

# Air Controls for Therm-O-Flow®

334201C

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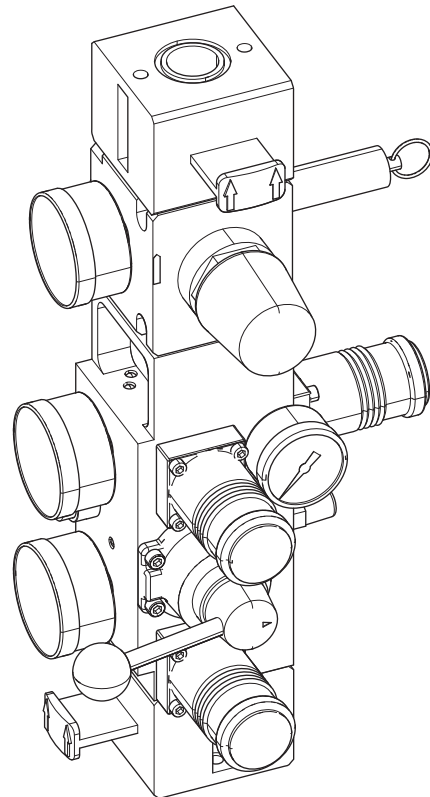
*Repair Kit for Integrated Air Controls for Therm-O-Flow® 20 and 200 Systems. For professional use only.*

**Part No. 24W870**



### **Important Safety Instructions**

Read all warnings and instructions in this manual and in all related manuals. Save all instructions.



ti25387a

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## Models


<b>Kit No.</b>	<b>Maximum Working Pressure psi (MPa, bar)</b>	<b>Description</b>	<b>Air Inlet Size</b>
24W870	125 psi (0.8 MPa, 8.6 bar)	Integrated Air Controls for Therm-O-Flow 20 and Therm-O-Flow 200	3/4 npt (f)






## Related Manuals

<b>Manual</b>	<b>Description</b>
334129	Therm-O-Flow 200, Instructions-Parts
334130	Therm-O-Flow 20, Instructions-Parts

# Repair

## Pressure Relief


WARNING

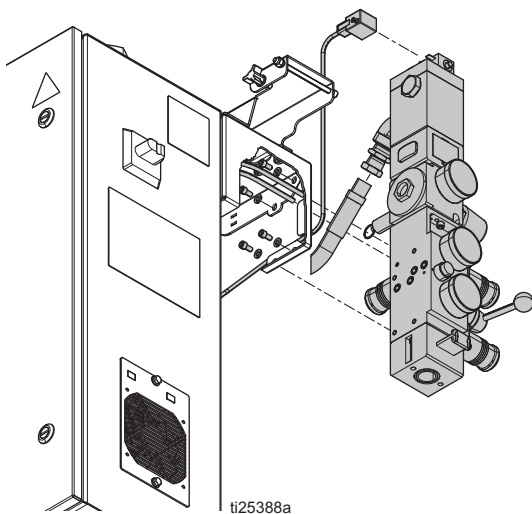
**PRESSURIZED FLUID HAZARD**

Therm-O-Flow 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 the Pressure Relief Procedure when you stop pumping and before cleaning, checking or servicing the equipment.

Relieve pressure by following the Pressure Relief Procedure in the instruction manual for the Therm-O-Flow system you are using. See **Related Manuals** on page 3.

## Remove the Air Control

1. Relieve pressure to the Therm-O-Flow system.
2. Disconnect all hoses and tubing from the air control.
3. Remove the four screws and washers as shown in Figure 1.



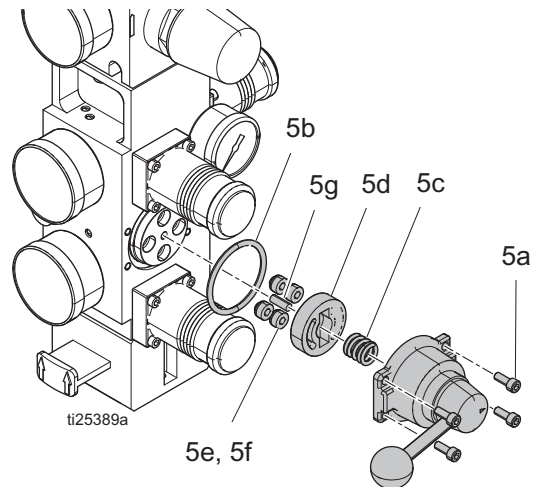
**FIG. 1: Air Control Removal**

## Replace the Director Valve

1. Relieve pressure to the Therm-O-Flow system.
2. Remove screws (5a) as shown in Figure 2 and take off the director valve.
3. Remove the spring (5c), valve plate (5d), and o-ring (5b).

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

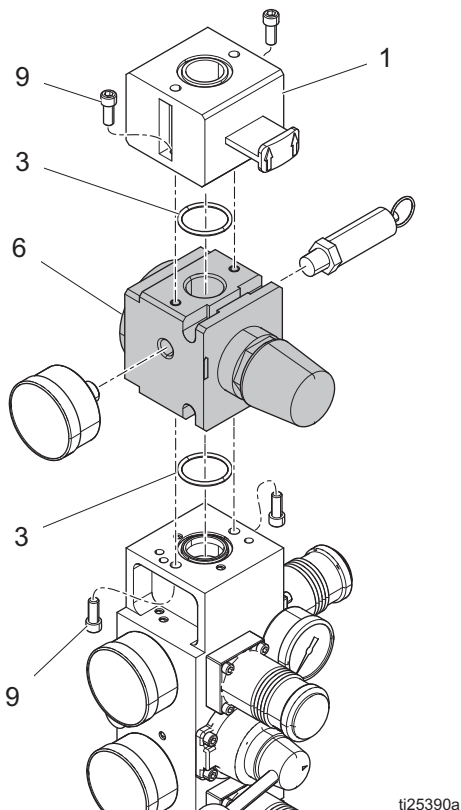
4. Remove and discard the pin (5g) and the four valve seats (5e) with the o-rings (5f).
5. Insert new valve seats (5e) with o-rings (5f) and the new pin (5g).
6. Insert the new director valve plate (5d; see the note above), spring (5c), and o-ring (5b).
7. Attach the new director valve plate with the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



**FIG. 2: Director Valve Replacement**

## Replace the Air Motor Regulator

1. Relieve pressure to the Therm-O-Flow system.
2. Disconnect the air motor housing and fittings.
3. Remove the two screws (9) and take off the shutoff valve (1) at the top of the module. If your system has an air solenoid, it can remain attached to the shutoff valve.
4. Remove the two screws (9) and take off the air motor regulator (6).
5. Attach the new regulator (6) to the manifold. Orient it so the gauge lines up with the ram gauges and the direction of the flow arrow points up. Tighten the screws until snug. It is recommended that you use thread locker Loctite 220 or equivalent.
6. Reattach the shutoff valve (1) at the top of the regulator. Make sure that the o-ring (3) is in place on the valve (1).



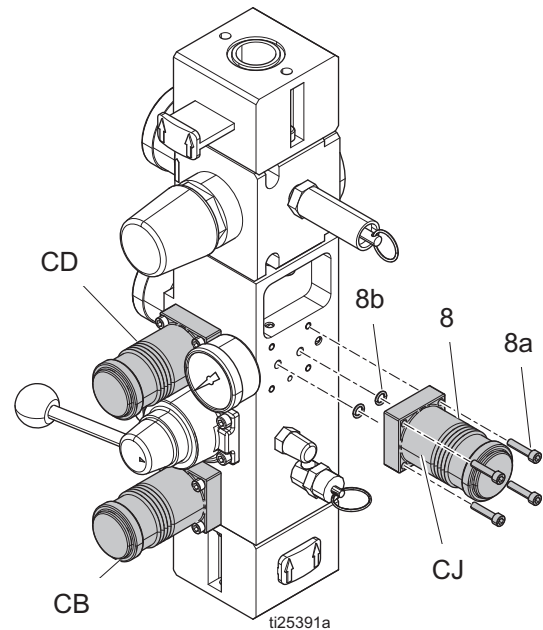
**FIG. 3: Air Motor Regulator Replacement**

## Replace the Air Regulators

Identify which knob regulator (8) need to be replaced.

- Ram Down Air Regulator (CB)
- Ram Up Air Regulator (CD)
- Blowoff Air Regulator (CJ)

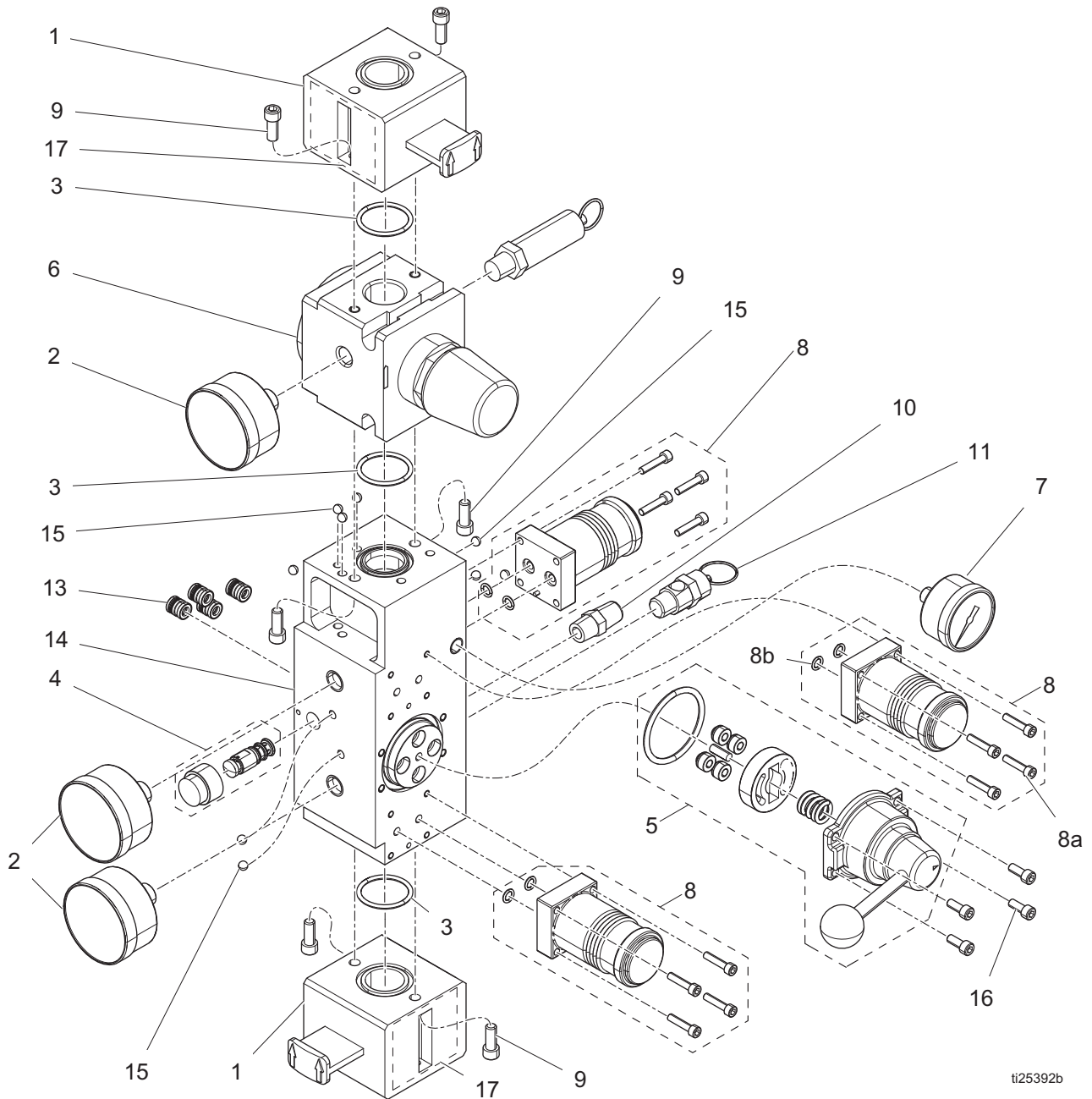
1. Relieve pressure to the Therm-O-Flow system.
2. Remove the four screws (8a) and take off the air regulator (8) as shown in Figure 4.
3. Replace the o-rings (8b) on the back side of the regulator.
4. Attach the new air regulator to the manifold. Use the index pin for correct orientation. Tighten the screws until snug.



**FIG. 4: Air Regulators Replacement**

# Parts

## 24W870 Air Control



ti25392b

FIG. 5: 24W870 Parts

Ref	Part	Description	Quantity
1	---	VALVE, shutoff, 3/4 npt (includes o-rings and screws)	2
2	101689	GAUGE, pressure, air; 0-200 psi (0-1.4 MPa, 0-14 bar)	3
3	121110*	O-RING, buna	3
4	121109	VALVE, blow-off (includes valve and push button)	1
5	---	VALVE, control	1
6	255651	KIT, regulator, air motor	1
7	108190	GAUGE, pressure, air; 0-100 psi (0-700 kPa, 0-7 bar)	1
8	121106	REGULATOR, manifold mounting (includes 8a and 8b)	3
8a	---	SCREWS	4
8b	---	O-RING	2
9	121112*	SCREW, cap, socket head	6
10	517449	MUFFLER, sintered, 1/4 npt	1
11	113498	VALVE, safety, 110 psi (0.8 MPa, 7.6 bar)	1
13	120602	FITTING, cartridge, 1/4	4
14	---	BLOCK, ram, control, 3 regulator	1
15	---	BALL, sst, 7/32 dia	11
16	120039	FASTENER, shcs, 10-32 x 1/2	4
17	15V954▲	LABEL, valve, shutoff, air control	1

--- Not available for individual sale.

\* Parts are available in kit 255651.

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

## Graco Information

For the latest information about Graco products, visit [www.graco.com](http://www.graco.com).

For patent information, see [www.graco.com/patents](http://www.graco.com/patents).

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