



INJECTION SYSTEMS

EZ 2005-HB

INSTALLATION AND OPERATING GUIDE Low Pressure Garden Hose & Drip Feeder



For an overview of the EZ-FLO System
Installation & Operation:

www.ezfloinjection.com/videos/

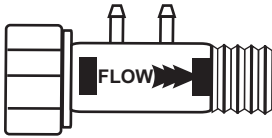
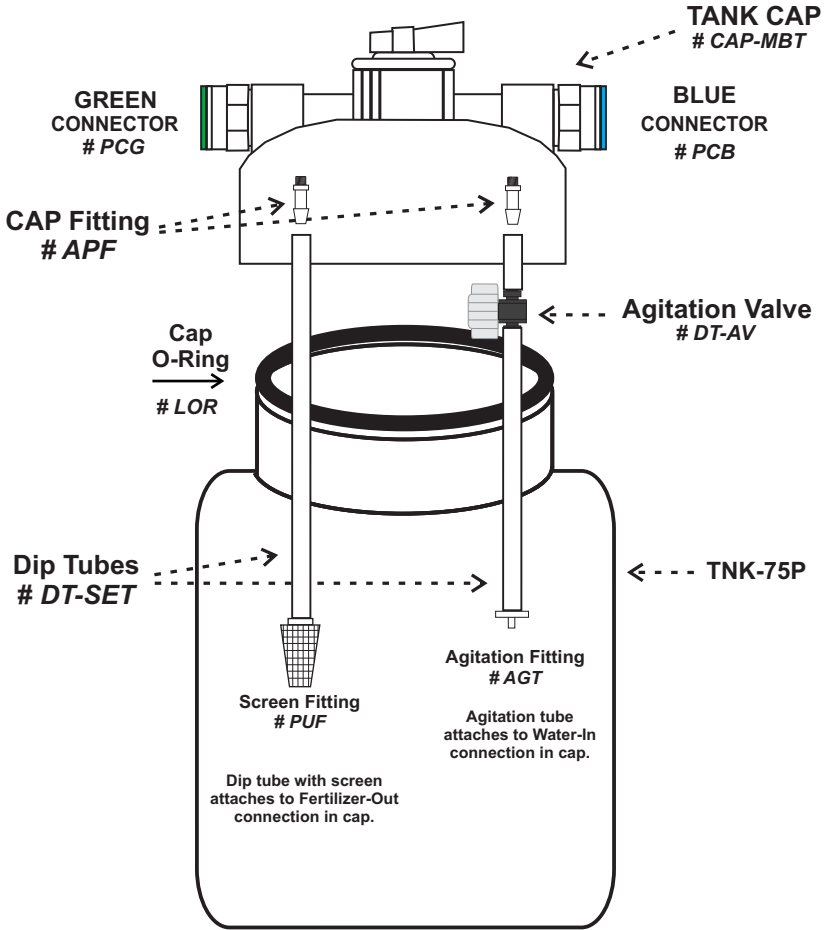
*** IMPORTANT ***

READ INSTRUCTIONS BEFORE INSTALLING THE SYSTEM

- Use with a hose vacuum breaker or approved backflow device
- Use only with non-hazardous products
- Minimize exposure to direct sunlight to maximize service life
- Do not install under constant pressure
- Do not install if pressure exceeds 50 PSI
- Run fresh water through garden hose after every use

TANK ASSEMBLY & PARTS LIST

Replacement parts available through EZ-FLO & distributors



1 - Hose Bib Connector
3060



2 - Tubing Valves
TVLV

Tubing Valves normally drip when under pressure.

5 - Feet 1/4" Clear Tubing
CT5

5 - Feet 1/4" Black Tubing
BT5



Hose Vacuum Breaker
(Not Included)



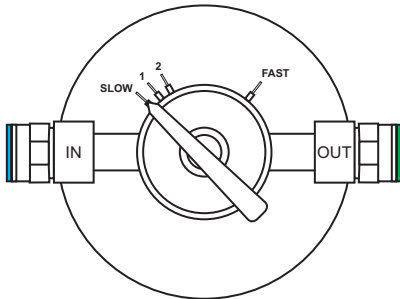
Pressure Regulator
Required if over 50psi
(Not Included)



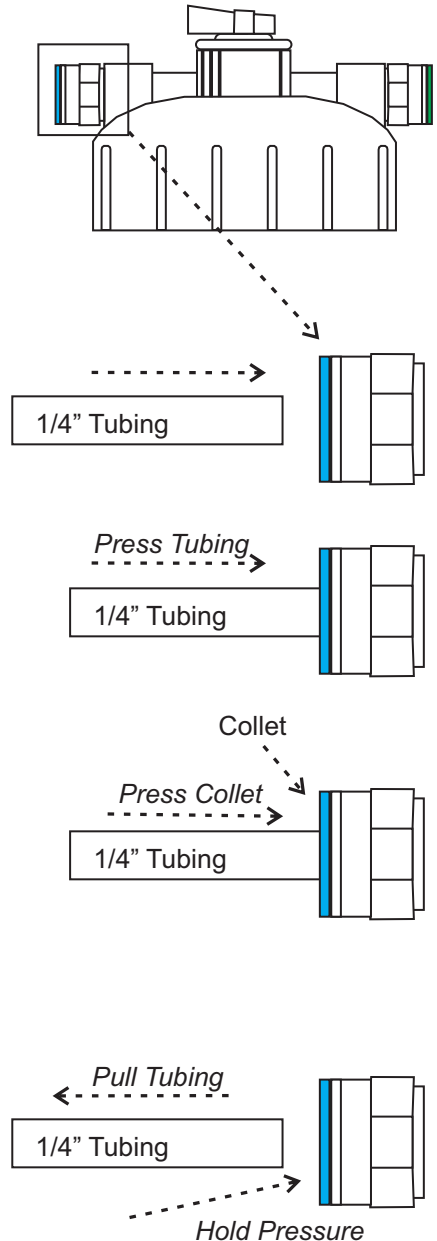
Flo Disc Set
K-INSKFD

CAP Tubing Fittings: Insert & Release

Top View



Side View



The EZ-FLO system uses push connect fittings to connect the clear and black 1/4" tubing to the cap.

To Insert:

Step 1. Insert the end of the tubing into the appropriate side (Clear to Green/Out and Black to Blue/In) by pressing into the hole/Collet. Press gently until the tubing stops.

Step 2. Gently tug the tubing to insure it is locked into place.

To Remove:

Step 1. Shut off pressure to the system.

Step 2. Apply gentle pressure to the Green or Blue Collet with your fingers.

Step 3. While holding pressure, gently pull the tubing away from the fitting to release.

Note: Make sure to direct the fitting away from your face and body. A small amount of residual pressure may be in the tank and cause a momentary release of fluid.

Installing your EZ-FLO: Garden Hose & Drip Systems

Setting up your EZ-FLO is “EZ” just follow the simple steps below:

Step 1: Determine the type of installation that is correct for your system (hose or drip) and insert the correct Flo-Disc if necessary (see “**Flow Requirements Section**” on page 5).

Step 2: Install the **EZ-FLO** Hose Bib Adapter in the correct position as shown in the illustrations.

Step 3: Attach tubing to the Hose Bib Adapter fitting. Slide the Black Tubing over the barb next to the Blue mark carefully to avoid stressing the fitting. Repeat with the Clear Tubing next to the Green mark.

Step 4: Attach tubing to the white tank cap. **Do not remove the fittings.** To install press the tubing into the cap fitting until it stops. Light pressure is required, do not stress the fittings.

Additional Installation Notes:

A hose vacuum breaker should be installed to use an **EZ-FLO** system per local plumbing codes (**not Included**).

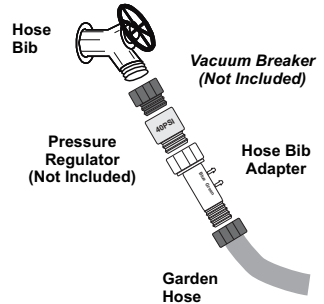
Pressure regulator to 40 PSI is required if operating pressure exceeds 50 PSI or is unknown.

When possible the Hose Bib Adapter fitting should always be the last component installed in any configuration. Timers, filters, & pressure regulators Should Not be installed after the Hose Bib Adapter.

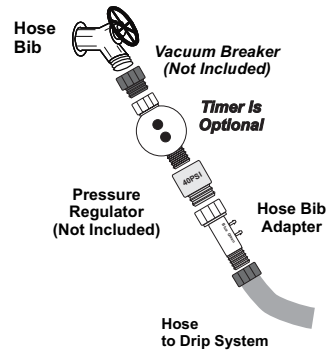
The included Tubing Shut Off Valves (TVLV) may be used to shut off the unit. These can be installed in the clear and black tubing at any point. Tubing valves normally drip under pressure, this will not affect the operation of the EZ-FLO.

Unit includes 5 ft of clear and 5 ft of black tubing, you may trim tubing to necessary length.

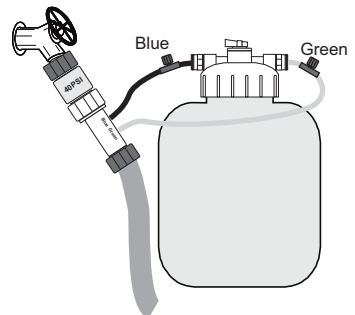
Garden Hose



Hose Drip System With Timer



Completed Installation



Flow Requirements: Low Flow Hose & Drip Systems

Drip systems with less than 120 gallons per hour (GPH) water flow may require a **Flo-Disc** in order to inject solution into the drip system. There are three discs provided for these conditions.

Note: The Flo-Disc is not intended for pressure reduction and cannot be used for this purpose. The Flo-Disc will create additional bypass through the tank when necessary to speed up injection.

Important: You must have colored fertilizer in the injection tank or food dye to adjust the system. Let the system run for a few minutes to make sure the fertilizer is not flowing before installing or changing the Flo-Disc. If there is not color in the clear tube, the system is not flowing and a more restrictive Flo-Disc is required for operation.

White Flo-Disc	120 to 60 gph
Black Flo-Disc	60 to 30 gph
Red Flo-Disc	30 to 7.5 gph

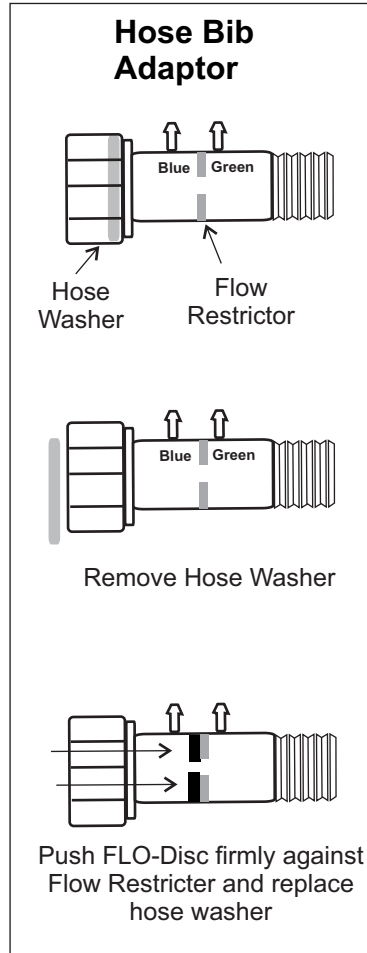
When using a Flo-Disc, pre-dilute products 3 parts water with 1 part product (25% Strength).

Step 1. Estimate your water flow by multiplying the number of drip emitters on your system by their gallons per hour flow rating. **(If you do not know your water flow you can use trial & error starting without a Flo-Disc. If no color is present in the clear line insert a Flo-Disc starting with the white)**

Step 2. Remove the orange washer from the swivel nut on the Hose Bib Adapter. For easy removal, use pliers to grab the O-Ring tab or a plain end screw driver.

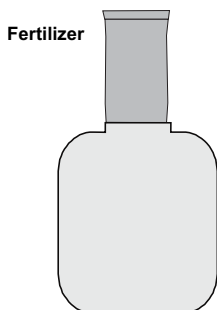
Step 3. Push the proper **Flo-Disc** into the Hose Bib Adapter until it presses firmly against the flow restrictor in the center of the Hose Bib Adapter. The water flow will hold the disc in place.

Step 4. Replace the Hose Bib Adapter orange washer and follow steps 2 through 4 in the **"Installing your Injector"** in these instructions.



Adding Fertilizer & Feeding Settings

MAX CAPACITY:
5 Lb Dry Powder
3/4 Gallon Liquid

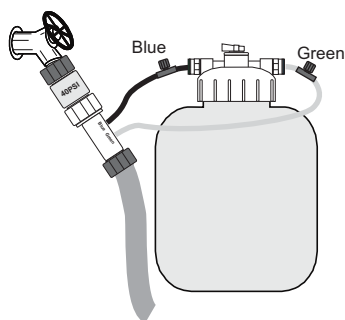


Step 1. Add the fully concentrated product and select the appropriate cap setting based on the manufacturers recommended coverage rate. **Products do not require dilution or premixing unless using a Flo-Disc or the manufacturer's recommendation.**

Typical Coverage Rates:

Water Soluble Products - 1 lb per 1000 SQFT
Liquid Products - 2 cups per 1000 SQFT

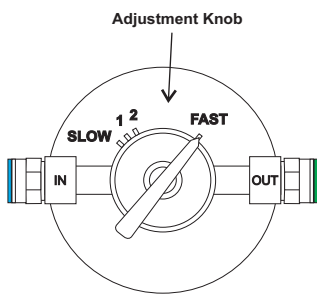
EZ-FLO does not provide application recommendations for products not listed in the EZ-FLO catalog or EZ-FLO website.



Step 2. Fill the tank with water until all air is out of the tank. The system will mix the products automatically when the water is turned on.

Step 3. Screw cap onto the tank and connect tubing to the cap and Hose Bib Adapter. Cap and tubing connections are color coordinated, connect black to blue and clear to green. The tubing slides over the connectors on the Hose Bib Adapter and into the connector on the cap.

Step 4. Set the flow adjustment on the proportioning cap to Fast Feed for quick feeding and to Slow Feed to feed slowly every time you water. You can also feed at these approximate rates (rates will vary due to product variations)



PROPORTIONING CAP

Slow	1000:1	2/3 tsp. per gallon
#1	500:1	1 1/3 tsp. per gallon
#2	250:1	1 Tbsp. per gallon
Fast	100:1	2 Tbsp. per gallon

To refill - Shut off pressure to tank, remove tubing from the cap, remove cap from the tanks, pour the water out of the tank and go to step one above.

Advanced Feeding Guide

The chart below is intended to be used for a reference to assist in calibrating your EZ-FLO system to other manufacturers products. This chart along with additional information and videos may be found on our website: www.ezfloinjection.com

Using the chart:

The gallons to empty at a given setting indicates the total water that will be mixed with your concentrated product before the contents are completely used. If you need to figure ounce per gallon or tablespoons, you would reference the "Gallons to Empty" section of the chart.

Example: Fertilizer bag wants you to apply 1 tablespoon of product per gallon of water and you want to apply quickly. If you use the Fast setting, it will take 75 gallons to empty the tank. You then need to add 75 tablespoons to the tank, top off with water, and use the Fast setting until the color runs out.

The same example above, but with a Flo-Disc installed, on the Fast setting the tank would run out in 19 gallons of water. To get 1 tablespoon per gallon, you would need to add 19 tablespoons to the tank and top off with water.

EZ 2005-HB

No Flo-Disc / Standard Hose Bib

Feed Rate	Ratio	Tank Capacity	Gallons to Empty
Slow	1000 to 1	.75 gal	$1000 \times .75 = 750$
#1	500 to 1	.75 gal	$500 \times .75 = 375$
#2	250 to 1	.75 gal	$250 \times .75 = 188$
Fast	100 to 1	.75 gal	$100 \times .75 = 75$

With Any Color Flo-Disc

Feed Rate	Ratio	Tank Capacity	Gallons to Empty
Slow	250 to 1	.75 gal	$250 \times .75 = 188$
#1	125 to 1	.75 gal	$125 \times .75 = 94$
#2	62.5 to 1	.75 gal	$62.5 \times .75 = 50$
Fast	25 to 1	.75 gal	$25 \times .75 = 19$

Notes: All feed rates are approximate and not guaranteed due to the high amount of variables resulting from differences in irrigation system configuration, product quality, viscosity, and specific gravity. Feed rates and ratios are provided for convenience only. Injection feeders should be used for general application of liquid and water soluble products only and are not marketed as a direct replacement for chemical pumps or siphon feeders.

For safe fertilizing practices it is recommended the plants be fed at half or 50% of the manufacturers recommended amount for the first application to prevent any damage to the plants or landscape.

FAQ

How much product to put into the tank: Refer to the product label and feeding guides on pages 6 & 7. Additional information is on our website.

What fertilizer can I use: Almost any liquid or water soluble powder product. Do not use dry broadcast fertilizers.

Can I use weed killer/ herbicide in the system: Typically no, hazardous products are not recommended for use in the system.

What cap setting should I use: Slow and #1 are the most common cap settings. Page 9 offers more details on each setting.

How do I know when to refill: The system can be checked for color by in the clear output tubing during irrigation operation. If the fertilizer color is gone, you need to refill the system. Alternatively, you may let the system run without fertilizer (just water) and refill based on a set schedule.

How do I know it is working: When the irrigation system is running watch the clear output tube for color. You may adjust the cap from slow to fast to see the color change (slow will be lighter than fast). You can use blue or green food dye to add color to the fertilizer.

Will I over fertilize: No, the injection process micro doses products but we do recommend caution when using new products and faster feed settings.

Will the system clog drip irrigation: No, as long as you are using an injection compatible fertilizer.

If product is mixed with water, will it dilute: No, the patented process and agitation valve control dilution of compatible products.

Will the fertilizer stain: Not if using recommended products. Check other manufacturers labels if not using recommended brands.

The system did not inject any fertilizer: Refer to "Flow Requirements" on page 5. If using a CBV or 3060-BV (sold separately), refer to the "Connector Calibration" and set the CBV to a further closed position.

The system is emptying too fast: Confirm you used the correct cap setting and check the "Flow Requirements" page and confirm the correct Flo Disc was selected.

My system is always full of water, is it working: Yes! This is part of our patent and you can review the videos on our website to see how it works.

Water and fertilizer run back into the tank when I turn on the water: This is normal, the system is pressurizing.

Fertilizer fills the clear tube and is very dark after I shut off the water: This is normal, the system is depressurizing.

When I disconnect the cap from the tank or remove the tubes, water flows from both tubes: This is normal, tank system needs to be connected to a tank to function properly.

Troubleshooting:

I cannot see color when closing the ball valve:

- Confirm you have set the knob to fast.
- Check to see that both shut off valves on the tubing are open.
- Confirm you have the irrigation running (water flowing).
- Confirm you have added enough fertilizer and that it has a color.
- Refer to the "Flow Requirements" on page 5.

For more information
and videos

