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DIG CORPORATION THREE-YEAR WARRANTY

DIG CORPORATION warrants these products to be free from defects in material and workmanship for a period of three years from date of purchase. This warranty does not cover damage resulting from accident, misuse, neglect, modification, improper installation or subjection to line pressure in excess of 50 lbs. per square inch. This warranty shall extend only to the original purchaser of the product for use by the purchaser. This warranty shall not cover batteries or any malfunction of the product due to battery failure. The obligation of DIG CORPORATION under this warranty is limited to repairing or replacing at its factory this product which shall be returned to the factory within three years after the original purchase and which on examination is found to contain defects in material and workmanship.

DIG CORPORATION SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND; THE SOLE OBLIGATION OF DIG IS LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Unattended use for prolonged periods without inspection to verify proper operation is beyond the intended use of this product, and any damage resulting from such use shall not be the responsibility of DIG CORPORATION. There are no warranties which extend beyond the description on the face hereof. In the case of purchase of the product for use other than, for irrigation purposes, DIG CORPORATION hereby disclaims any implied warranties including any warranties of merchantability and fitness for a particular purpose. In the case of the purchase of the product for personal, family or household purposes. DIG CORPORATION disclaims any such warranties to the extent permitted by law. To the extent that any such disclaimer or implied warranties shall be ineffectual, then any implied warranties shall be limited in duration to a period of one year from the date of the original purchase for use by the purchaser. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply

to you. In order to obtain performance under this warranty, the unit must be returned to the factory, along with proof of purchase indicating original date of purchase, shipping prepaid, addressed as follows:

DIG CORPORATION, 1210 Activity Drive, Vista, CA 92081. Repaired or replaced units will be shipped prepaid to the name and address supplied with the unit returned under warranty. Allow four weeks for repairs and shipping time. Repair of damaged units not otherwise within warranty may be refused or done at a reasonable cost or charge at the option of DIG CORPORATION. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

1.800.322.9146 FAX: 760.727.0282



www.digcorp.com dig@digcorp.com





INSTALLATION INSTRUCTIONS

Gravity Feed Drip Irrigation Kit

Model GF100

INTRODUCTION

Thank you for purchasing the DIG's Model GF100 Gravity Feed Drip Irrigation Kit. Please take the time to read through the enclosed instructions and follow them step by step. If you have any questions, please call our customer service line at 1.800.344.2281.

ABOUT YOUR GF100 KIT

Let your landscape thrive with a slow and precise drip watering kit that connects to a gravity feed barrel or to an outdoor faucet. DIG's GF100 kit is a complete kit designed for a low-pressure gravity feed system for up to 50 plants. The kit includes all the parts needed to install a drip irrigation system to water roses, vines, shrubs or vegetables, starting from a raised rain barrel with a $3/4^{"}$ hose thread outet. The kit can also be used from a garden faucet using the included pressure regulator. Use the following guidelines to design and install an efficient low-volume irrigation system from a rain barrel that conserves water and promotes a healthy environmment.

INSTALLATION



Before you start:

The GF 100 Gravity Feed Drip Irrigation Kit contains all the parts necessary to install a drip system that starts from a rain barrel or outdoor faucet. Select a 60- to 200-gallon rain barrel (not included) and raise it above the ground for best results. All of the included threaded fittings are "hose" type, so no Teflon tape is needed to seal the connections, and they should be tightened clockwise until they are only "hand tight". The 1/2'' poly tubing serves as the main supply line which starts from the faucet at the bottom of the rain barrel.

Barrel faucet connections:

Begin the installation at the rain barrel by turning the 3/4" Y hose end splitter (optional) onto the male threads of the rain barrel faucet. Then, connect the 3/4" plastic screen filter with FHT (#D57A) to one of the splitter outlets; if the splitter is not used, connect the filter directly to the rain barrel faucet. Next, force the end of the 1/2" poly tubing into the 3/4" swivel adapter, and then connect the swivel adapter to the filter outlet by turning it clockwise until hand tight.

Note: If you are connecting this kit to a conventional pressurized outdoor faucet, install the included pressure regulator (#D46) onto the Y screen-filter outlet

Drip tubing layout:

Before installing the 1/2'' poly tubing, uncoil the roll and lay it out in direct sunlight (if possible) for 30 to 40 minutes. This will make it more pliable and easier to work into the compression fittings during installation.

Lay out the 1/2" poly tubing and run it next to as many plants as possible. Secure the tubing to the soil with the 1/2" drip tubing stakes. Install the drip tubing in a gentle S curve to allow for contraction of the 1/2" tubing at low to high temperatures.

Connect the 1/2" drip fittings

Use 1/2" tees (part #C35) and elbows (part #C36) throughout the layout as needed. To install the 1/2" compression drip fittings, cut the drip tubing with a hand pruner, being careful to keep dirt from entering the line. Hold the fitting in one hand and the drip tubing in the other and force the drip tubing into the compression fitting by moving it from side to side.

Note: Open the faucet on the rain barrel and flush out the poly drip tubing through the ends before installing the drip emitters.

Drip emitter installation:

The drip emitters can be installed along the poly drip tubing at varying or specific spacings, depending on the layout of the plants. To ensure high uniformity, take care not to exceed the recommendations provided in the chart and the kit specifications. Drip emitter flow rate performance will depend on the rain barrel elevation.

To install the drip emitters, use one of the below options:

Option 1: Installing the drip emitters into the 1/2^{\prime\prime} poly tubing Insert the drip emitters directly into the $1/2^{\prime\prime}$ tubing: Punch a hole into the side of the poly tubing using the small punch (part #D44). Snap the barbed side of the drip emitter into the hole after the lines have been flushed.

Option 2: Installing the drip emitters into the 1/4" micro tubing

Extend the drip emitters using 1/4" micro tubing to reach plants that are not near the 1/2" poly tubing. First, run a length of micro tubing from the 1/2" poly tubing to the plant and cut it. Then, insert a 1/4" barbed connector (part #H80A) into the micro tubing. Punch a hole into the 1/2" poly tubing and insert the 1/4" barb into the poly tubing. At the other end of the micro tubing, insert the barbed side of the drip emitter after the lines have been flushed. Add a stabilizer stake and secure to the ground.





Turn the water on again, flush the line[s], this will flush out any dirt or debris that may be in the line. Close the end of the poly tubing with the figure "8" hose end (part #F68B).

Test and inspect the system to identify if there are any leaks in the drip tubing laterals. If there are any leaks from the barbed fittings or drip emitters, remove the fitting or drip emitters and insert a goof plug to close the hole. Reinsert the barb fitting or drip emitter nearby.



SPECIFICATION

- Operating pressure: 2 to 15 PSI
- Drip emitter flow rates: .5 GPH at 5 PSI, .8 GPH at 10 PSI, and 1 GPH at 15 PSI (nominal)
- Drip emitter inlet size: 1/4" barb

- Drip emitter outlet side: nipple
- Poly tubing length & size: 100' of 1/2" with .600" ID x .700" OD
- Micro tubing length & size: 50' x 1/4"
- Total flow rate for this kit: 32 GPH (.53 GPM)

Rain barrel size	Barrel height above the drip sytem	Outlet pressure	Dripper flow rate	Length 1/2" drip tubing	# of drippers	Total flow rate per 50 drippers	Total flow rate per 50 drippers	Avg. barrel time to empty
60 gal.	5 ft	2.16 PSI	0.33 GPH	Up to 60 ft	50	16.5 GPH	.28 GPM	3.6 h
227 L	1.5 m	.15 bar	1.25 L/H	Up to 18 m	50	62.4 L/H	1.04 LPM	3.6 h
60 gal.	10 ft	4.33 PSI	0.43 GPH	Up to 70 ft	50	21.5 GPH	.36 GPM	2.8 h
227 L	1 m	.30 bar	1.62 L/H	Up to 21 m	50	81.4 L/H	1.26 LPM	2.8 h
60 gal.	20 ft	8.66 PSI	0.72 GPH	Up to 80 ft	50	36 GPH	.60 GPM	1.67 h
227 L	6 m	.60 bar	2.7 L/H	Up to 24 m	50	136 L/H	2.27 LPM	1.67 h

ABOUT THE GRAVITY FEED SYSTEM

In gravity feed systems, raising the rain barrel above the drip system will allow the system to gain pressure. For every 1' (30 cm) of elevation above the drip system there is a gain of .433 PSI (.030 bar). If the rain barrel is raised 10' (3 m) above the drip system, there is a pressure gain of 4.33 PSI (.30 bar) at the rain barrel bottom or outlet (.433 x 10 = 4.33).

Keep in mind that low pressure such as 4.33 PSI (.30 bar) or less in a drip system will lead to:

- 1. Limited distance to the layout of the 1/2" or 1/4" drip tubing.
- 2. Reduction in the drip emitters' flow rate to considerably below the specified nominal flow rate.
- 3. A drastic drop in uniformity once a certain length is exceeded.

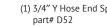
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(1) 100' of 1/2" Black Poly Tubing with .600" ID x 700" OD part# B36



(1) 50' of 1/4" Black Micro Tubing with .170" ID x 250" OD part# B38P

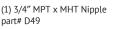


part# B38P (1) 3/4" Y Hose End Splitter

part# D52 (1) Hole Punch part# D44



part# D57A



(1) 3/4" Filter with FHT x MHT



(1) 3/4" Faucet Adapter part# C34

(1) 3/4' part# D

