

Saw-cut Installation Instructions*

BD Loops Preformed 3/16" Saw-Cut Loop

Saw-Cut Instructions

1. Mark the Pattern

Determine and mark loop position and footprint to include lead-in run to gate operator. If the pattern is too large the loop will not stretch to fit, so make your measurements slightly conservative, excess loop can always be placed into the yoke area. Corners should be marked with a 45° dog-ear cut that measures $5\frac{1}{2}" \times 5\frac{1}{2}" \times 7\frac{3}{4}"$. See reverse side of this sheet for a template. Be sure to use the correct loop size.**

2. Cut the Pattern

Use a $\frac{3}{16}"$ or $\frac{1}{4}"$ saw-cut blade, the groove depth should be $1\frac{1}{4}"$. Maximum groove depth should not exceed $1\frac{3}{4}"$. Deeper cuts require more loop sealant to seal. Cut into the installation surface following the marks previously made. No backer-rod is required if using a $\frac{3}{16}"$ saw-cut blade, but when using a $\frac{1}{4}"$ saw-cut blade use backer-rod or wrap electrical tape every 2-3' around the wire to serve as backer-rod. Saw-Cut depth can be as little as $\frac{3}{4}"$ for indoor parking garage applications. Look at step #4 to see how the yoke area should be cut.

3. Insert the Loop

Prepare to insert the loop into the saw-cut groove. Start by positioning the red line on the loop (mark made at the factory) at the corner opposite of the yoke. **Do not fully insert the loop into the saw-cut groove at this time.** Partially insert the loop into the saw-cut groove with the red wire side down, adjusting the position of the loop to fit the yoke. After aligning the yoke start at the red mark opposite of the yoke, fully push the loop into the bottom of the saw-cut groove, **do not push the lead-in wire yet!** Before pushing the lead-in into the groove put a layer of sealant (not water based sealant for this step) under the yoke then place the yoke down and push the lead-in into the groove. Do not use a tool that has a sharp edge to push the loop into the groove. BD Loops recommends the use of its PR-3/16" (Pizza Wheel) to push saw-cut loops into the groove.

4. V-Cut Yoke

A wider groove is needed for the yoke (area where the loop meets the lead-in). Drop the blade twice to make a "V" cut, the V cut should be $1\frac{1}{2}"$ wide at its widest point and 8"-10" in length. When sealing the yoke, place a layer of sealant below the yoke, lay the yoke into the "V" Cut groove and then cover the yoke with sealant. **Sealing the yoke this way will fully encapsulate the yoke in sealant and provides an additional layer of protection for your saw-cut loop.** Do not bend or crush the yoke area, this could damage the water tight seal.

5. Seal the Groove

Seal the saw-cut groove with a proper loop sealant (such as BD-LG). **Do not use a water based sealant.** Follow sealant instructions. Apply loop sealant to a dry and clean surface, use of the BD Loops Groove Cleaning Air Wand can help remove debris and dry the groove quicker. Use a $\frac{3}{16}"$ sealant tip to effectively fill the groove from the bottom up in one pass.



V-Cut Yoke with loop inserted. Notice how the bottom of the V-Cut yoke had a small layer of sealant put into it before the yoke was laid into it. Sealing the yoke in this way will fully encapsulate the yoke and add an additional layer of protection to your installation.

For Harness Wiring: Solder all connections

For Plug/Screw Connectors: Tin all wire connections

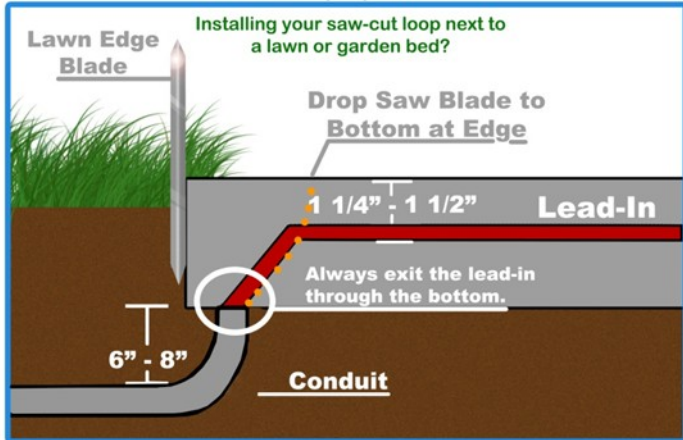
Basic loop layout guidelines to follow:

Reverse and Exit Loops	Shadow Loops
4ft from the gate/door. - Swing gates require 4ft from its complete open and closed position. 0-2ft from each curb. 4ft from every other loop.	- Loop lays under the swing path. 3-4ft from the gate in its complete open and closed position. - If the shadow loop is under a single swing gate, 0-2ft from the curb.

How to properly exit the roadway into a garden bed

- Drop the blade to the bottom at the edge of the roadway.
- Always exit lead-in through the bottom.
- 6-8 inches below the bottom of the surface material.
- Always run lead-in through PVC conduit. If you have a gopher problem lead-in can be run in metallic conduit.

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Lead-in should be run 6"-8" below the surface. Always run the lead-in through conduit

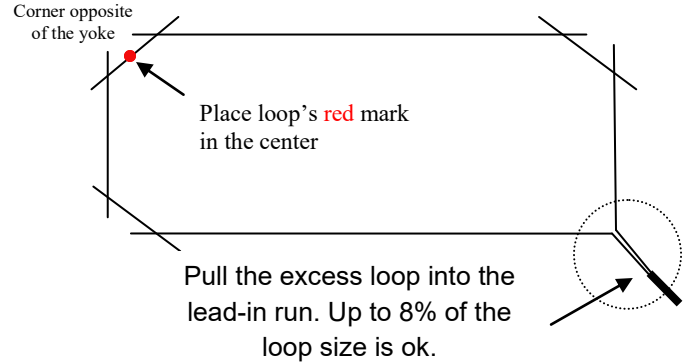
Instrucciones ESPAÑOL

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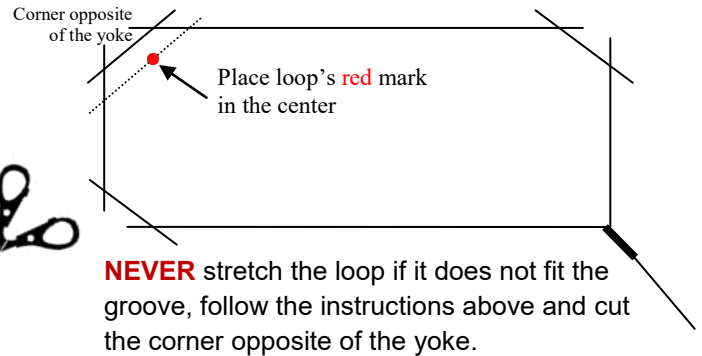
Made the cut too small?

Push the yoke down the lead-in run, up to 2 ft.



Made the cut too large?

Cut the dog ear corner opposite of the yoke to make the loop's perimeter shorter.



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Dog-ear 45° cut-out template

5 1/2 x 5 1/2 x 7 3/4 inches.

Cut out the picture and use to mark the corners for the saw-cut or make a wood block the same size.

Thoroughly test loops/system to make sure they meet your detection needs/objectives.

These instructions may not be suitable if there are special circumstances at your job site.

**Need help determining your layout?

BD Loops Loopalator- The Loop Layout Calculator

Visit our website to learn more, and download your own free copy of the Loopalator – The Loop Layout Calculator. Just by knowing the driveway width, type of gate or door and type of loop (direct burial or saw cut) you can easily calculate the sizes of loops needed for any job, and print out a detailed layout plan to give to installers.

*Check BDLoops.com for the latest installation instructions & product literature