

## GENERAL FUNCTION:

The Hydro-Force Revolution injection sprayer is used to quickly, and evenly apply pre-spray, protector and other chemicals over large areas. The Hydro-Force Revolution injection sprayer is unique because you can adjust dilution ratios on the fly by simply turning a knob. The Hydro-Force Revolution injection sprayer can be used at pressures as low as 50 PSI or as high as 1,000 PSI. All Hydro-Force Revolution sprayers are set at the factory to be used at water pressures of 400 P.S.I. but can easily be configured to work at lower pressures by simply changing the knob to a low pressure knob (NA0868). See 'Low Pressure Instructions' below. Water flow is automatically reduced as it passes through the injector valve, thus reducing the pressure approximately 64%. To obtain the actual working pressure of your Hydro-Force Revolution injection sprayer, multiply your incoming pressure by 36%.

## PRE-SPRAY AND TRAFFIC LANE APPLICATIONS:

Hydro-Force injection sprayers eliminate the hassles of measuring and mixing. We recommend you keep an extra 5-quart container or two on your truck to make sure you never run out and to facilitate quick changes of your chemical containers. Remember that Hydro-Force sprayers automatically mix at a 1 to 8 ratio. If your 5-quart container is full then that is the same as holding an 11 gallon pump sprayer of regular, ready to use pre-spray.

Hydro-Force injection sprayers offer better penetration and overall coverage than other sprayers. It is therefore possible to pre-spray your jobs up to 45 minutes before that area needs to be cleaned. An effective way to use the Hydro-Force sprayer for pre-conditioning is to start at the door coming into the house; spraying all the traffic areas, and work your way to the farthest point back in your job. You have then completed your pre-conditioning in just seconds and are prepared to hook up your wand and start cleaning your way out.

On larger jobs, or jobs involving more than an hour of cleaning time, it is recommended that you pre-spray an area that will take no longer than 45 minutes to clean. You can then hook up your Hydro-Force again and pre-spray another large area.

## APPLICATION OF CARPET PROTECTORS:

This highly profitable procedure is often passed up on many jobs because it is too big of a 'hassle'. Operators will not mention the availability of protectors because they are running short on time and must hurry to their next job, or they don't want to take the time to rinse tanks then measure, mix and pump.

Hydro-Force injection sprayers bypass these hassles and encourage you to apply carpet protectors. Go to your machine, shut off the chemical and, if you prefer, your heat. You should then take a 5 quart container with clean water (adding an ounce or two of acid or vinegar will help) to your Hydro-Force injection sprayer unit. Take off your traffic lane bottle and put on clean water. Run your Hydro-Force injection sprayer for approximately 20 seconds or until all soap is out of your lines. You may then put on your 5 quart container with carpet protector in it. Your product should be concentrated and diluted at 1 to 8 for application on damp carpet. If this is a difficult dilution to reach you may remove the metering tip to obtain a 1 to 4 ratio. If you are using Scotchgard® or a Teflon® product on dry carpet you should dilute them 1 to 1 with water before you use them with a Hydro-Force injection sprayer. Whether you use Maxim™ or another product, you will find that a 5 qt. container will go a long way. 5 qts. diluted 1 to 8, gives you 11 gallons of ready to apply protector. With a coverage rate of 300 square. ft. per gallon, 5 qts. of protector will cover 3,000 square ft.

Keep in mind that your Hydro-Force injection sprayer is spraying 3 to 4 times the amount of product your normal pump sprayer is putting out. This means you must move quickly to avoid over-applying. Protector should be applied in even, slightly overlapping strokes. You should proceed from the entrance again working your way toward the farthest point.

## LOW PRESSURE INSTRUCTIONS

Your solution hose pressure affects how much chemical is drawn from the Hydro-Force injection sprayer. Higher pressures decrease the ratio of chemical to water and lower pressures increase the ratio of chemical to water. If you are using pressures ranging from 50 to 200 PSI, you'll want to install the low pressure knob (NA0868) so your dilution ratios are more properly calibrated. We recommend using 100 PSI when using the low pressure knob for the most accurate dilution ratios.

# HYDRO-FORCE™ REVOLUTION®

## Injection Sprayer



Part Number: AS08R

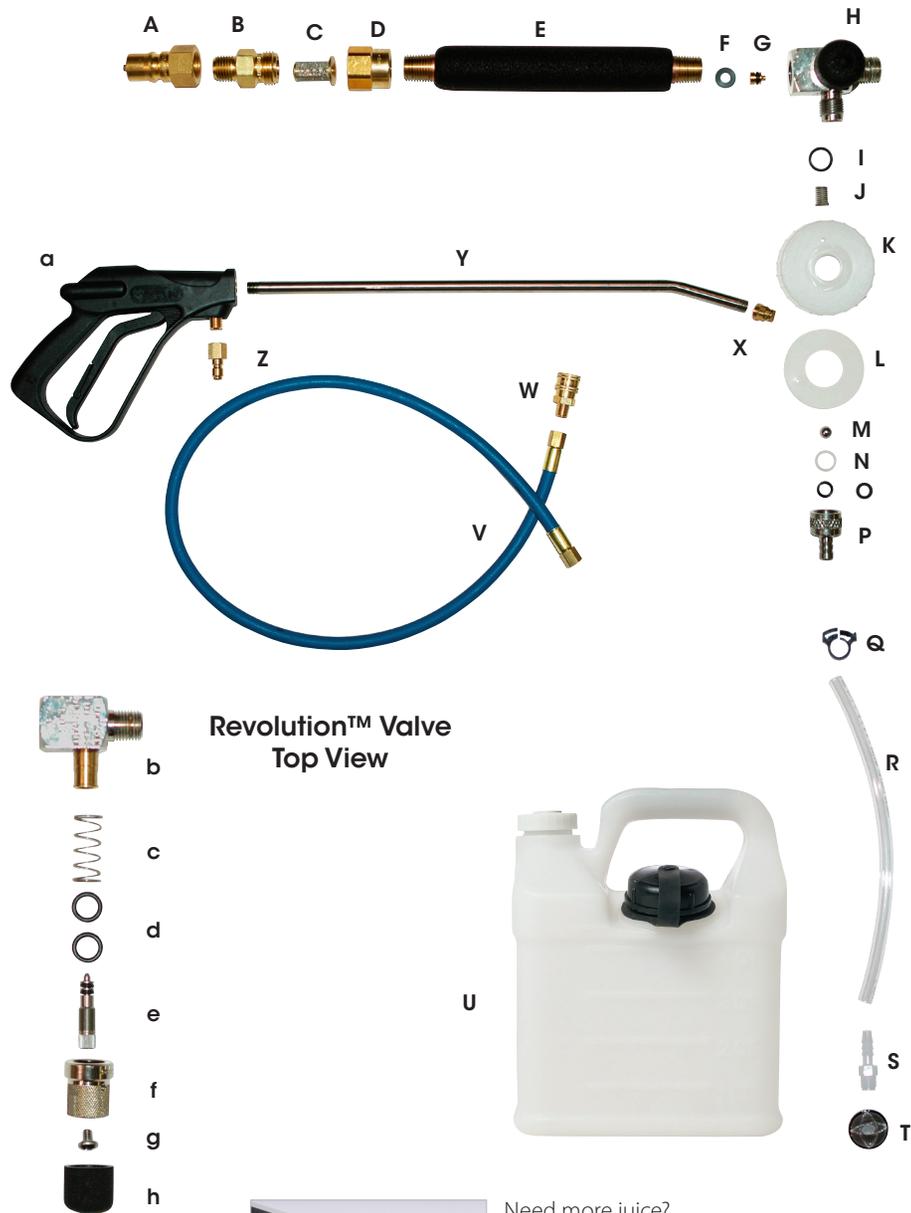
Patent Pending

For those that want to Revolutionize how their spraying is done, the Revolution takes efficiency to a new level by allowing cleaners to dial in the exact concentration of chemical needed. Cut your spray time in half! Quickly apply presprays, deodorizers, tile and grout cleaning solutions, sanitizers, protectors and more.

To learn how you can save time  
and money using a Hydro-Force sprayer  
call 800-637-3789 or visit [www.hydroforce.com](http://www.hydroforce.com)

 **HYDRO-FORCE™**  
Innovating since 1974

## PARTS BREAKDOWN



Need more juice? Instantly change the **dilution ratio** to blast away greasy stains.

## PARTS LIST

| PART #  | PART DESCRIPTION         | PART #  | PART DESCRIPTION         | PART # |
|---------|--------------------------|---------|--------------------------|--------|
| AH102B  | 1/4" Male Quick Connect  | NA0802  | Strainer Body            | NA0839 |
| NA0802  | Strainer Body            | NA0803  | Strainer                 | NA0840 |
| NA0803  | Strainer                 | NA0804  | Strainer Adapter         | AS68   |
| NA0804  | Strainer Adapter         | NA0806A | Insulated Handle         | NA0828 |
| NA0806A | Insulated Handle         | NA0807  | Backup Washer            | BR337  |
| NA0807  | Backup Washer            | NA0808  | Water Nozzle with O-Ring | B280   |
| NA0808  | Water Nozzle with O-Ring | NA0850A | Injector Valve Complete  | NA0833 |
| NA0850A | Injector Valve Complete  | NA0837  | Viton O-Ring             | NA0837 |
| NA0837  | Viton O-Ring             | NA0810  | Check Valve Spring       | NA0835 |
| NA0810  | Check Valve Spring       | NA0812  | Formed Bottle Cap        | BR335  |
| NA0812  | Formed Bottle Cap        | NA0838  | Cap Liner                | 100010 |
| NA0838  | Cap Liner                | NA0811  | Steel Ball               | 100010 |
| NA0811  | Steel Ball               | NA0813  | Spacer                   | 100010 |
| NA0813  | Spacer                   | NA0814  | Viton O-Ring             | 100010 |
| NA0814  | Viton O-Ring             | NA0815  | Suction Nut              | 100010 |
| NA0815  | Suction Nut              | NA0818  | Clamp HF Draw Tube       | 100010 |
| NA0818  | Clamp HF Draw Tube       | NA0817  | Tubing                   | 100010 |
| NA0817  | Tubing                   |         |                          |        |

## TROUBLE SHOOTING GUIDE

### PROBLEM: Will Not Draw Chemical

| CAUSES                             | PART    | SOLUTIONS        |
|------------------------------------|---------|------------------|
| Inlet Strainer Clogged             | NA0803  | Clean or Replace |
| Wrong Teejet Size                  | B280    | Replace          |
| Acorn Strainer Clogged             | NA0840  | Clean or Replace |
| Metering Tip Clogged               | NA0816  | Clean or Replace |
| Water Nozzle Clogged or Worn       | NA0808  | Clean or Replace |
| Injector Valve Needs Major Rebuild | NA0849  | Install Kit      |
| Bad Injector Valve                 | NA0850A | Replace          |
| Chemical Build-up Inside of Valve  | NA0850A | Clean w/ Vinegar |

### PROBLEM: Container Backfills

|                              |         |                      |
|------------------------------|---------|----------------------|
| Injector Valve Needs Rebuild | NA0841  | Install Backflow Kit |
| Bad Injector Valve           | NA0850A | Replace              |

### PROBLEM: Does Not Shut Off or Leaks From Gun

|                     |        |         |
|---------------------|--------|---------|
| Worn Gun            | 100010 | Replace |
| Valve Needs Rebuild | NA031A | Replace |
| Worn Valve in Gun   | NA031  | Replace |