# FASTDRAW® Technical Manual

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1. **FASTDRAW® System Description**

*FASTDRAW* is a result of countless end user surveys. Our customers asked for a system that was **easy to install, easy to use, and easy to maintain** while providing the most accurate dilutions. Of course, the price had to be affordable also. The design features allow for maximum productivity and performance:

- Installs in minutes – Three simple holes to mount the dispenser.
- No metering tips to clean or replace. Each 2L bottle of *FASTDRAW* chemical gives you the perfect, precise dilution with every fill up.
- No duplicate inventories! – Each *FASTDRAW* refill bottle can fill both spray bottles and mop buckets/automatic scrubbers.
- Activate the product with the simple twist of a lever! Turn left for mop buckets or right for spray bottles.
- Extremely simple to change or replace product.
- No cross-contamination! – Product completely drains back into bottle when the lever is released. No need to flush the system.
- Upright bottle insertion eliminates drips or spills.
- Eductor based system – Once a vacuum is established, *FASTDRAW* produces consistent dilutions over varying water flow rates. Contrast this to gravity, drip systems which have the potential for great dilution change when subjected to different water flow rates.
- Easy to train! – Products are numbered and color-coded for simplified operation and training.
- New action gap backflow prevention resists hard water attack and draws more consistently with varying water pressures.
- Designed for small spaces – Fits into virtually any setting and weighs less than 6 pounds.
- Leave the product out of the system and dispense rinse water directly from the *FASTDRAW* dispenser; no need for a separate Y-valve.
- Icon-based wall charts – Simple to understand and aids in training employees.
2. FASTDRAW® Equipment Available

#91043-00 FASTDRAW Dispenser w/Action Gap
- Selector lever easily rotates to bottle or bucket position. Clearly identified and extremely easy to operate.
- Bottle docking lever pivots between locked and unlocked position. Heavy duty spring keeps bottle securely in place.
- All moving parts have been tested and have passed 100,000 cycles.
- The view window clearly identifies the product name and product use. In addition, the product bottles are numbered and color-coded to match the end-user wall chart.
- Action gap eductors produce consistent dilutions at lower water pressures than competitive systems.

#91069-00 FASTDRAW Dispenser w/Air Gap
- Similar to the #91043-00 dispenser above except unit comes with an Air Gap back flow preventer.

#91044-00 FASTDRAW Rack – sold separately
- Holds up to four FASTDRAW products.
- Lightweight – Can be mounted onto virtually any surface.
- Simple mounting instructions.
- Filled spray bottles can easily hang on bottom shelf.

#90052-00 Mobility Adaptor – sold separately
- Easily mounts onto the back of the FASTDRAW dispenser.
- Can clip onto any maid’s cart for mobile dilution control.

3. FASTDRAW® Equipment Packing Lists

a. #91043-00 (and #91069-00 air gap) FASTDRAW Dispenser
   - (1) FASTDRAW Dispenser
   - (1) Bottle Fill Outlet Hose
   - (1) Priming Tube (Included with 91069-00 only)
   - (1) Bucket Fill Outlet Hose w/Hanger Assembly
   - (1) 6’ Black Water Inlet Hose
   - (3 Each) Mounting Screw and Anchor Kit
   - (1) FASTDRAW Technical Manual
   - (1) FASTDRAW Operation Wall Chart (Item #91059-92)

b. #91044-00 FASTDRAW Rack
   - (1) 4-Product Rack
   - (1) Hardware Kit with 4 Mounting Screws, 4 Anchors, 1 Lock, 2 Keys
   - (1) Instruction Sheet

c. #90052-00 Mobility Adaptor
   - (1) Mounting Bracket
   - (4) Self Locking Nuts
   - (4) Washers
   - (1) Brass Quick Connector
## Section 2.
### Parts Diagram

<table>
<thead>
<tr>
<th>#</th>
<th>ITEM #</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>98303-00</td>
<td>Housing</td>
</tr>
<tr>
<td>2</td>
<td>98304-00</td>
<td>Cover &amp; Label Assembly</td>
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<tr>
<td>3</td>
<td>98305-00</td>
<td>Valve Knob</td>
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<tr>
<td>4</td>
<td>98306-00</td>
<td>#8 Hi Lo Flat Head Screw x 5/8&quot; Long</td>
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<td>5</td>
<td>98307-00</td>
<td>Ball Valve Assembly (Includes Item #98308-00)</td>
</tr>
<tr>
<td>6</td>
<td>98308-00</td>
<td>Strainer Washer</td>
</tr>
<tr>
<td>7</td>
<td>98309-00</td>
<td>#8 Hi Lo Screw x 1/2&quot; Long</td>
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<td>8</td>
<td>98310-00</td>
<td>Bottle Docking Assembly</td>
</tr>
<tr>
<td>9</td>
<td>98311-00</td>
<td>Tube 3 1/8&quot; Long</td>
</tr>
<tr>
<td>10</td>
<td>98312-00</td>
<td>Action Gap Assembly</td>
</tr>
<tr>
<td>11</td>
<td>98313-00</td>
<td>4 GPM Proportioner Assembly - White</td>
</tr>
<tr>
<td></td>
<td>98298-00</td>
<td>4 GPM Air Gap Proportioner - White</td>
</tr>
<tr>
<td>12</td>
<td>98314-00</td>
<td>1 GPM Proportioner Assembly - Green</td>
</tr>
<tr>
<td>13</td>
<td>98299-00</td>
<td>1 GPM Air Gap Proportioner - Green</td>
</tr>
<tr>
<td>14</td>
<td>98293-00</td>
<td>Black Water Hose 6' Long</td>
</tr>
<tr>
<td>15</td>
<td>98317-00</td>
<td>Outlet Tubing w/Hanger - 6' Long (Action Gap)</td>
</tr>
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<td>16</td>
<td>98300-00</td>
<td>Outlet Tubing w/Hanger - 6' Long (Air Gap)</td>
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<tr>
<td>17</td>
<td>98318-00</td>
<td>Bottle Fill Tube (Action Gap)</td>
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<td>18</td>
<td>98301-00</td>
<td>Bottle Fill Tube (Air Gap)</td>
</tr>
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<td>19</td>
<td>98302-00</td>
<td>Priming Tube (Air Gap Only)</td>
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<td>20</td>
<td>98319-00</td>
<td>Screw &amp; Anchor Kit (Quantity: 3 Each)</td>
</tr>
<tr>
<td>21</td>
<td>98297-00</td>
<td>Rubber Washer (Used for Proportioner Orientation)</td>
</tr>
</tbody>
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Optional Air Gap Proportioners

- 4 GPM White
- 1 GPM Green

Action Gap

- 4 GPM White
- 1 GPM Green

Air Gap Only

- 4 GPM White
- 1 GPM Green

Green Proportioners

- 1 GPM

White Proportioners

- 4 GPM

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**Diagram Annotations:**

- Item 1: Housing
- Item 2: Cover & Label Assembly
- Item 3: Valve Knob
- Item 4: #8 Hi Lo Flat Head Screw x 5/8" Long
- Item 5: Ball Valve Assembly (Includes Item #98308-00)
- Item 6: Strainer Washer
- Item 7: #8 Hi Lo Screw x 1/2" Long
- Item 8: Bottle Docking Assembly
- Item 9: Tube 3 1/8" Long
- Item 10: Action Gap Assembly
- Item 11: 4 GPM Proportioner Assembly - White
- Item 12: 4 GPM Proportioner Assembly - Green
- Item 13: 1 GPM Air Gap Proportioner - Green
- Item 14: Black Water Hose 6' Long
- Item 15: Outlet Tubing w/Hanger - 6' Long (Action Gap)
- Item 16: Outlet Tubing w/Hanger - 6' Long (Air Gap)
- Item 17: Bottle Fill Tube (Action Gap)
- Item 18: Bottle Fill Tube (Air Gap)
- Item 19: Priming Tube (Air Gap Only)
- Item 20: Screw & Anchor Kit (Quantity: 3 Each)
- Item 21: Rubber Washer (Used for Proportioner Orientation)
5. Pre-Installation Requirements

• Read this technical manual before beginning installation of equipment.
• Know what products are required for use in maintaining the facility. There are several different products to choose from for virtually any cleaning application.
• Make sure all components outlined in Section 3a are in the carton.
• Use water supply lines from tap water outlets with a minimum of 20 PSI, not to exceed 80 PSI, and water temperature must not exceed 100°F.
• When using the FASTDRAW® Rack (Item #91044-00), be sure the surface can sustain a 20 lb. load.
• Make sure to allow 10 inches on the right side of the dispenser for attaching the water supply hose and to allow ample room for bottle insertion.
• Install the unit close to a floor drain or sink whenever possible.
• As with all chemicals, place the system in an area that can be secured from unauthorized personnel.

6. Tools Required For FASTDRAW® Installation

• Hammer
• Pliers
• Tape Measure
• Drill with 1/4", 1/8" and 9/32" Diameter Bits
• Medium Phillips Screwdriver
• Straight Edge Level
• Pencil or Marker
Step 1: Mounting the Proportioner to the Wall

1. Find the appropriate hole pattern for your installation.

   **NOTE:** If the dispenser is being hung with the internal hole patterns, you must remove the cover. To remove the dispenser cover, first remove the screw on the front lever with a Phillips screwdriver.

   Then press down on the upper, snap-in tab and rotate the cover forward.

   To replace the cover, first insert the two lower tabs into the slots and rotate the cover until the housing snaps into place.

2. Mark appropriate holes for drilling. Use the 1/4” diameter bit with the included #10 x 3/4” long screw and anchor set. If you are mounting the dispenser to wood and do not plan to use anchors, drill 1/8” diameter holes.

3. Insert the anchors into the drilled holes and hammer them into the wall until they are flush with the wall. Insert the threaded screws into the anchors so the screw heads are sticking out approximately 3/8”. Position the dispenser holes over the screw heads and slide down until the keyhole slots are resting on the screws. Use a level to make sure the dispenser is hung properly. Tighten the screws.
Step 1: Mounting the Proportioner to the Wall (continued)

4. Connect the supplied 6’ braided water supply hose to the right side of the dispenser and the water line. Tighten both connections by hand. Mount the water supply line to the wall with proper clamps to avoid damaging the dispenser. Slowly turn on the water supply to check for any leaks. You may need to tighten an additional 1/4 turn with pliers, but be careful not to over tighten.

5. *Push and twist the plastic short hose over the barbs in the 1 GPM green eductor on the right side. Push and twist the plastic long hose over the barbs in the 4 GPM white eductor on the left side. Make sure the hoses are secured tightly.

   *NOTE: For 91069-00 air gap dispensers, you must first insert the small, thin priming tube onto the 1 GPM green eductor on the right side. Then place the clear plastic short hose over the small priming tube and onto the barbs.

6. Make sure that the hook portion of the hanger is near the open end of the hose. (See diagram to the left.) Hook the bucket-fill hose onto the slot on the left side of dispenser.

7. Hang the clear folder with the product literature sheets/MSDS next to the dispenser. Hang the Operation Chart on other side of the dispenser for training and reference.
Step 2: Mounting the Chemical Storage Rack

1. Hold the rack to the wall. Use the level to ensure that the rack is straight.

2. Using the back of the rack as your template, make marks on the wall where holes should be drilled.

3. Use the 9/32” drill bit to drill holes where marked on the wall surface.

4. Insert the anchors into the drilled holes, tapping gently with the hammer if needed.

5. Hold the rack to the wall. Insert the screws through the rack mounting holes and into the anchors. Tighten the screws to secure the rack to the wall.

6. Hold the FASTDRAW refill bottle by the handle and place it into the rack; the handle and the FASTDRAW number should be facing you. Insert up to 4 products into the FASTDRAW Rack.

(Optional) To lock the rack, slide the bar between the handles and the bottle neck. Place the lock through the loop in the bar. Secure the lock.
8. Operating the FASTDRAW® System

1. Make sure the water supply is connected to the unit and turned on.

2. Each product sleeve matches the product color. Find the appropriate product for your cleaning task.

3. Remove the cap from the bottle.

4. Rotate and hold the side docking lever down in the unlocked position.

5. Slide the bottle fully into the dispenser housing with the bottle neck going in first. The bottle will not dock if you attempt to insert the bottle handle-first. The product name and number should be seen through the view window on the front of the dispenser.

6. Return the docking lever to the locked position.
8. Operating the FASTDRAW® System (continued)

Filling Mop Buckets

1. Place the long hose into the container to be filled.

2. Rotate the front lever to the mop bucket icon on the left.

3. When the container is filled, return the lever to the OFF position.

4. Return the long hose to the hose holder on the left side. Make sure to drain all liquid from the hose.
8. Operating the FASTDRAW® System (continued)

Filling Spray Bottles

1. Place the empty spray bottle onto the short hose on the right side of the dispenser.

2. Rotate the front lever to the spray bottle icon on the right.

3. When the bottle is filled, return the front lever to the OFF position.
8. Operating the FASTDRAW® System (continued)

To Dispense Water Only

1. Place the long hose into the container to be filled.

2. With the concentrate bottle out of the dispenser and the water supply connected and turned on, rotate the front lever to the mop bucket icon on the left.

3. When finished, return the lever to OFF position.

4. Return the long hose to the hose holder on the left side. Make sure to drain all liquid from the hose.
9. Guidelines for Using the FASTDRAW® System

- Always wear appropriate Personal Protective Equipment (PPE) when using any chemical.
- Always observe safety and handling instructions that are found on the Material Safety Data Sheets (MSDS).
- Always direct discharge away from you or other persons.
- Always dispense cleaners and chemicals according to label directions.
- Keep equipment clean to maintain proper operation.
- Always reassemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
- Use of any other products through the FASTDRAW System, other than products manufactured by Betco Corporation, will void all warranties and may prevent the system from operating properly.

    *Remember to turn the water supply to the dispenser off when not in use.*

10. Installation Review

1. Is the equipment securely mounted to the wall?
2. Is the water supply connected to the dispenser and turned on?
3. Have authorized personnel been fully trained on the system?
11. Troubleshooting Guide

Product or chemical does not dispense.
1. Make sure the water is on.
2. Make sure the water inlet hose is not kinked or crimped.

Only water is being dispensed.
1. Make sure there is product in the concentrate bottle.
2. Make sure there is at least 20 PSI pressure to draw product.
3. Remove cover. Did any tubes become dislodged or damaged? If so, reconnect or replace tubing as needed.

Dispenser is leaking.
1. Make sure dispenser is not accidentally left on.
2. Is water pressure greater than 80 PSI? If so, install a pressure regulator.
3. If leaking occurs at specific connection points, replace fitting and connectors.

Excessive foam when filling spray bottles.
1. Make sure there is product in the concentrate bottle.
2. Place the bottle fill hose farther down in bottle. By placing the hose farther down into the bottle, less foam will result.
3. Make sure all connections are secure.

Excessive foam when filling mop buckets/automatic scrubbers.
1. Make sure there is product in the concentrate bottle.
2. Make sure all connections are secure.