Install irrigation pipe and electrical conduit under sidewalks and driveways fast!

FREQUENTLY ASKED QUESTIONS

As contractors, many of us have been there; we have to run an irrigation pipe or electrical conduit under a sidewalk, driveway, or other hardscape. Some of these questions may come to mind:

- *How do I run an irrigation pipe under a sidewalk or under a driveway?*
- *How do I run an electrical conduit under a sidewalk or under a driveway?*
- *How do I tunnel under a sidewalk or under a driveway?*
- *How do I bore under a sidewalk or under a driveway?*
- *Why should I "Bullet Mole" under a sidewalk or under a driveway?*

If you are asking these questions you might be considering these choices:

- ***Cut a trench** into the hardscape with a concrete or pavement saw.*
- ***Erode a hole** under the hardscape using a water erosion tool or garden hose.*
- ***Drill a hole** under the hardscape using a DUB (Directional Underground Boring) tool.*
- ***Pierce a hole** under a hardscape using a DUP (Directional Underground Piercing) tool.*

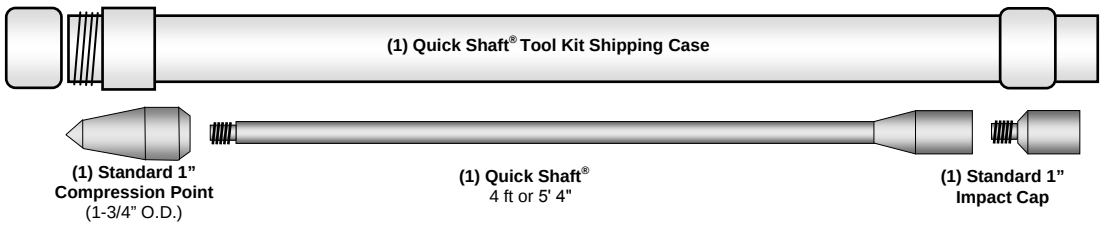
We recommend you think very carefully before you cut a trench in your hardscape, or even erode or drill a hole under your hardscape. Consider piercing a hole using the Bullet Mole.

What is the Bullet Mole?

The Bullet Mole is Horizontal Directional Underground Piercing (DUP) Tool System, that quickly & easily installs irrigation pipe and electrical conduits under hardscape surfaces such as driveways, sidewalks, or paved areas and only requires the use of a shovel and sledgehammer. It is engineered and designed to break apart rocks, roots, gravel or other common buried debris hiding under pavement. The Bullet Mole® is fast, easy to use, and eliminates the need for water, electricity, or other setup tools. Please play the Demonstration Video at http://bulletmole.com/video.html and see for yourself.

Sidewalk Kit - Quick Shaft® Unit KS240 – 4 ft & KS260 – 5' 4" ft

Each Sidewalk Tool Kit comes with the following parts.



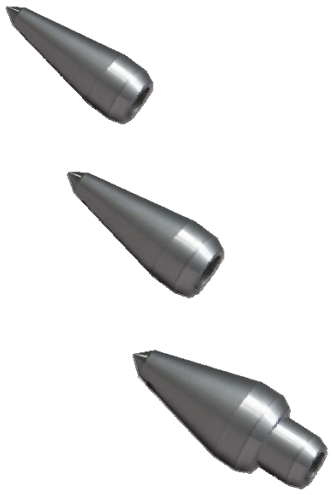
Why should I consider using the Bullet Mole?

The Bullet Mole is Horizontal Directional Underground Piercing (DUP) Tool System that quickly & easily installs irrigation pipe and electrical conduit under hardscape surfaces such as driveways, sidewalks, or paved areas. You should consider using the Bullet Mole to get under hardscapes, such as sidewalks and driveways around, homes, golf courses, and schools. The Bullet Mole is an incredibly effective and simple tool that replaces the need for cumbersome equipment typical associated with directional underground boring. The Bullet Mole is a ground piercing tool that eliminates the need for dangerous high-torque directional boring equipment. Only the largest and most expensive underground directional boring equipment can penetrate rocks, roots and obstacles like the Bullet Mole, yet with the Bullet Mole you remove the liability of a dangerous high torque device that can seize up when it comes in contact with obstacles such as rocks or roots.

How large a hole can the Bullet Mole make?

*We make three **Compression Point** Sizes:*

- *1” Compression Point (1-3/4” OD) can make an opening large enough to accommodate a 1” pipe.*
- *1” Plus Compression Point (2” OD) can make an opening large enough to accommodate a 1-1/4” pipe.*
- *2” Compression Point (3” OD) can make an opening large enough to accommodate a 2” pipe.*



How far can the Bullet Mole go?

Using multiple Extension Shafts, we tested the Bullet Mole to over 60 ft when we ran out of space at our test site. It is the fastest, most cost effective, way to install irrigation pipe and electrical conduit under sidewalks and driveways.

Extension Shaft
ES220, ES240, & ES260
Allows added length to Quick® Shaft & other extensions available 2 ft, 4 ft, or 5' 4"

Can the Bullet Mole penetrate Rocks, Roots, & Concrete?

Yes the Bullet Mole penetrates quickly & easily through obstacles such as rocks, roots, wood, concrete and other common debris. Play the Demonstration Video at http://bulletmole.com/video.html and see for yourself.

What are the main components of the Bullet Mole?

The tool is comprised of three major parts:

1) *Compression Points;*
    a. *1" which opens a 1-3/4" hole, and is used to run one (1) section (either 4 ft or 6 ft) of 1" pipe as you go.*
    b. *1" Plus which opens a 2" hole, and is used to run multiple sections (greater than 6 ft total) of 1-1/4" pipe as you go.*
    c. *2" which opens a 3" hole, and is used to run multiple sections of 2" pipe as you go.*
2) *Shafts; Quick shafts in 4 ft & 5' 4" lengths that install the pipe as you go and Extension Shafts in 2 ft, 4 ft & 5' 4" lengths.*
3) *"Threadless" Impact Caps;*
    a. *1" which has a 2" O.D.*
    b. *2" which has a 2-3/4" O.D.*

Are the Bullet Moles main components all interchangeable?

All our Series II Compression Points, "threadless" Impact Caps and shafts (all threaded parts) are interchangeable.

How does the Bullet Mole work?

Using only a shovel, a sledgehammer, and the Bullet Mole, you make the installation in three simple steps:

1) *Prepare the entrance and exit trenches.*
2) *Assemble the tool by hand and drive it through the ground using a sledgehammer or optional jackhammer.*
3) *Install the pipe in either of two methods:*
    a) *Install the pipe as you make the hole.*
        - *For instance to run a 1- 1/4" PVC pipe (minimum pipe size that you can run in multiple sections) ; Using the 1" plus (2" OD) Compression Point and either 4' or 5' 4" sections of pipe, shafts, and*

female to female PVC couplings, drive the tool system, shaft by shaft, with each section of PVC pipe over each shaft.

- *When you reach the other side of the hardscape, remove the Compression Point and remove the tool system from the pipe in place.*

b) *Pull the pipe back through with one of our Pull Connectors and Extractor Rings after making the hole. Find them at http://store.bulletmole.com/accessories.html.*

- *For instance to run a 1" PVC pipe; drive the tool system with the 1" Compression Point under the landscape completely.*
- *Remove the 1" Compression Point from the front of the shaft.*
- *Screw on the 1" PVC Pull Connector to the front of the shaft.*
- *Connect the 1" PVC pipe using the self tap threads of the Pull Connector.*

- *Remove either the threaded or threadless Impact Cap from the back end of the tool system.*
- *Screw in the Extractor Ring to the back end of the tool system.*

- *Use a 6' pry bar to "jack" the tool system out of the hole pulling the 1" PVC pipe back through the hole.*

Which Bullet Mole tool configuration is best for me?

- *For boring under 4 ft residential sidewalks, running 1" pipe as you go, use a 4 ft Sidewalk Kit.*
- *For boring under 5' 4" commercial sidewalks, running 1" pipe as you go, use a 5' 4" Sidewalk Kit.*
- *For boring under hardscapes greater than **5' 4"**, select combinations of Extension Shafts as needed, to run 1-1/4" pipe as you go using the 1" plus Compression Point..*
- *Add a 2" Compression Point (3" OD) and Impact Cap Kit to run 2" pipe.*
- *Add additional Extension Shafts as needed.*
- *Add Pull Connectors to drive the tool quickly and pull back the pipe. Recommended for good soil conditions.*

Please go to http://bulletmole.com/howitworks.html and see the Pipe Size Chart at the bottom of the page.

Does the Bullet Mole require water or external power sources?

The Bullet Mole does not require water and does not erode the soil. It only compresses the soil as it is driven through the ground. The Bullet Mole® eliminates the muddy mess and the waiting for trenches to dry out. It does not require any external power sources, eliminating the need to haul bulky, expensive equipment and the downtime associated with their failure. Since no secondary power source is required, the need for cords and hoses is also eliminated.

How many men do you need to operate the Bullet Mole?

The lightweight and compact size allows for easy maneuvering and operation by only one person. One man with a one shovel and one sledge hammer is all you need.

Is the Bullet Mole easily transportable?

It is extremely compact and easily transported! The Bullet Mole is packaged in a PVC pipe container that can be used as a tool case.

Will you need wrenches or other tools to assemble the Bullet Mole?

The Bullet Mole needs no wrenches or other tools to assemble. The patented thread design prevents them from locking or binding and eliminates the need for any setup tools or peripheral equipment. It's always assembled and disassembled by hand. Please see our Sales Brochure found at http://bulletmole.com/downloads/Sales_Brochure.pdf for a quick introduction to our tool system.

Is the Bullet Mole safe to operate?

It is much safer to use than other tools that require high-powered drivers or augers. The only knowledge required is the safe work practices associated with using a shovel and sledgehammer. Please see our Instruction Manual found at http://bulletmole.com/downloads/Instruction_Manual.pdf for a discussion on safe practices found on page 2 and throughout the Manual.

Is the Bullet Mole easy to operate?

Yes, the Bullet Mole is easy to operate. Play the Demonstration Video at http://bulletmole.com/video.html and see for yourself.

How Much Does the Bullet Mole Cost?

When you consider the time and money you'll save using the Bullet Mole, you will see that it is really a great deal and will pay for itself after only a few uses. Please email or call for the latest pricing.

What other tools do you need to effectively operate the Bullet Mole?

The only tools needed for installation are a shovel, a sledgehammer, and the Bullet Mole. Assembling and disassembling of tools is always done by hand.

Is the Bullet Mole durable?

The Bullet Mole is made to last. "Series One" tools have been used continuously in the field for years. The Bullet Mole is manufactured with high quality steel, to precise standards.

Is the Bullet Mole Patented?

The Bullet Mole has two sets of Patents.

How do I order the Bullet Mole Tool System?

Go to our online store at http://store.bulletmole.com/ or ask your local Irrigation, Landscape, Plumbing, or Electrical Supply Store.