WAL230561 61100-01 rB.qxd (0/27/03 12:32 PM Page 1



INSTALLATION GUIDE

The best way to water plants, trees, shrubs, hanging baskets, and gardens





WHAT IS MICRO IRRIGATION?

A Micro-Irrigation system is a watering system designed to apply water to designated areas, such as gardens, flower beds, container plants, trees and ground cover

WHY INSTALL A MICRO-IRRIGATION SYSTEM?

- Saves Water—Water is delivered directly to the roots
- Saves Money—Up to a 70% reduction in water waste, resulting in lower water bills
- Saves Time—Replaces hand watering
- Healthier Plants—Plants flourish when receiving the precise amount of water
- Less Yard Maintenance—Delivers water to the plants not to weeds





TABLE OF CONTENTS

SECTION 1 Before You Begin	Page 4
SECTION 2 Water Source and Pressure	Page 5
SECTION 3 Connecting to a Hose Faucet	Page 6
SECTION 4 Common Hose Faucet Projects Potted/ Hanging Plants Ground Cover & Flower Beds Small Trees & Shrubs	Page 10
SECTION 5 Retrofit—Connecting to an Underground Sprinkler System	Page 14
SECTION 6 Common Retrofit Projects Container Plants and Shrubs	_
SECTION 7 Connecting Directly to an Irrigation Valve	Page 22
SECTION 8 Common Projects Gardens Desert Landscaping	
SECTION 9 DripMaster® Parts List	Page 29



BEFORE YOU BEGIN

SECTION

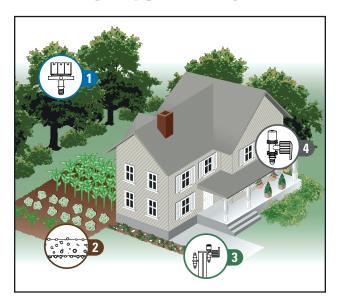
1

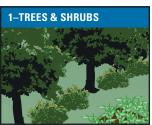
WATER SOURCES

SECTION

2

IDENTIFY PLANTS WITH SIMILAR WATERING REQUIREMENTS







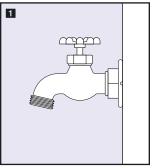


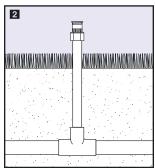


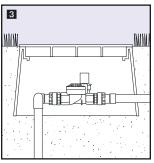
WATER SOURCE AND PRESSURE

Water Source—Micro-Irrigation Systems can be connected to either of the following water sources. Select the best option for you.

- 1 Outside Hose Faucet
- **2** Existing Underground Sprinkler System
- **☑** Direct Connection to an Irrigation Valve







Water Pressure—Obtain a water pressure gauge (available at most home improvement stores) and attach it to your source of water. Drip irrigation systems are designed to operate between 25–80 psi (high water pressure may cause system failure).

PROCEED TO THE APPROPRIATE SECTION

- 1. For Hose Faucet Connection—proceed to the next page
- 2. For Connection to Existing Underground Sprinkler System (Retrofit)—proceed to page 14
- 3. For Connection to a Designated Irrigation Valve—proceed to page 22

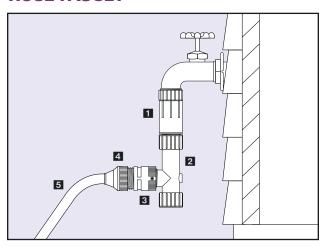


CONNECTING TO A HOSE FAUCET

SECTION

3

CONNECTING TO AN OUTSIDE HOSE FAUCET



An outside hose faucet is one of the simplest ways to connect your micro-irrigation system.

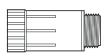
TIP—For complete hands-free watering, install an Orbit® Electronic Hose Timer to the hose faucet prior to connecting your micro-watering system.



The following items are recommended for your hose faucet micro-watering system:

1 Pressure Regulator

Regulates water pressure to 25-45 psi (part # 61060, 61063, 61260 or 61435)

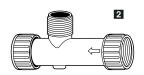


1

2 Filter

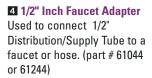
Prevents sediment from entering and clogging the micro-watering system.

(part # 61009, 61209D, or 61062)



3 Anti-Siphon

Prevents contaminants from entering your drinking water supply. (Required in most areas). (part # 61056 or 61256)



5 Distribution/Supply TubeThe main supply line that feeds water to the micro-irrigation system. Distribution tube may be installed either above or below ground. (part # 61079, 61080 or 61081)

TIP— To make installation easier, allow the 1/2" Distribution/Supply tube to sit in the sun and soften prior to installation.

6 Tube End Cap

Plugs the end of the 1/2" Distribution/Supply Tube and serves as a drain for the micro-watering system. (part # 61067)



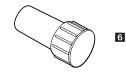
3



4



Important: Check local code requirements prior to installing any watering system.



THE NEXT SECTION CONTAINS THE THREE MOST COMMON USES FOR MICRO-WATERING.

- 1. Potted/Hanging plants—page 8
- 2. Ground Cover and Flower Beds—page 10
- 3. Large Plants, Small Trees & Shrubs—page 12

Select the application that best matches your needs.

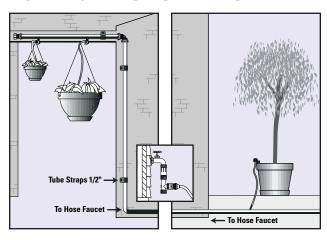


COMMON HOSE-FAUCET PROJECTS

SECTION

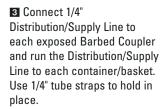
4

POTTED / HANGING PLANTS

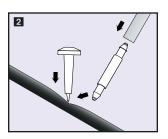


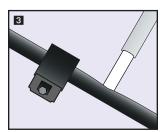
Note: Steps 1-3 apply to both potted & hanging plants

- Distribution/Supply Line—Place the 1/2" Distribution/Supply Line close to your Potted or Hanging Plants. Use 1/2" Tube Straps to secure the Tube and install a 1/2" End Cap.
- 2 Hole Punch—Punch holes, in the 1/2" Distribution/Supply Line, for each container or hanging basket. Next, insert 1/4" Barbed Couplers into each hole.



IMPORTANT: A single 1/4" distribution/supply line should not exceed 30'.





FOR POTTED PLANTS

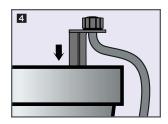
- 4 Attach Multi-Stream
 Drippers to each 1/4"
 Distribution/Supply Line and
 insert stake next to each plant.
- **5** Remove the 1/2" End Cap and turn on water to flush system and replace cap.
- Adjust water flow by twisting the top of the Multi-Stream Dripper.

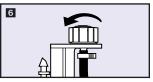
FOR HANGING PLANTS

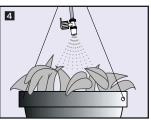
- 4 Attach Adjustable Flow Mist Sprayers to each 1/4" distribution/supply line and aim sprayer into the hanging basket.
- **5** Continue running lines to each hanging basket until the system is completed.
- **6** Remove the 1/2" End Cap and turn on water to flush system and replace cap.
- Rotate the flow control knob on the Mist Sprayer, to adjust flow rate.

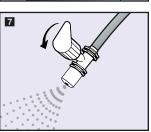
IMPORTANT: The maximum recommended number of Multi-Stream drippers and Mist Sprayers, per 1/2" supply line, is 15.

- 1/2" Tube Straps (part # 61048 or 62148)
- 1/4" Tube Straps (part # 61051)
- 1/4" Distribution/Supply Tube (part # 61070, 61490 or 61071)
- 1/4" Barbed Couplers (part # 61022 or 61222)
- Stake with Multi-Stream Dripper (part # 61064 or 61264)
- Adjustable Flow Mist Sprayer (part # 61032 or 61017)
- Punch Tool (part # 61085 or 61285D)









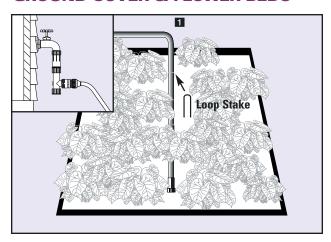


COMMON HOSE-FAUCET PROJECTS

SECTION



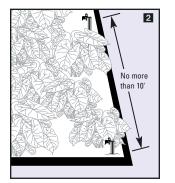
GROUND COVER & FLOWER BEDS

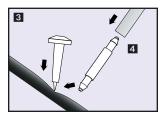


- Distribution/Supply Line—Lay the 1/2" Distribution/Supply Line down the center of the Flower Bed or Ground Cover and install a 1/2" End Cap. Use Loop Stakes to hold in place.
- 2 Low Volume Sprinkler— Following the illustrated example, place quarter sprinkler heads in the corners, half sprinkler heads along the sides, and full spray pattern sprinkler heads in the center of your ground cover.

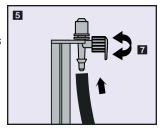
IMPORTANT - Spacing should be no more than 10' from one sprinkler to the next.

■ Hole Punch—Punch a hole, on top of the 1/2" Distribution/Supply line, for each Low Volume-Sprinkler. Next insert a 1/4" barbed coupler into each hole.

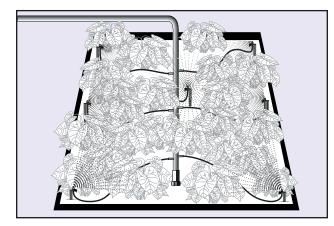




- Connect the 1/4"
 Distribution/Supply Line to each of the exposed Barbed Couplers and run the Distribution/Supply Line to each sprinkler location.
 Cut tubing to desired length.
 IMPORTANT: Keep Micro-Tubing lengths to less than 30'.
- S Attach the On-Stake Low Volume Sprinkler to each 1/4" Distribution/Supply Line.
- 6 Remove the 1/2" End Cap and turn on water to flush system and replace cap.
- **7** Rotate the flow control knob to adjust flow rate.







IMPORTANT: The maximum recommended number of Low Volume Sprinklers per 1/2" supply line is 16 at medium flow setting (8 at the maximum setting)

- 1/4" Distribution/Supply Tube (part # 61070, 61490 or 61071)
- 1/4" Barbed Fittings (part # 61022 or 61222)
- Low Volume Sprinkler on Stake (part # 61038, 61238, 61039, 61239, 61068 or 61268)
- 1/2" Loop Stake (part # 61442)
- Punch Tool (part # 61085 or 61285D)

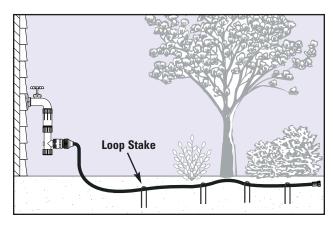


COMMON HOSE-FAUCET PROJECTS

SECTION

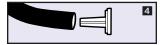
4

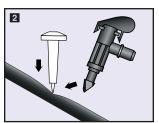
SMALLTREES, & SHRUBS

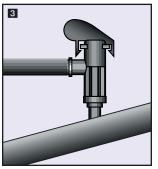


- Distribution/Supply Line—Lay the 1/2" Distribution/Supply Line next to the base of your plants, shrubs, and trees. Install a 1/2" End Cap at the end of the tubing. Use Loop Stakes to hold in place.
- ≥ Hole Punch—Punch holes, on top of the 1/2" Distribution/Supply Line, next to the base of each plant, shrub or tree. Insert the barbed end of a 0-4 gallon per hour Flag Dripper into the hole.
- If needed, attach 1/4"
 Distribution/Supply Line to the end of the Flag Dripper and run the 1/4" Distribution/Supply Line to the plant location.
- Install insect plugs into the end of the 1/4"

 Distribution/Supply Line.

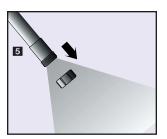


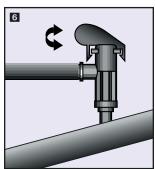


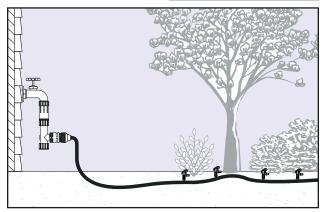


- **5** Remove the 1/2" End Cap and turn on water to flush system and replace cap.
- Adjust the flow rate by twisting the top of the adjustable Flag Dripper.

Note: If your micro-irrigation system is being installed on nonlevel ground, replace all 0-4 GPH Flag Dripper with 1 or 2 GPH Pressure Compensating Drippers to insure consistent water flow across the entire system.







IMPORTANT: The total number of 4 GPM (Gallons per Minute) Flag Drippers, attached to a single 1/2" supply line, should not exceed 45.

- Flag Drippers (part # 61464, 61465 or 61466)
- 1/2" Loop Stake (part # 61442)
- 1/4" Insect/Water Plug (part # 61065 or 61265)
- Punch Tool (part # 61085 or 61285D)



RETROFIT

SECTION

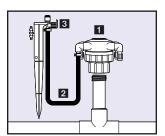
5

CONNECTING TO AN EXISTING UNDERGROUND SPRINKLER SYSTEM

Connecting Micro-Irrigation to an existing underground sprinkler system (or Retrofit) is a simple way to supply water to your Micro-Irrigation System. Retrofits are commonly used to conserve water by replacing inefficient shrub sprinklers and bubblers.

Retrofit Micro-Irrigation systems compose mainly of:

- Manifold-Attaches to a 1/2" riser and consists of 1 to 8 outlets.
- 2 1/4" Distribution/Supply Line
- Low Volume Sprinkler, Micro-Heads or Soaker Tube

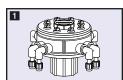


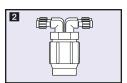
MANIFOLDS

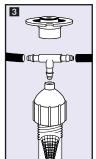
The main function of a Manifold is to distribute water through 1/4" outlets.

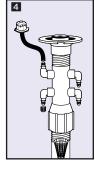
There are 4 types of Manifolds

- Adjustable Flow Manifolds—Ideal when water system pressures exceeds 40psi and where flow control is desired.
- **2 Full Flow Manifolds**—Ideal for replacing inefficient shrub heads and bubblers
- 3 Shrub Adapter—Ideal for small potted or container plants
- ☑ Riser Adapter Manifolds—Permits Micro-Irrigation with out eliminating a sprinkler head



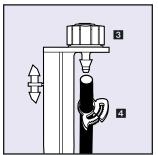


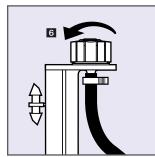




INSTALLATION FOR: ADJUSTABLE FLOW, FULL FLOW AND RISER ADAPTER MANIFOLDS

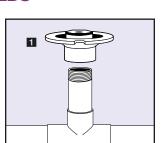
- Remove sprinkler head from a 1/2" riser and attach the manifold. (for Riser Adapter Manifold: re-attach sprinkler head)
- Remove cap(s) from the 1/4" barb(s) and insert 1/4" Distribution/Supply Line.
- 3 Attach a Low-Volume sprinkler or Micro-Irrigation head to the end of the Distribution/Supply Line.
- 4 To avoid high water pressure failure, install a 1/4" high pressure clamp on all tube connections.
- 5 Position Micro-Irrigation head, next to plant.
- 6 If applicable, adjust flow control knob for desired flow rate.

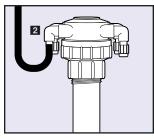






- 1. Container Plants and Shrubs—page 16
- 2. Shrubs and Large Plants—page 19







COMMON RETROFIT PROJECTS

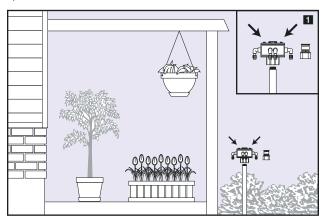
SECTION



CONTAINER PLANTS AND SHRUBS

Replacing hand watering with micro-irrigation

- Connect an Apollo 8^{∞} or a Quad Manifold to an exposed shrub riser. If a vacant riser is not available, use a Saddle Adapter (part # 61023W, 61024W) to connect to the sprinkler line.
- 2 Remove caps and attach 1/4" Distribution/Supply Line to each 1/4" barb.



B Run each 1/4"
Distribution/Supply Line to
each container. Use 1/4" Tube
Straps to hold tube in place.
(Window boxes and large containers may require more than
one line.)

IMPORTANT: A single 1/4" Distribution/Supply Line should not exceed 30'.

- 4 Flush lines to clear any debris.
- **5** Select the appropriate Micro-Irrigation Head for each container and plant.

COMMON RETROFIT PROJECTS

SECTION



HANGING BASKETS AND WINDOW BOXES

Use Orbit's® FlexMist™ (part # 61017) or Adjustable Mist Sprayer (part # 61032).

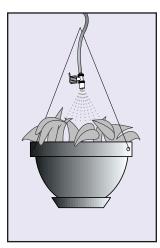
POTTED PLANTS

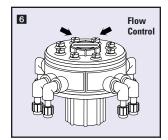
Use Orbit's® Multi-Stream on an 8" Stake (part # 61064, 61264)

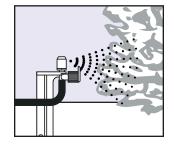
SHRUBS

Use Orbit's® Low-Volume Sprinkler Head on 12" Stake (See Parts list for spray pattern options)

6 Adjust the flow rate by turning the flow control screw.







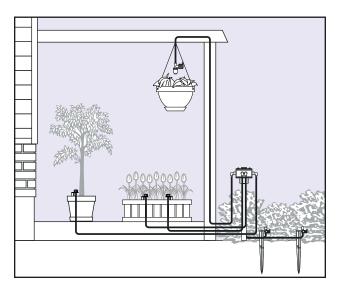


Continued on next page

COMMON RETROFIT PROJECTS

SECTION





Supplies Needed:

- Apollo 8[™] Manifold (part # 61008)

0r

- Quad Adjustable Manifold (part# 61006)
- The appropriate Micro-Irrigation Head listed above
- 1/4" Tube Straps (part # 61051)
- 1/4" Distribution/Supply Tube (part # 61070, 61490 or 61071)

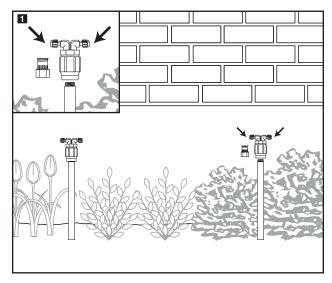
COMMON RETROFIT PROJECTS

SECTION



FLOWER BEDS, GROUND COVER, SHRUBS AND LARGE PLANTS

Replacing inefficient shrub heads with Micro-Irrigation



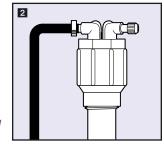
■ Remove shrub heads from risers and replace with "Full Flow Quad Manifolds."

■ Remove barb caps from the manifolds and attach 1/4" Distribution/Supply Lines to each exposed 1/4" barb. Run individual 1/4" Distribution/Supply Line to each Low-Volume Head

flush lines to clear any debris.

IMPORTANT: Full flow manifolds do not have an internal pressure regulator. To avoid high pressure failures install 1/4" High Pressure Clamps on all 1/4" connections.

IMPORTANT: A single 1/4" Distribution/Supply Line should not exceed 30'.



Continued on next page



COMMON RETROFIT PROJECTS

SECTION

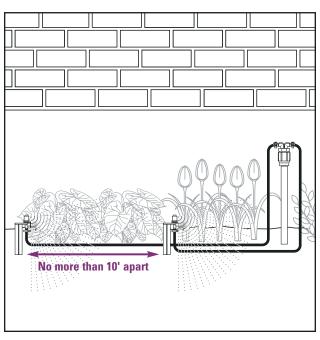


FLOWER BEDS AND GROUND COVER

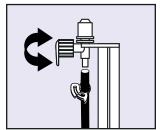
Attach a Low-Volume Head on 12" Stake, spaced no more than 10' apart (See Parts List for spray pattern options)

٥r

Multi-Stream Dripper on a stake (spaced no more than 3' apart) (Part # 61064, 61264)



Note: Adjust the flow rate by turning the flow control on each Micro-Irrigation head.



COMMON RETROFIT PROJECTS

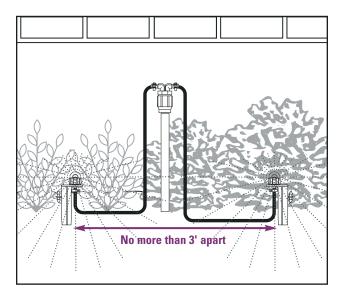
SECTION



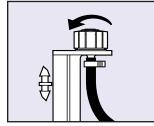
SHRUBS AND LARGE PLANTS

Use Orbit's® Multi-Stream Dripper on a stake next to each shrub or large plant

(Part # 61064, 61264)



Note: Adjust the flow rate by turning the flow control on each Micro-Irrigation head.



- Quad-Manifold Full-Flow (part # 61004)
- The appropriate Micro-Irrigation Head listed above
- 1/4" Distribution/Supply Tube (part # 61070, 61490 or 61071)
- 1/4" High Pressure Clamps (part # 61054, 61254)



DIRECT CONNECTION TO AN IRRIGATION VALVE

SECTION

7

CONNECTION TO A DESIGNATED IRRIGATION VALVE

Direct connection to an underground irrigation valve is ideal for medium to large micro-irrigation projects. This application is most commonly used for gardens, large flower beds, shrubs, trees and desert landscaping.

IMPORTANT:

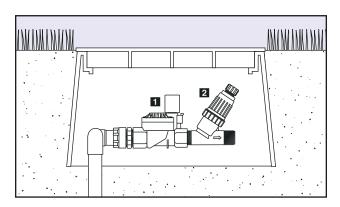
- Contact the local water district for code requirements
- Before digging, contact utility companies to mark utility lines

Connection to a designated valve comprise mainly of:

- 1 3/4" Irrigation Valve (Manual or Automatic)
- 2 Y Filter (model 61062)

Note: Using a filter, not designed for micro-irrigation, may cause damage.

■ 1/2" Distribution/Supply Tubing (part # 61079, 61080, 61081) or 3/4" PVC Pipe



SECTION 8 CONTAINS THE TWO MOST COMMON APPLICATIONS

- 1. Gardens—page 23
- 2. Desert Landscaping—page 25

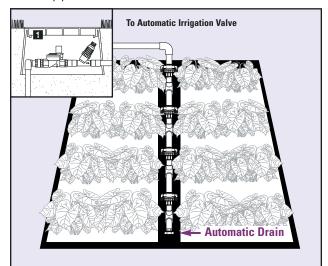
COMMON PROJECTS

SECTION

7

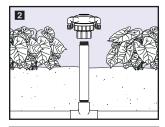
GARDENS

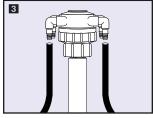
■ Water Supply—Connect 3/4" PVC to the end of the Y Filter and run the PVC pipe down the center of the garden. Attach a 3/4" Slip x 1/2" threaded Tee for each row. Use an Automatic Drain Valve on the end of the pipe and on any low sections of the PVC pipe.



- 2 Screw in 1/2" risers on each tee (extending 6" to 8" above ground). Attach an Orbit® Quad Manifold on each riser.
- Remove manifold caps and attach 1/4" Soaker Tube to each 1/4" barb. Run Soaker Tube along the base of each plant.

Tip—Use Metal Loop Stakes to hold the 1/4" soaker tube in place





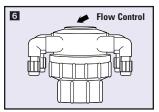


4 Cut Soaker Tube to desired length and insert a 1/4" End Plug.

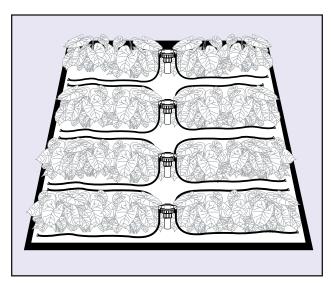
Note: Keep each 1/4" Soaker Tube lengths to less than 15'.

- **5** Remove the Automatic Drain Valve, attached to the end of the PVC pipe and flush the line to remove any debris.
- **6** Adjust the flow rate by turning the flow control screw.





IMPORTANT: Do not attach more than 14 Quad Manifolds



Supplies Needed:

- 3/4" Automatic Drain Valve (part # 51041)
- Quad Adjustable Manifold (part# 61006)
- Loop Stakes 1/4" (part # 61443)
- Soaker Tubing (part # 61072, 61073, 61173 or 61488)
- 1/4" End Plugs (part # 61026 or 61226)
- 3/4" Slip x 1/2" Threaded Tees
- 1/2" Risers

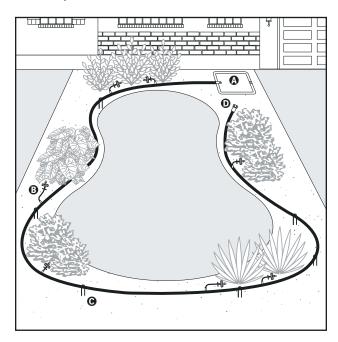
COMMON PROJECTS

SECTION



DESERT LANDSCAPING

- A Irrigation Valve
- Pressure Compensating Dripper with a Tube Stake
- Coop Stake
- End Cap.



■ Water Supply—Connect a Pressure Regulator (part# 61060 or 61260) to the Y filter and attach a Universal Male Adapter (part # 61425). Next attach 1/2" Distribution/Supply line to the exposed end. (See the top of page 26)

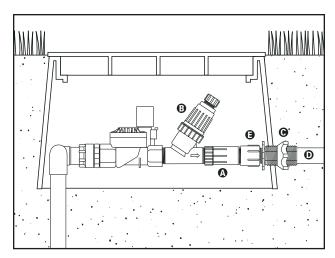
Important: not using a pressure regulator may cause damage to the micro-irrigation system.



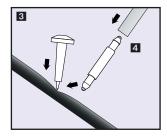
COMMON PROJECTS

SECTION

8



- Pressure Regulator
- Y filter
- Universal Male Adapter
- 1/2" Distribution/Supply line
- Threaded Coupler (Sold Separately)
- 2 Run Distribution/Supply Line next to plants, shrubs and trees you intend to water. Next install a 1/2" End Cap. Use 1/2" Loop Stakes to hold the line in place.
- Hole Punch—Punch a hole, in the 1/2" Distribution/Supply line, for each shrub or tree. Next insert a 1/4" barbed coupler into each hole.



4. Connect the 1/4" Distribution/Supply Line to each of the exposed Barbed Couplers and run it to the base of each shrub or tree. Cut tubing to desired length.

Important: A single 1/4" Distribution/Supply Line should not exceed 30'

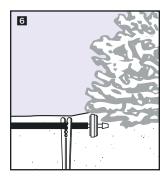
- Remove the 1/2" End Cap and turn on water to flush system, then replace cap to flush 1/4" Distribution/Supply Line.
- 6 Attach a Pressure Compensating Dripper (Part # 61477) to

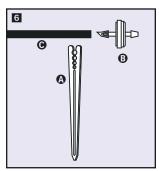
each 1/4" Distribution/Supply Line. To hold dripper in place, next to the base of the shrub or tree, use a Tube Stake (part # 61052).

Note: More than one 1/4"
Distribution/Supply Line (with
Pressure Compensating Dripper)
may be required for large trees or
shrubs.



Important: Do not attach more than 57, two Gallon per hour Pressure Compensating Drippers, to a single 1/2" Distribution/Supply Line





- Tube Stake
- Pressure Compensating Dripper
- **⊙** 1/4" Distribution/Supply Line

- 1/2" Universal Male Adapter (part # 61425)
- 1/2" Distribution/Supply Tubing (part # 61079, 61080 or 61081)
- 1/2" Universal End Cap (part # 61429)
- 1/2" Loop Stakes (part # 61442)
- Punch Tool (part # 61058 or 61285D)
- 1/4" Coupling (part # 61022 or 61222)
- 1/4" Distribution/Supply Tube (part # 61070, 61490 or 61071)
- Tube Stakes (part # 61052)
- Pressure Compensating Dripper (part # 61477)

DripMaster®

NOTES

ORBIT DRIPMASTER PARTS LIST

SECTION



DISTRIBUTION TUBE FITTINGS













1/4" Barb Shut-Off Valve 61027



1/4" Insect/Water Distribution Plug 61065, 61265



Coupler 61041, 61241



1/2" Distribution/Supply Line Connectors

Tee 61042, 61242



Elbow 61043, 61243



1/2" Figure 8 End Fitting 61047, 61247



1/2" Shut-Off Valve 61086





Hose/Faucet Adapter 61424



Coupler 61426



Elbow 61427



Tee 61428



End Cap 61429

ACCESSORIES



3/4" Female Hose Thread x 1/2" Barbed-Stake 61156

1/2" Barbed Inline X Male Pipe Thread-Stake 61158

1/2" Barb X Male Pipe Thread-Stake 61159



Saddle Adapter 1/2" x 1/2" 61023W 3/4" x 1/2" 61024W



Faucet Adapter 1/2" Distribution Tube 61044, 61244 1/4" Distribution Tube 61049, 61249D



Female Hose Thread Swivel x 1/2" Tubing Tee 61045



Connects - 3/4" Hose Thread to 3/4" Pipe Thread 61066, 61266



1/2" Tube End Cap 61067

DripMaster®



ORBIT DRIPMASTER PARTS LIST

SECTION

9



Tubing Strap 1/4" 61051 1/2" 61048, 61248



1/4" High Pressure Clamp 61054, 61254



Hose/Tap Filter 61009, 61209D



Y Filter 3/4" Male Pipe Thread 61062



Pressure Regulators 25 PSI - 3/4" Pipe Threaded Female x Male 61060, 61260 25 PSI - Hose Threaded Female X Male 61063, 61263 47 PSI - Hose Threaded Female X Male 61435



Plastic Hose Y 61059, 61259D



Hose Bib Anti-Siphon Valve 61056, 61256



Extension Riser 6" 61057 12" 61058



Tube Stake 12" 61053, 61253 6" 61052



6" Inline Stake 61050



Loop Stake 1/2" 61442 1/4" 61443



9" Micro Spring-Loaded Pop-up 61478



Tubing Cutter 61082



Tube Punch Tool 61085, 61285D

DISTRIBUTION/SUPPLY TUBE



1/4" Distribution Tube 50' 61070, 61490, 61074, 61481 100' 61071 500' 61075



1/2" Distribution Tube 50' 61079 100' 61080 500' 61081

1/4" SOAKER TUBE



Laser Soaker Tube 15' 61072 60' 61073



1/4" Porous Soaker Tube 50' 61173 100' 61488

MANIFOLDS



Apollo 8™ Manifold 61008



Quad Manifold Adjustable 61006



Quad Manifold Full-Flow 61004



1/2" MPT Bi-Manifold 61005



Quad Adapter Manifold 61003



Bi-Manifold II 61411



1/2" Riser Adapter with 1/4" Barb 61005



Threaded Shrub Adapter With 1/4" Barbed outlet

1/2" Female Pipe

61011 With threaded outlet 61010

LOW VOLUME HEADS



Multi-Stream Dripper 61030, 61230



Inline Dripper/Emitter 61037, 61237



Multi-Stream on 8" Stake 61064, 61264



Flag Dripper 0-1 GPH 61464 0-2 GPH 61465 0-4 GPH 61466



Pressure Compensating Dripper 1 GPH 61467 2 GPH 61477

LOW VOLUME SPRINKLERS



Mini Rotating Sprinkler 61033

Low-Volume



Sprinkler Full Pat 61034 1/2" Pat 61035 1/4" Pat 61036 Strip Pat 61031



Low-Volume Sprinkler Head on 12" Stake Full Pat 61038, 61238 1/2" Pat 61039, 61239 1/4" Pat 61068, 61268 Strip Pat 61029, 61229



Adjustable Mist Sprayer 61032



Adjustable FlexMist™ 61017

