

Prodigy® Color-on-Demand® Color Change Manifold and Dump Valve Repair and Parts

Customer Product Manual
Part 1066484A03

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**For parts and technical support, call the
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Color Change Manifold and Dump Valve



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.



WARNING: Before making repairs to any component of the system, disconnect and lockout power at the system disconnect. Shut off the system air supply at the ball valve on the pump panel and release the air in the accumulator tank.

Manifold Repair

The color change manifold consists of three identical valve modules connected together with tubing and mounted on a V-shaped panel.

Repair of the manifold modules consists of disassembly, cleaning, and reassembly. The following kits are available for repair:

- Bladder Kit: 10 valve bladders and filter discs
- O-ring Kit: 12 O-rings for tubing connections

Repair Procedure

See Figure 1.

1. Disconnect the air tubing from the elbow fittings (1).
2. Unscrew the side lock knobs (8) and pull the powder tubing out of the ports.
3. Unscrew the top and bottom lock knobs.
4. Remove the fasteners securing the module bracket to the panel. Save the fasteners for reuse.
5. Lift the module away from the panel and move it to a clean workbench.
6. Unscrew the nut (5) securing the ground jumper (7) to the bracket stud. Remove the nut, lock washer (6), and flat washer (4).
7. Remove the 16 socket screws (2) securing the cover (17) to the manifold and lift the cover off the manifold.
8. Remove the filter discs, valve bladders, and bladder supports (10, 11, 12) from the manifold.
9. Remove the bladder supports from the valve bladders.
10. Blow out the manifold, cover, and bladder supports. Make sure all traces of powder have been removed.
11. Insert the bladder supports into the new valve bladders, with the hole closest to the end of the support going in first.
12. Insert the new valve bladders into the manifold, with the flat edges on the flanges facing to the center of the manifold.
13. Install the new filter discs on the cover.
14. Install the cover on the manifold and thread the 16 screws in finger tight.
15. Tighten the screws in a crisscross pattern, a turn at a time, until all are tight. Be careful not to overtighten the screws or the manifold threads could be damaged.
16. Secure the ground strap to the module bracket with the flat washer, lock washer, and nut.
17. Install the manifold on the panel.
18. Slide the lock knobs, then the O-rings (9), on the powder tubing.
19. Insert the tubing into the manifold ports until it bottoms out, then screw the lock knobs into the ports until tight.

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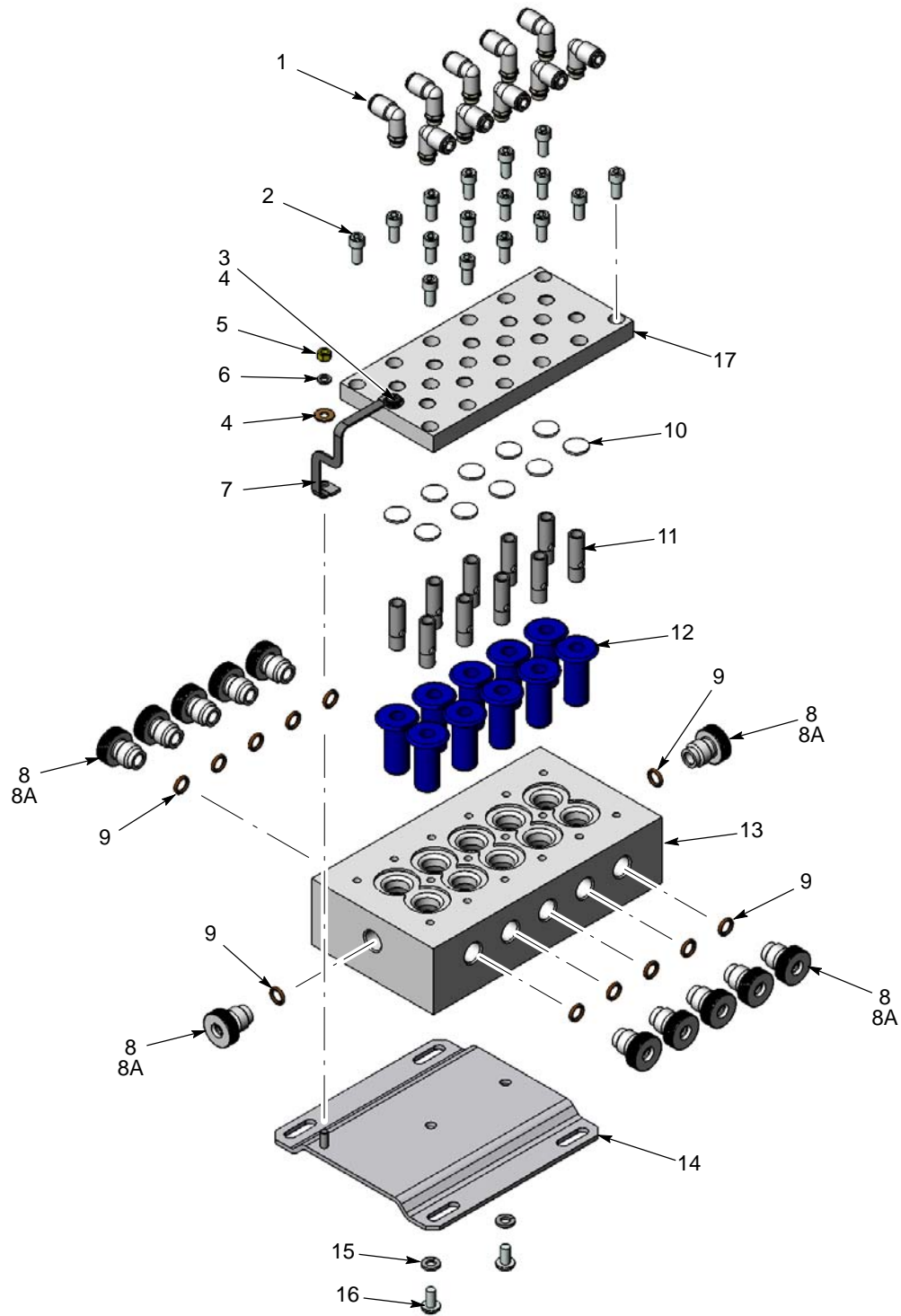


Figure 1 Manifold Exploded View

Color Change Manifold Parts

See Figure 1.

Item	Part	Description	Quantity	Note
-	1094892	MANIFOLD, module, Color-on-Demand, assembly		
1	972126	• CONNECTOR, male, elbow, 6 mm tube x 1/8 in. unithread	10	
2	981225	• SCREW, socket head, 1/4-20 x 0.625 in.	16	
3	1045837	• SCREW, panhead, M5 x 12, w/lockwasher	1	
4	983021	• WASHER, flat, 0.203 x 0.406 x 0.040, brass	2	
5	984702	• NUT, hex, M5, brass	1	
6	983401	• WASHER, lock, split, M5, steel, zinc	1	
7	246458	• JUMPER, ground, 4 in.	1	
8	1047934	• KNOB, lock, powder tube	12	
8A	940117	• O-RING, silicone, .312 x .438 x .063 in.	12	C
9	945115	• O-RING, Viton, 8.00 x 2.00	12	A
10	1058378	• DISC, filter, Prodigy HDLV pump	10	B
11	-----	• SUPPORT, Color-on-Demand bladder	10	
12	-----	• VALVE BLADDER, color changer, 0.12 W, , Color-on-Demand	10	B
13	-----	• MANIFOLD, color changer, Color-on-Demand	1	
14	-----	• BRACKET, Prodigy color changer	1	
15	983409	• WASHER, lock, split, M6, steel, zinc	2	
16	982499	• SCREW, panhead, slotted, M6 x 12, zinc	2	
17	-----	• COVER, manifold, color changer, Color-on-Demand	1	
NOTE A: Available in packages of 12, order 1065983 KIT, Color-on-Demand, O-Ring, 12 pack. B: Available in packages of 10 bladders and 10 filter discs, order 1065982, KIT, Color-on-Demand, bladder, 10 pack. C: Internal O-ring for lock knob.				

Dump Valve Repair

See Figure 2. Use the insertion tool shipped with the HDLV pump pinch valve kit to install the dump valve pinch valve. Refer to the HDLV pump manual 1053244 for a detailed pictorial procedure.

1. Remove the 8 socket head screws from the valve caps and remove the caps.
2. Place the valve body in a padded vise.
3. Grasp the large bottom flange of the pinch valve and pull it out of the valve body.
4. Clean the valve body.
5. Install the insertion tool through the valve body. Put the UP end of the new pinch valve in the tool. The UP end of the pinch valve fits into the smaller counterbore in the valve body.
6. Pinch the UP end of the pinch valve through the insertion tool and pull on the other end of the tool until the pinch valve is through the valve body.
7. Install the cap with the 12 mm fitting over the UP end of the pinch valve, and the cap with the 8 mm fitting on the other side, and tighten the screws in a crisscross pattern. Do not overtighten the screws or the valve body threads could be damaged.

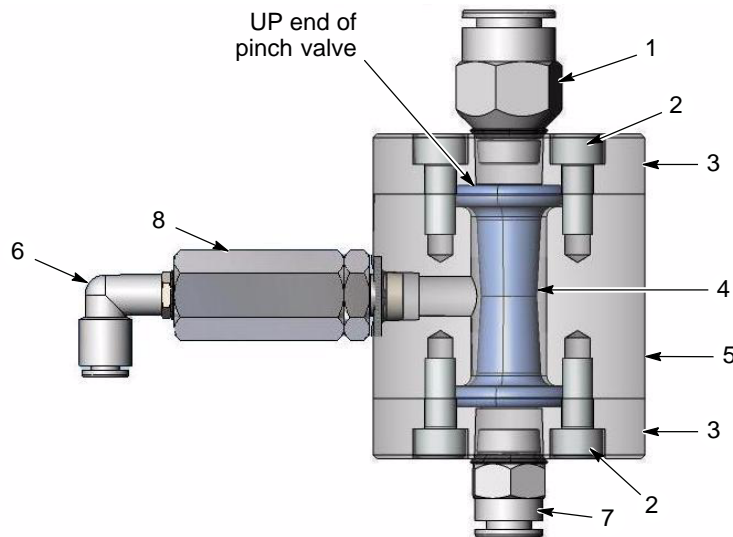


Figure 2 Dump Valve Cross-Section View

Dump Valve Parts

Item	Part	Description	Quantity	Note
-	1074720	VALVE, dump, Color-on-Demand	1	
1	971104	• CONNECTOR, male, 12 mm x 1/4 in. unithread	1	
2	1064886	• SCREW, socket head, M6 x 14, zinc	8	
3	- - - - -	• CAP, dump valve, Color-on-Demand	2	
4	1066626	• VALVE, pinch, HDLV pump	1	A
5	1074028	• BODY, dump valve, Color-on-Demand	1	
6	972126	• CONNECTOR, male, elbow, 6 mm x 1/8 in. unithread	1	
7	971121	• CONNECTOR, male, 8 mm x 1/4 in. unithread	1	
8	1075460	FILTER, inline, 1/8-in. NPT	1	
NOTE A: To replace, order 1066626 KIT, dump valve, pinch valve, 4 pack. Use insertion tool shipped with pump pinch valve kit to install.				