

Saw-cut Loop Installation Instructions

Saw-Cut Loop Instructions



Do not remove the cable tie above the yoke.

Determine and mark loop position and lead-in run to gate operator. If the pattern is too large, the loop will not fit, so make your measurements slightly smaller. Excess can be placed in the yoke area. Corners should be marked with a 45° dog-ear cut that measures 14 x 14 x 20 cm. See reverse side of this sheet for a template. Be sure to use the correct loop size.

3/16" (4.7mm) or 1/4" (6mm) saw-cut blade with a minimum depth of 1 1/4" and a maximum of 1 3/4" is recommended. Cut into the installation surface following the marks previously made. No backer-rod is required if using a 3/16" saw-cut blade, but when using a 1/4" saw-cut blade use backer-rod or wrap electrical tap every 50 - 60cm.

A wider groove is needed for the yoke (where the loop meets the lead-in). Drop the blade twice to make a "V" cut, the V cut should be 40 mm wide at its widest point and 200-250 mm in length.

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, red 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 using the pizza wheel and the wedge tool. Do not use a tool that has a sharp edge.

Seal saw-cut groove with loop goop from Elsema, use of a 3/16" saw-cut blade can save 50-60% on loop sealant because of built-in backer-rod. Weather, humidity, and temperature will determine which type of sealant to use. Apply loop sealant to a dry and clear surface. Use a 3/16" sealant tip to effectively fill the groove from bottom up in one pass.

Elsema stocks sealant tips and sealants which are ideal for Australian conditions.

Harness Wire: Solder all connections

Plug/Screw Connectors: Tin all connections

Basic loop layout guidelines to follow

Entry and Exit Loops

- > 1.5m from the gate/door
- > For Swing gates, at least 1.5m from the fully open and closed position
- > 0 - 600mm from each curb
- > 1.5m from every other Elsema loop

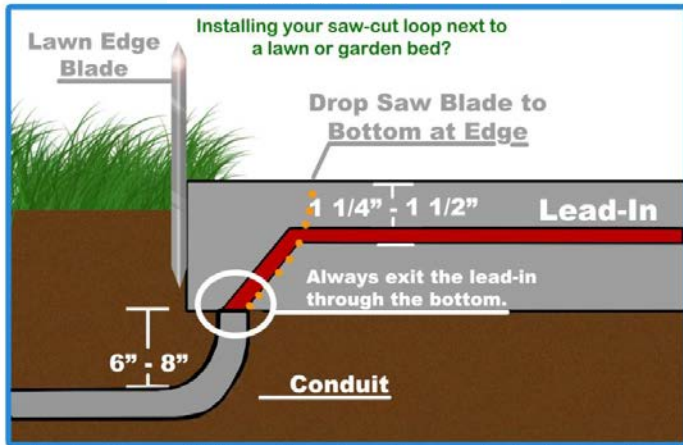
Detection height of loop is determined by 2/3 of the short leg of the loop.

Residential 1.2m short leg (Detection of standard size vehicles - 0.80m detection height)

Commercial 1.8m short leg (Detect higher bed vehicles - 1.2m detection height)

How to properly exit the roadway

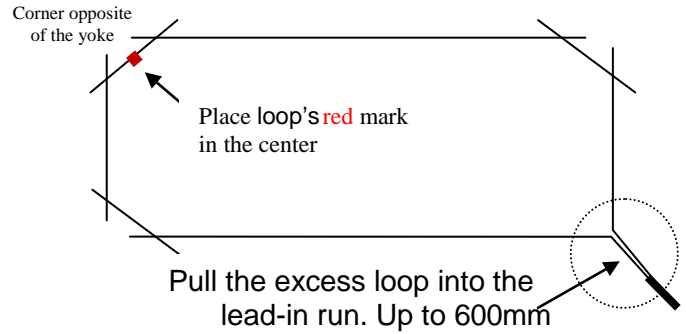
- > Drop the blade to the bottom at the edge of the roadway.
- > Always exit lead-in through the bottom.
- > 6-8 inches below the bottom of the surface material.
- > Always run lead-in through PVC conduit.



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

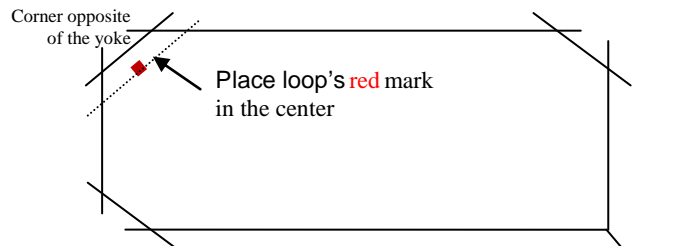
Made the cut too small?

Push the yoke down the lead-in run, up to 600mm.

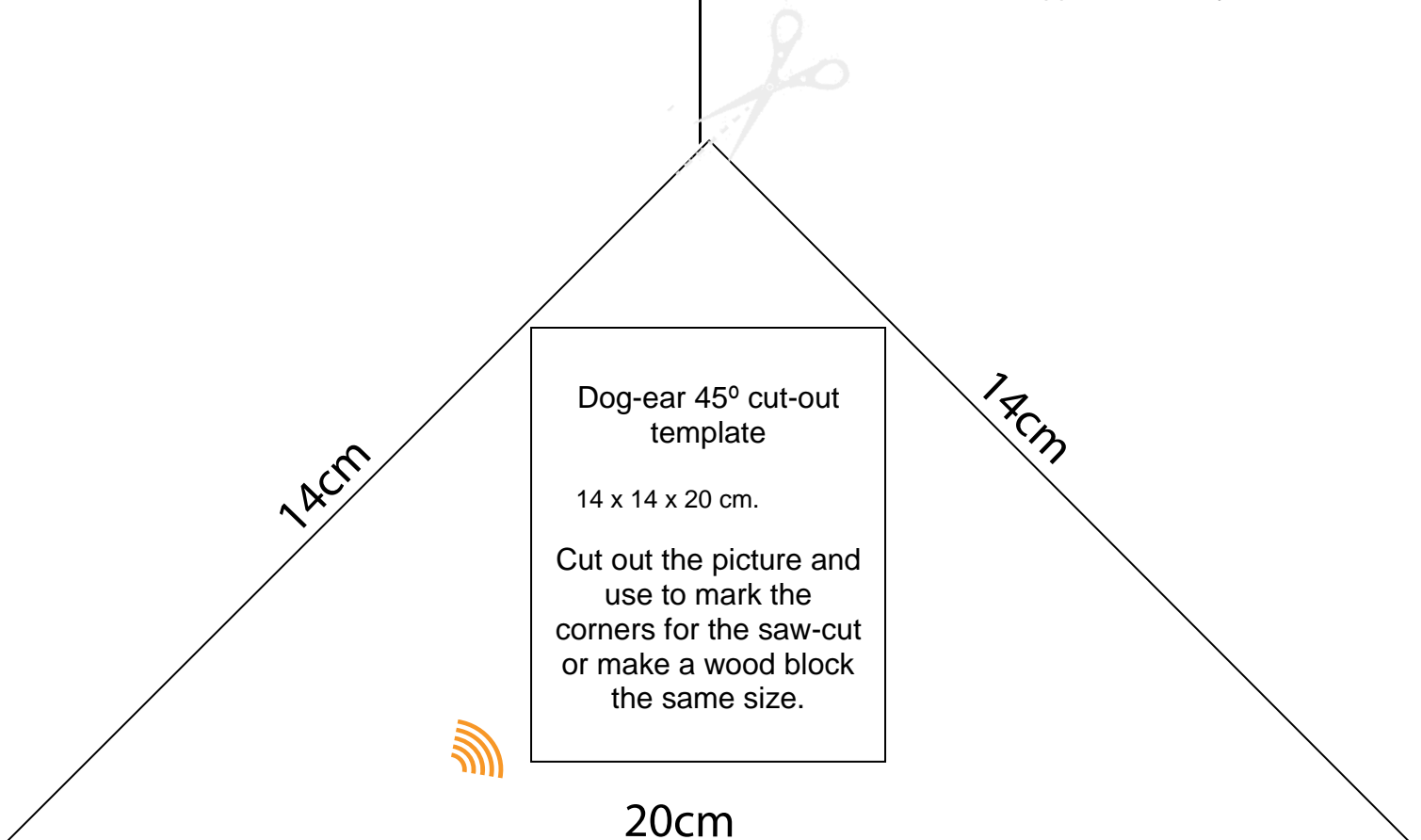


Made the cut too large?

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



NEVER stretch the loop if it does not fit the groove, follow the instructions above and cut the corner opposite of the yoke.



Loop Goop (Sealant) is a tough and durable polyurethane resin designed to encapsulate, protect and insulate inductance loops for door, gate, and parking applications. Effectively seals out moisture and provides exceptional chemical resistance to gasoline, motor oil, hydraulic brake fluid and other hydrocarbons. Loop Goop remains strong, flexible and resilient in cold & hot weather. It provides superior adhesion to wires and saw cuts in concrete and asphalt.



Loop Goop (Sealant)
Part Number: LG



Caulking Gun
Part Number: LG-Gun

Many loop installers use screwdrivers, paint mixers, sticks, or other tools to stuff saw-cut loops into saw-cut grooves. These tools are not only inefficient, they can knock the loop wire and cause a loop to short to ground.

Save your back and knees with the Pizza Wheel and Wedge Tool!

The Pizza Wheel and Wedge Tool allows installers to quickly and easily roll loop wire into the bottom of the saw-cut groove while standing. It is made of smooth and durable PVC that will not nick the loop wire.

The flat and angled wedge tools allow installers to easily push wire down into 135 dog eared corner cuts.

The Pizza Wheel and Wedge Tool has a 3/4" PVC coupler to accept any length 3/4" PVC handle, we suggest the use of Schedule 80 PVC conduit.

- Designed for saw-cut depth up to 2 1/4 inches.
- Quickly and easily roll the loop to the bottom of the saw-cut groove.
- The Pizza Wheel & Wedge Tool can also be used to help clean out the saw-cut groove.
- Dog ear corner block allows installers to quickly mark the dog ear corners, simply trace around the block with the construction crayon.

