply system.

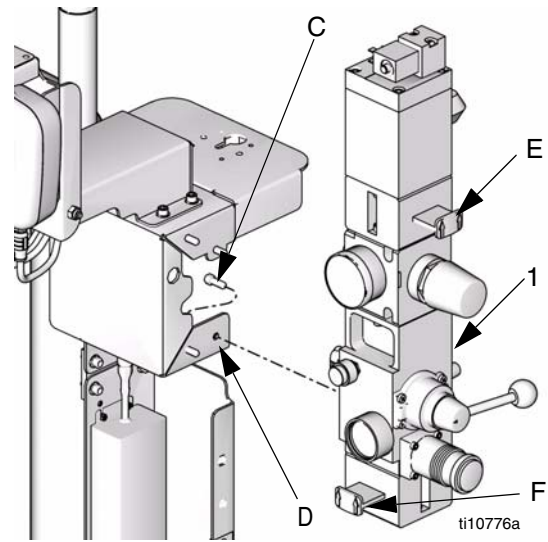



FIG. 2

 If you are not replacing the manifold (1), you may prefer to remove the bracket from the ram and leave it attached to the integrated air controls because the screws are easier to reach. See FIG. 3.

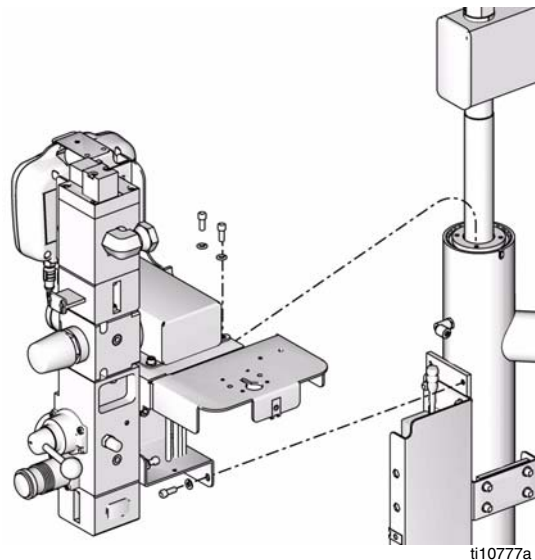



FIG. 3

## Replace Director Valve

Numbers in parentheses refer to FIG. 4.

1. Relieve pressure.
2. Remove screws (4a) and take off director valve.
3. Remove spring (4c), valve plate (4d), and o-ring (4b).

 Note the orientation of the director valve plate when you remove it. The opening should be on the opposite side (left) of the lever.

4. Remove and discard pin (4g) and four valve seats (4e) with o-rings (4f).
5. Insert new valve seats (4e) with o-rings (4f) and new pin.
6. Insert new director valve plate (4d, see Note above) spring (4c), and o-ring (4b).
7. Attach new director valve with screws (4a). Tighten screws until snug.

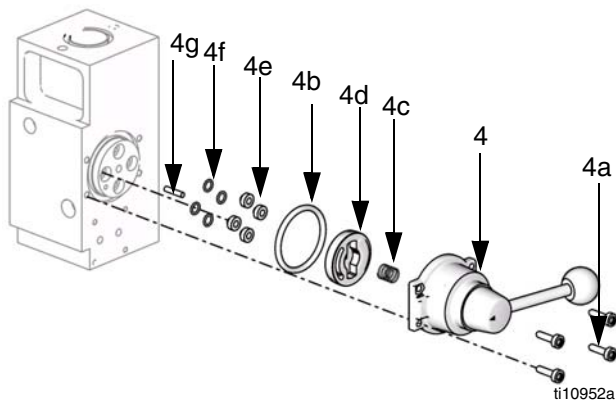


FIG. 4

## Replace Air Motor Regulator

Numbers in parentheses refer to **Parts**, page 6.

1. Relieve pressure.
2. Disconnect air motor hosing and fittings.
3. Remove two screws (9) and take off the shutoff valve (3) at top of module. If your supply system has an air solenoid, it can remain attached to the shutoff valve.

4. Remove two screws (9) and take off the air motor regulator (6).
5. Attach new regulator to manifold. Orient so the gauge lines up with the gauge on the ram air regulator and the direction of flow arrow points up. Tighten screws until snug. Recommend using thread locker Loctite 220 or equivalent.
6. Reattach shutoff valve (3) at top of regulator. Make sure that o-ring (5) is in place on valve (3).

## Replace Ram Air Regulator

Numbers in parentheses refer to **Parts**, page 6.

1. Relieve pressure.
2. Remove four screws (7a) and take off the ram air regulator (7).
3. Replace o-rings (7b) on back side of regulator.
4. Attach new air regulator to manifold. Use index pin for correct orientation. Tighten screws until snug.

## Reassembly

1. Using four screws, attach the integrated air controls to the mounting bracket. See FIG. 2.
2. Attach the ram up, ram down, and blowoff air lines as shown in Figure FIG. 5.

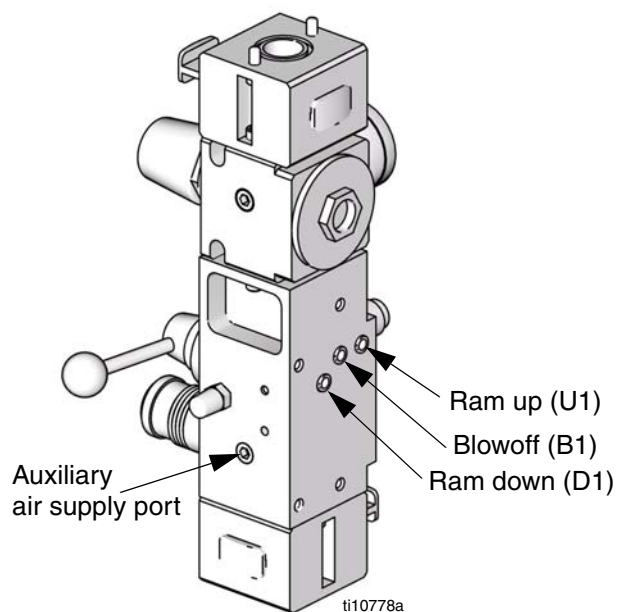





FIG. 5

3. Attach all other hoses and replace shrouds.

# 2-Button Interlock

						
<p>To reduce the risk of serious injury whenever you are instructed to relieve the pressure, follow the <b>Pressure Relief Procedure</b>, page 2.</p>						

## Attach Roller Switch and Actuator

1. Attach roller switch (133) to bracket (132). Position roller switch to far back position on the bracket and leave mounting screws (144) loose.
2. Attach bracket (132) to ram with screws (105) and washers (106). Leave screws loose.

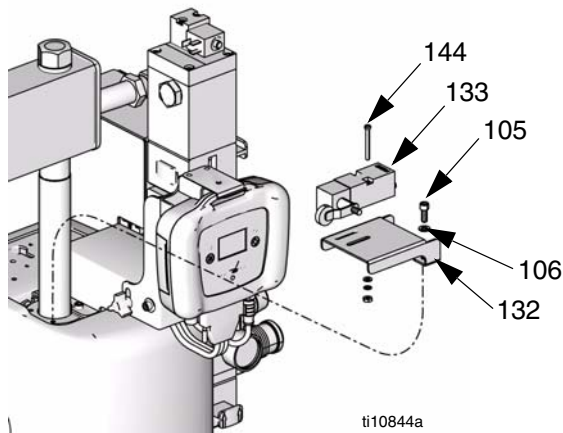


FIG. 6

3. Raise platen to top of drum. Attach actuator bracket (138) near bottom of lift rod so it engages the roller switch when the platen reaches the top of the drum.
4. Tighten actuator bracket to rod using 4 screws (140) and bracket clamps (139).
5. Adjust the roller switch (133) out so it contacts actuator bracket (138), then tighten screws (144).
6. Tighten bracket (132) to ram with screws (105) and washers (106).

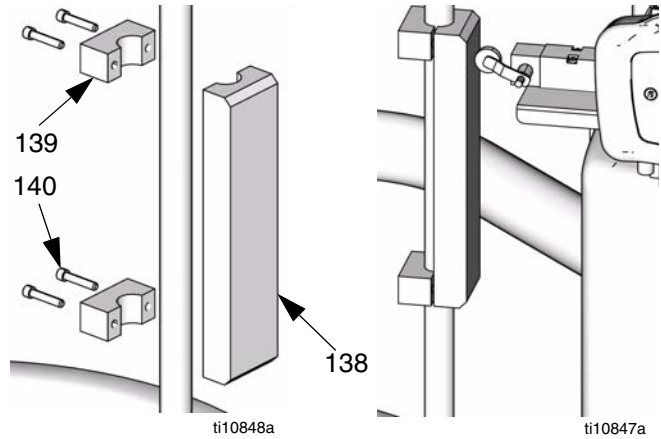


FIG. 7

7. Connect main air (S1) to port (S1) on roller switch (133) with 15 in. of tubing (146).
8. Connect switch signal air (S2) to port (S2) on roller switch (133) with 15 in. of tubing (146).

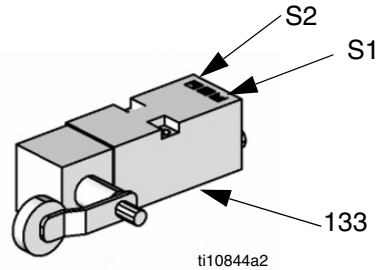


FIG. 8:

## Attach 2-Button Interlock Assembly

See FIG. 9.

1. Relieve pressure.
2. Remove shrouds. See FIG. 1.
3. Disconnect air lines.
4. Remove integrated air controls from bracket. See **Disassembly**, page 2.
5. Remove back cover from 2-button interlock assembly (130).
6. Position 2-button interlock assembly between air control bracket and air controls. The screws that

attach the integrated air controls to the supply system also attach the 2-button interlock assembly.

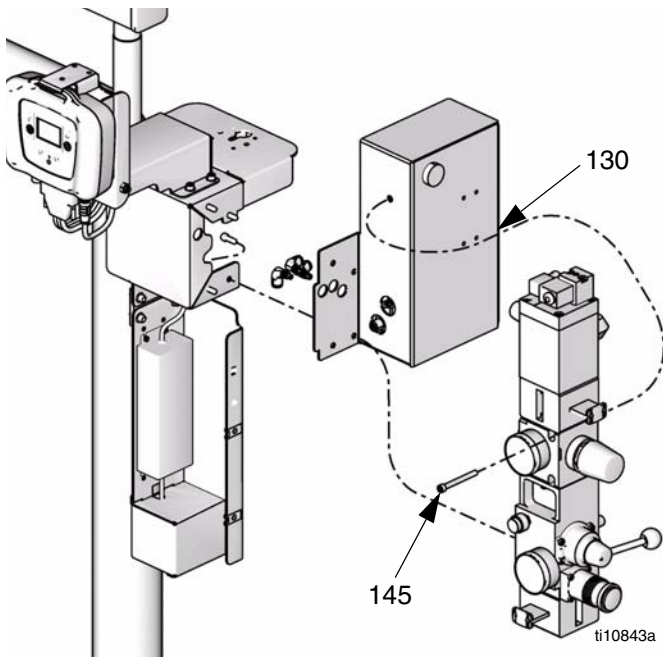



FIG. 9

See FIG. 10 for steps 8 - 13.

9. Inside 2-button interlock module, disconnect elbow fitting (6) and push fittings (7) from tee fitting (5). Remove plug (8) from auxiliary air supply port on back of integrated air controls. Install tee fitting (5) through into the port and through the opening in the bracket. Reconnect elbow fitting (6) and push fittings (7). Reinstall plug (8) at top of tee fitting (5).
10. Connect tubing (147) from ram down fitting on back of air controls to fitting (D1) on right side of bottom pilot valve. See FIG. 10.
11. Connect tubing from ram down fitting near top of ram cylinder to fitting (D2) on left side of bottom pilot valve. See FIG. 10.
12. Connect tubing (147) from ram up fitting on back of air controls to fitting (U1) on right side of top pilot valve. See FIG. 10
13. Connect tubing from ram up fitting near bottom of ram cylinder to fitting (U2) on left side of top solenoid.
14. Connect blowoff air (B1) to blowoff air connector on platen. See FIG. 5
15. Replace cover on 2-button interlock assembly.

7. Reattach integrated air controls. See **Reassembly**, page 3.
8. Insert cap screw (145) through integrated air controls into 2-button interlock module. See FIG. 9.

 It may be necessary to rearrange tubing so cover will fit back on assembly.

16. Attach all other hoses and replace shrouds.

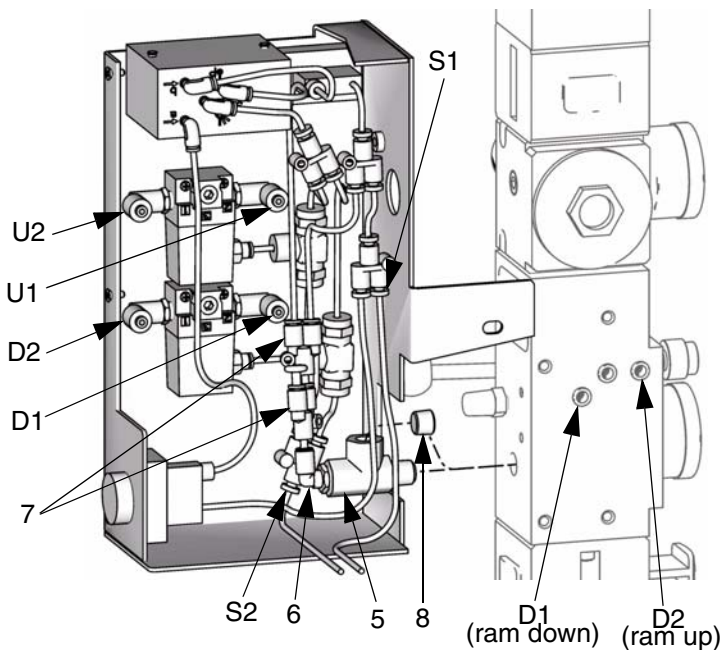
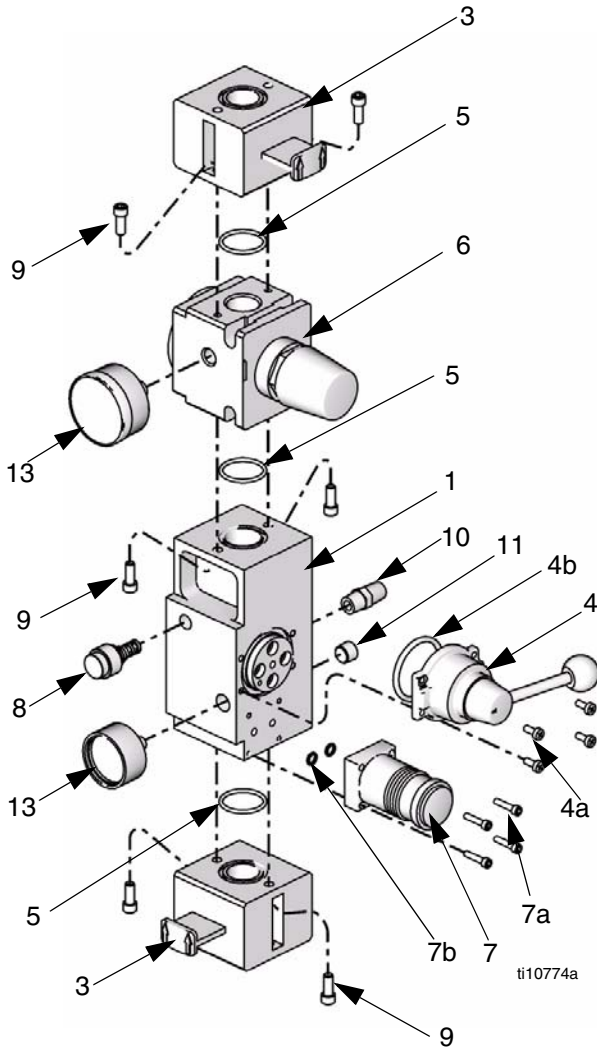


FIG. 10

# Parts

## Integrated Air Controls

### Model 255650



Ref.	Part	Description	Qty.
1		MANIFOLD	1
3	121108	VALVE, shutoff (includes o-rings and screws)	2
4	121107	VALVE, director (includes 4a and 4b, plus all parts shown in FIG. 4)	1
4a		SCREW	4
4b		O-RING	1
5	121110	O-RING, buna	3
6	121105	REGULATOR, air motor (includes regulator, o-ring, and screws)	1
7	121106	REGULATOR, ram (includes 7a and 7b)	1
7a		SCREWS	4
7b		O-RING	2
8	121109	VALVE, blowoff (includes valve and push button)	1
9	121112	SCREW, cap, socket head 1/4-20 x 5/8	6
10	517449	MUFFLER	1
11	100721	PLUG, pipe, auxiliary air supply	1
13	101689	GAUGE, air pressure, 0-200 psi (0-1.4 MPa, 0-14 bar)	2



# 2-Button Interlock Kit

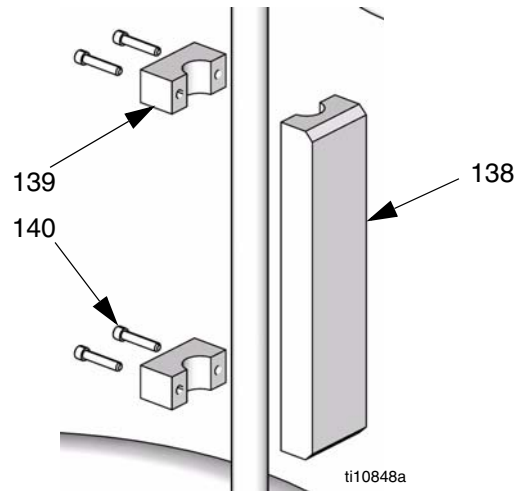
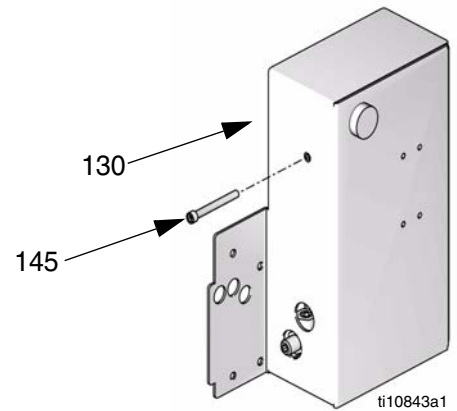
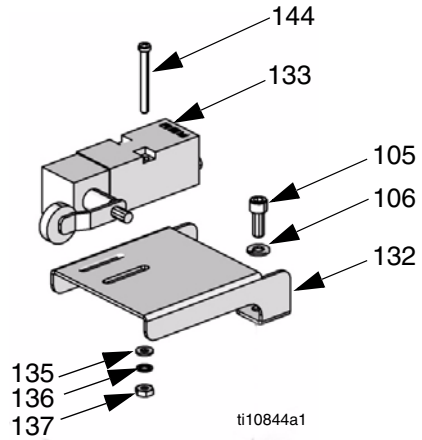
## Model 255719

(For D200 3-in., 55 gallon (200 liter) supply systems)

## Model 255720

(For D200s 6.5-in., 55 gallon (200 liter) supply systems)

Ref.	Part	Description	Qty.
105	101682	SCREW, cap, 1/4-20 x 5/8	2
106	100016	WASHER, lock, 1/4	2
130		AIR CONTROL, 2-button interlock	1
132		BRACKET, switch, mounting	1
133	121264	VALVE, roller operated	1
135	112905	WASHER, no. 8	2
136	157021	WASHER, lock, no. 8	2
137	100284	NUT, hex, 8-32	2
138		BRACKET, actuator	1
139		BRACKET, actuator, mounting	2
140	103345	SCREW, cap, 1/4-20 x 1 1/4	4
144	119251	SCREW, panhead, 8-32 x 1 1/2	2
145	C19817	SCREW, cap, 1/4-20 x 2 1/2	1
146	054753	TUBING, nylon, 5/32 in. (not shown)	30
147	C12509	TUBING, nylon, 1/4 in. (not shown)	30



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