

866/867 SAW-CUT LOOP INSTALLATION INSTRUCTIONS

The saw-cut vehicle detector loop kit consists of 16awg machine tool wire that is laid in a continuous five turn loop in rectangular slots in the pavement and epoxy sealant to protect the wire from weather and pressure.

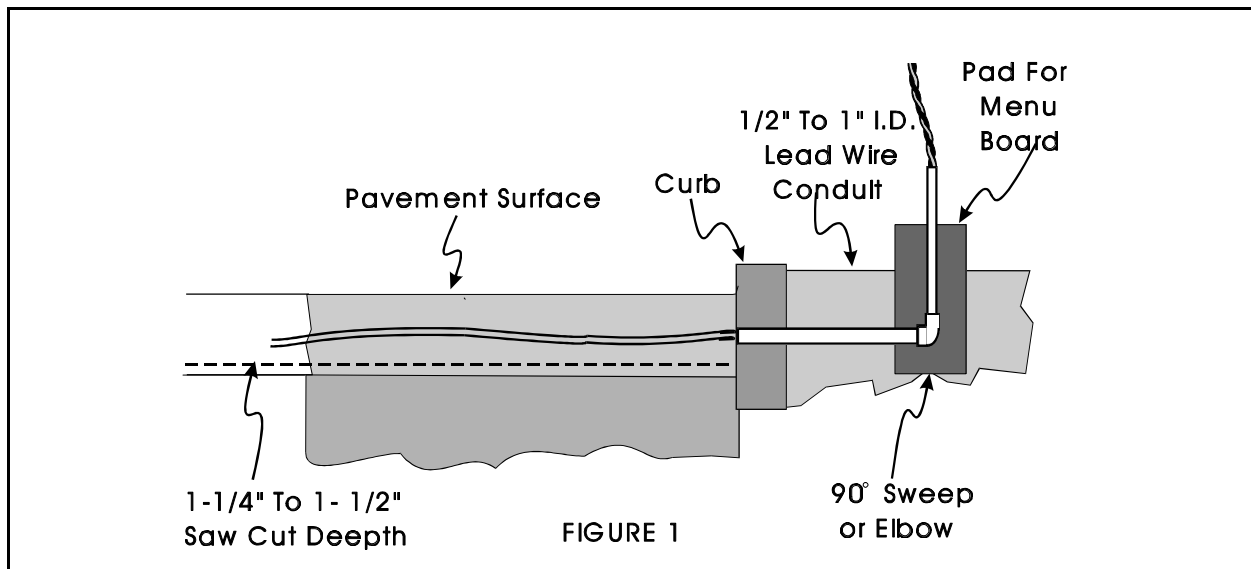
The saw-cut rectangle is located in the pavement perpendicular to the curb. Lead wires rising from conduit below ground are then connected to the loop detector via a loop extension cable.

PRECAUTIONS

1. The loop should not be closer than five feet (5') from any magnetic interference above ground such as a storage tank, a dumpster, or other large metal object.
2. No part of the loop should be within two feet (2') of reinforcement rods in the surrounding pavement.
3. It should not be situated directly over any large metal object in the ground within five feet (5') of the surface.

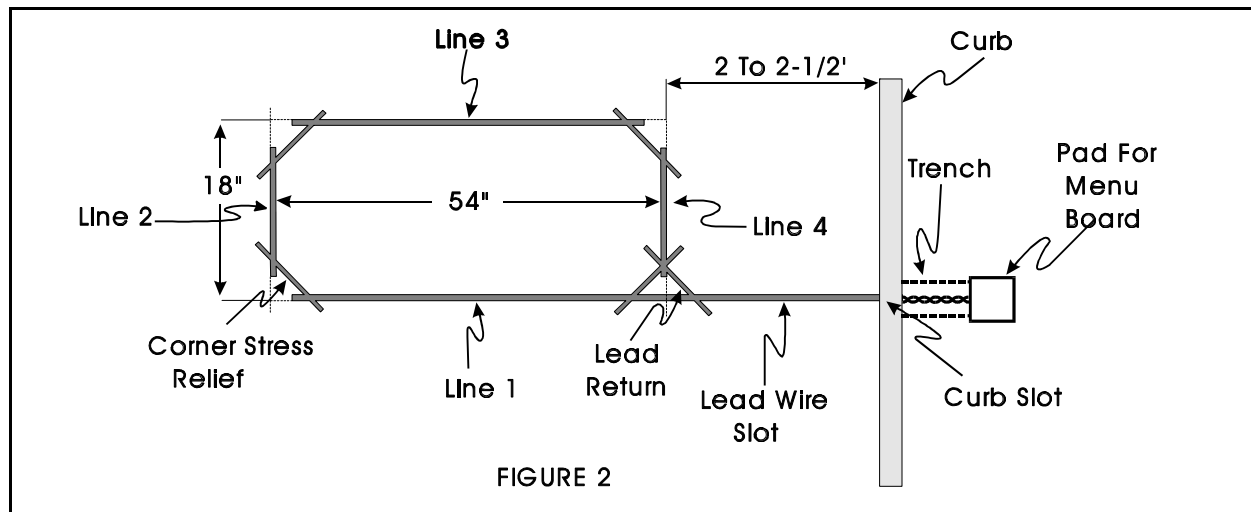
PREPARING THE SITE

1. Make sure the pavement is thicker than one and one-half inches (1-1/2") so the slot will not cut through.
2. Dig a trench at least 2" deeper than the pavement's surface running between the curb and the location where the lead wires will rise from the ground.
3. Cut a slot through the curb to install a 1/2" to 1" PVC conduit in the trench (conduit not supplied). Make the cut deep enough to put the centerline of the conduit 1-1/4" to 1-1/2" lower than the surface of the pavement.
4. Snap a chalk outline of the loop on the pavement.
5. Place Line #1 on the centerline of the conduit slot in the curb.



CUTTING THE PAVEMENT SLOTS

1. Cut the slots on all sides and corners to an even depth of 1-1/4" to 1-1/2" using a concrete saw with a 3/16" blade.
2. Clear debris from the slots with compressed air.
3. Allow both the surface and the slots to dry completely.

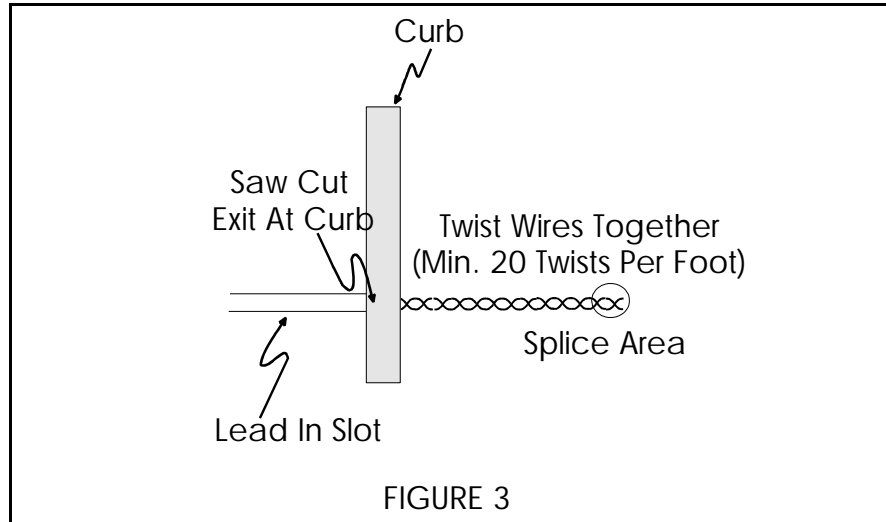


FORMING THE LOOP

1. Measure off ten feet (10') of loop wire plus the distance between the curb and the location where the loop lead wires exit the ground. This is the length of the two loop lead wires.
2. From that point on the wire, start forming the loop at the curb and insert the wire into the Line #1 slot.
3. With a wooden stick (not a metal object), press the wire firmly into place as it is inserted, so there is no space between each layer.
4. Continue inserting wire clockwise into loop slots until there are five (5) continuous turns and a return to the curb.
5. Avoid damaging the insulation by excessive stress or abrasion.
6. Anchor the ends of the loop in the curb slot to prevent them from being twisted, during installation.
7. Cut the second lead wire to the same length as the first.

PREPARE THE LOOP LEAD WIRES

1. With a variable speed electric hand drill, twist the two lead wires together at least twenty (20) turns per foot.
2. Pass the twisted pair of lead wires through the conduit.
3. Test the loop wire for continuity and leakage resistance to earth ground. If leakage resistance is not 10 Megohms or higher, replace the entire loop.
4. **DO NOT ATTEMPT TO REPAIR FAULTY VEHICLE DETECTOR LOOP WIRE.**



SEALING THE LOOP

There are two types of Wire Loop Sealant; A two part sealant that comes in a 1 gallon can which requires mixing, and a single part sealant that comes in a tube and requires a cartridge gun for dispensing. Follow the directions on the container for which ever product you received.

NOTE: If using the two part sealant, combining the two parts of the loop sealant starts a chemical reaction that will eat through a plastic container. Mix the sealant in a metal container. Also when the reaction occurs the sealant becomes very hot. Use caution to avoid burns.

See LOOP EXTENSION CABLE INSTALLATION for instructions on splicing the loop wires to the loop extension cable.