
Installation and Maintenance Instructions for COBRA EZ™ Install In-Ground Traffic Spike System

Thank you for your purchase of Guardian Traffic System Controllers, the finest and best engineered traffic barriers. These units are built to last, employing the finest engineering, using the highest quality materials with precision fabrication. To insure your units provide long lasting service and safety please follow these installation and maintenance instructions.

If you have any questions do not hesitate to contact our customer service or engineering staff at 1.520.881.3380 or toll free 1.800.866.9115 (8:00 AM to 5:00 PM - MST) or e-mail sales@guardiantraffic.com. Thank you for choosing Guardian Traffic Systems.

SAFETY NOTICE

Traffic Spike Systems are an inherently damaging product and are intended to puncture tires. There are risks and liabilities involved in the use of these products. To minimize potential injury or damage, it is imperative to take all safety measures in the installation, location and site conditions, traffic and pedestrian flow, and use and maintenance of the units. Warning signs should be installed at all sites where spikes are installed. Do not allow pedestrian traffic in the area of the barriers. Illumination of the units is necessary if the site conditions require visibility at night.

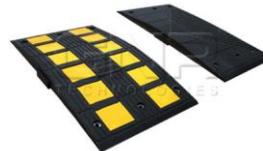
IMPORTANT NOTE FOR INSTALLATION OF ALL TRAFFIC SPIKE UNITS:

Ninety Degree Rule - Traffic Spike Systems must be installed so that traffic flows over the teeth at a strict 90-degree angle to the road (tire parallel to the teeth). Complete vehicle alignment and perpendicular passage over the units must be assured for front and rear axles. Allow a minimum of 15' (4.5m) to 20' (6m) in either direction of the traffic spike units between any turns required of vehicles. Under no circumstances should traffic controllers be installed on a curve, or in an area where vehicles will not be assured of complete perpendicular passage over the traffic controller for both front and rear axles.

Five MPH Rule - It is absolutely essential that traffic over the spike units be slowed to a maximum speed of 5 miles per hour (8km/h). Traffic that exceeds that speed will cause damage to the teeth and other internal components, premature wear and tear and will decrease the life expectancy of the units. Also additional maintenance will be required for excessive speed. It is recommended to install speed bumps as necessary to slow traffic.



Speed Bumps/Humps Recommended



Direction - All traffic spike units need to be positioned with the sharp edge of the teeth pointing away from traffic going the correct way and TOWARD offending or wrong-way traffic.

Signage - Warning signs are imperative to provide sufficient notice of the danger to drivers and to pedestrians and may be required by local ordinance. If the area will be accessible after daylight, illumination of the teeth especially in areas adjacent to pedestrian traffic is important. Be sure your customer is aware of these inherent dangers.



14100.100 Lighted



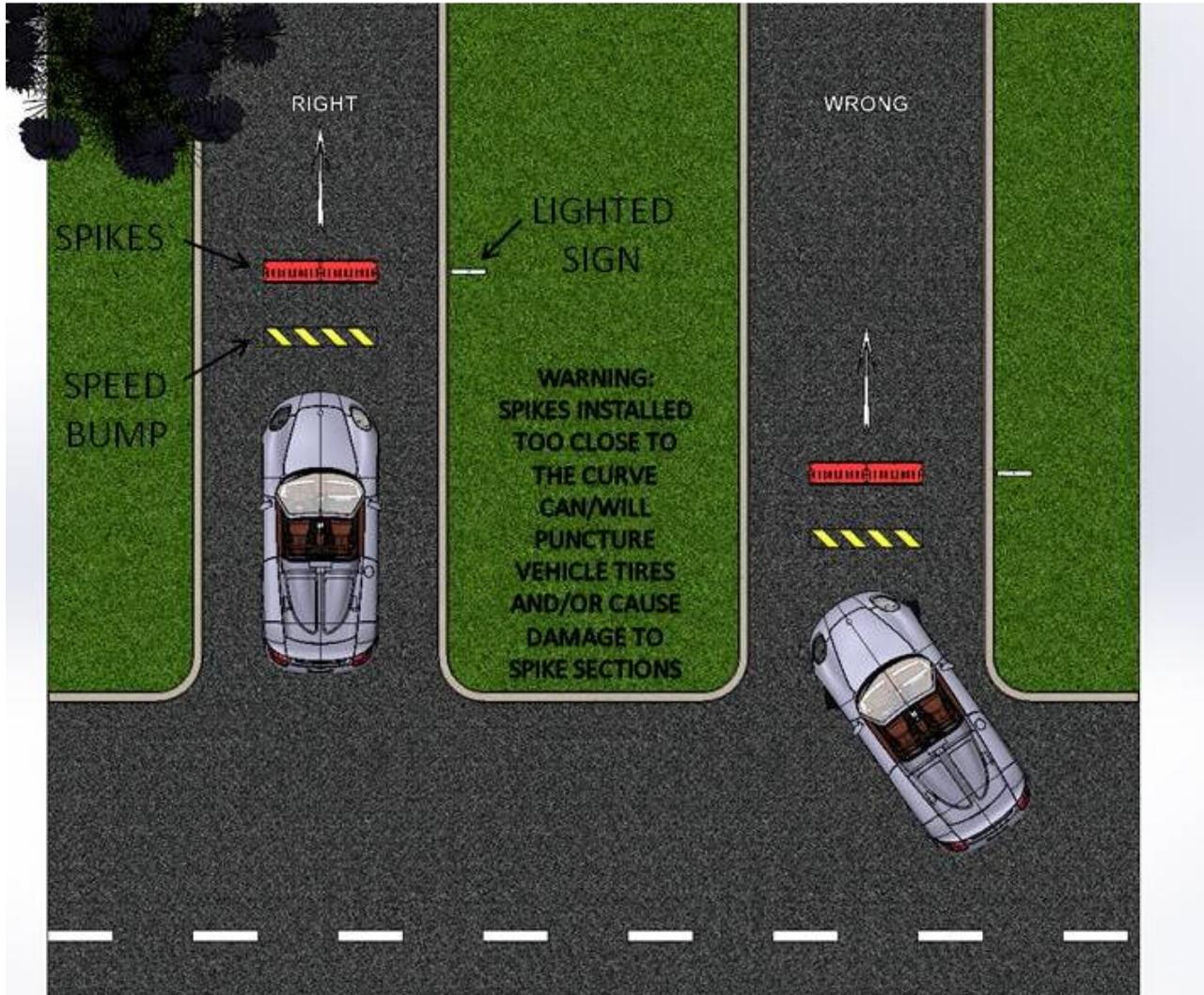
14140.100 Reflective

Guardian Warning Sign Model 14100.100 (lighted) or 14140.100 (reflective) that warns drivers of the inherent danger of the device including a notice for pedestrian traffic to stay clear of the area is strongly recommended. If there will be traffic after dark be sure to provide adequate lighting in the area and use the warning sign Guardian Model 14100.100.

Site Conditions – Carefully select your site so that the units are installed in a solid surface asphalt or concrete. Traffic spikes systems should not be installed in dirt, on any curve, inclines or where the road surface is uneven or where the road surface is in poor condition. Also, do not install in areas where there is significant water runoff that could potentially cause damage to the components of the units. Use caution when installing near high pedestrian traffic areas.

General Instructions - These instructions are provided in order for you to receive the maximum performance from your traffic control system. Failure to strictly follow these installation instructions will affect the performance of your traffic controllers. The positioning of the traffic spike units and the angle of the teeth are critical to the proper functioning. Controlling the speed to 5MPH along with the other above-mentioned guidelines are necessary to the operation of the spikes.

Failure to strictly follow these installation instructions could result in broken or bent teeth, broken springs, correct direction tire damage, inability to puncture tires of wrong-way traffic, and a multitude of other malfunctions. Guardian Traffic System will not be responsible for property, vehicles, tires, or personal damage resulting from improper installation or use. Guardian Traffic System will not be responsible for repairing malfunctions or replacing parts resulting from improper installation or use. Replacement parts needed in order to repair damage or malfunction caused by improper installation or abuse are not covered under your warranty.



WARNING
SPIKES INSTALLED TOO CLOSE TO THE CURVE CAN/WILL PUNCTURE VEHICLE TIRES AND/OR CAUSE DAMAGE TO SPIKE SECTIONS



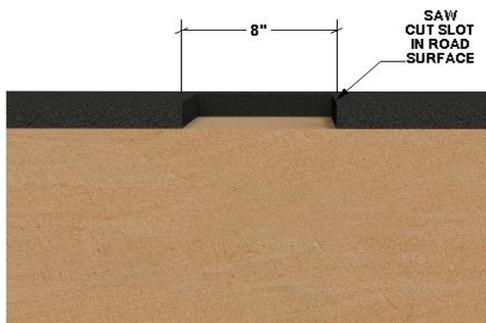
INSTALLATION - COBRA EZ™ In-Ground Models

1. Carefully determine the location for your Traffic Control Units. Locate so that when the tires of the vehicle pass over the teeth they are parallel to the teeth. Position the units so that the tires (both front and rear) when passing over do not strike the teeth at an angle as this could cause damage to the teeth and to the tire. It is recommended to place the units at least 15' – 20' (4.5m – 6m) into the lane.
2. Place adequate warning barricades in the traffic lane to divert traffic during the construction process and until ready to activate.
3. If you are installing a heater element in your system then you will need to plan for the location of the thermo device and power. See instructions with your heater cable.

NOTE: Always check with local municipality, Blue Stake and/or utility company for regulations, codes and inspection of site prior to excavation.

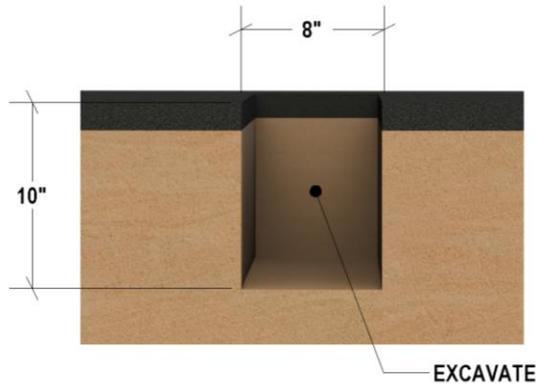
Do not disassemble the unit and keep the teeth in the latched down position.

4. To install COBRA EZ™ make two saw cuts the total length of the units **exactly 8" apart** on the inside dimension of the cuts.

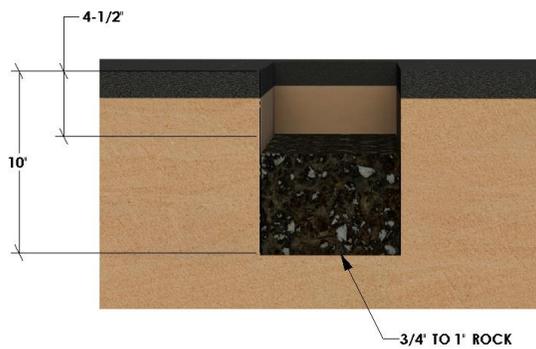


Installation & Maintenance Instructions

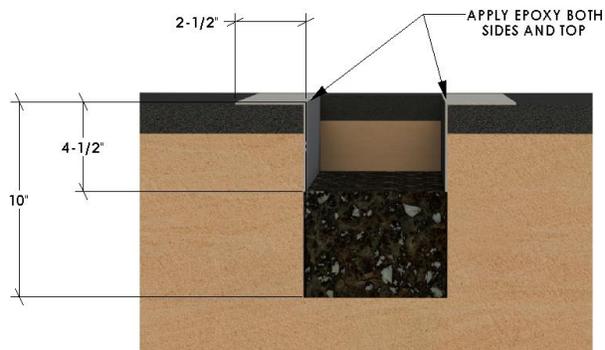
- Remove the asphalt or concrete and the sub grade to a depth of approximately 12" (more if you have a large amount of rain and require more drainage).



- Place $\frac{3}{4}$ " to 1" crushed rock in the open area bringing the rock to within 4 $\frac{1}{2}$ " of the top of the road surface.

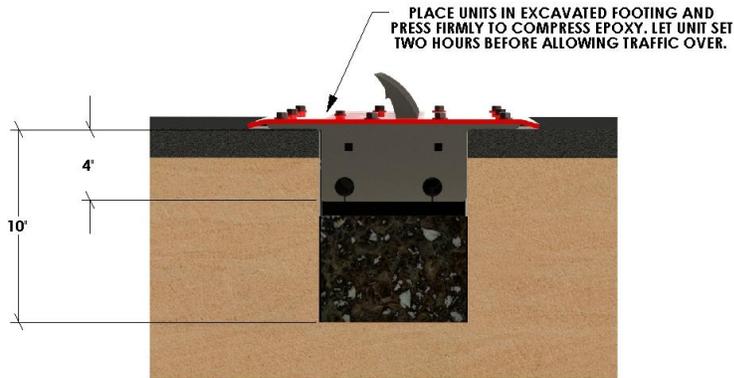


- After completion of the above processes, clean the road surface near the excavation area of any dirt or remaining debris and make sure the area is dry.



- Place epoxy (use Guardian Item Number 14250.100) or other bonding agent along the edge of the interior walls and on the top of the road surface 3 $\frac{1}{2}$ " away the edge of the pit on both sides.

Installation & Maintenance Instructions



9. Insert in the traffic spike unit into the opening making sure the teeth are orientated correctly. The unit should fit tightly in the area. If the unit binds going in you may need to chip off the edge of the road surface to get the unit to fit all the way down to the road surface.
10. Place as much pressure as possible to set the unit firmly in the area and compress the epoxy. You may drive over the unit with a vehicle to set the unit in place.
11. Let the epoxy set at least two hours (set time may vary depending on the epoxy, temperature and weather conditions) before allowing traffic over the units.
12. When ready to activate make sure all warning signs and any other precautions you have taken are in place. Then activate the teeth by loosening the latch down device. Be sure to retighten the latch down mechanism into open position after activating the teeth. Please see instructions below.

Latch Down Instructions

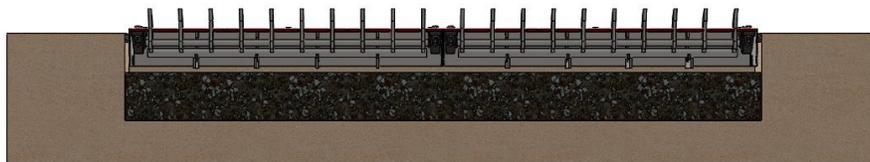
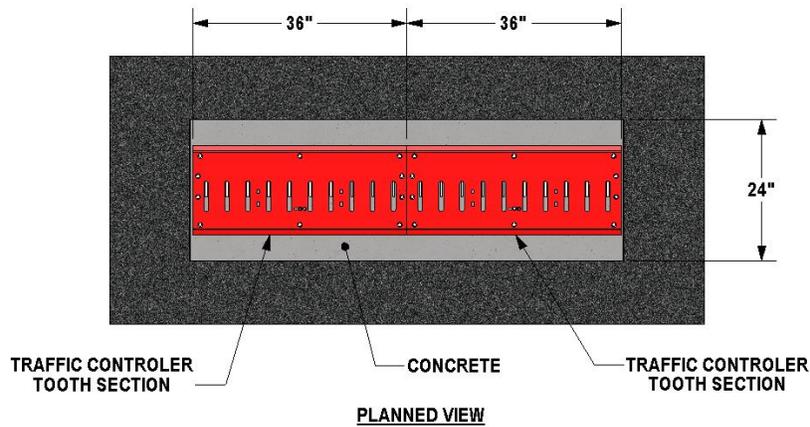
Although, your traffic system comes with a latch down assembly, it is not recommended to be left in latch down position for long periods of time as the vibration can work the mechanism loose raising the teeth.

To reactivate the latch down, use an adjustable wrench or 9/16" wrench. Loosen the latch down bolt. Then holding the two teeth sections down, slide the latch down assembly up until under the teeth shaft. When in place tighten the bolt securely.



To reactivate the teeth, loosen the bolt, then slide the assembly down. Take care to keep hands and feet away from teeth as they come up to prevent injury. Then tighten the bolt and latch down assembly securely.

For more information visit www.guardiantraffic.com and view the "Latch Down Video" showing the process.



MAINTENANCE of GUARDIAN Traffic Controllers:

It is necessary to maintain your Guardian Traffic System Controllers. Periodic inspections, but not less than monthly, to insure proper tooth and shaft movement and cleaning of any debris that may have settled or lodged inside the controller (dependent upon the site and elements in your area) is essential.

Accumulated debris can be vacuumed, blown or manually cleaned out by unbolting the top-plate, which gives free access to the inner cavity of the unit. If debris is allowed to build up in the unit, it will malfunction causing damage to the unit or to vehicle tires traveling in the correct direction. The accumulation of organic matter and debris may cause premature rusting and deterioration of steel components.

With proper installation and maintenance of Guardian Traffic System Controllers will provide many years of cost-effective and reliable directional access control.



LIMITED WARRANTY for GUARDIAN TRAFFIC SYSTEMS Products

GUARDIAN TRAFFIC SYSTEMS warrants that the Traffic Control Spikes System shall be free from all defects in material and workmanship for a period of one year (12 Months) from the date of the original invoice under normal use and service and specifically excludes surface paint, any work, products or wiring done by others. GUARDIAN'S obligation under this warranty is specifically limited to repairing or replacing, at its option, any defective part, which upon examination by GUARDIAN proves to be defective during the warranty period. This warranty excludes any and all labor in regards to repair or replacement. This warranty shall not apply to surface paint or to any part which has been improperly installed, improperly maintained, rust or deterioration due to water retention, improper drainage or weather, accident, improper use, speed exceeding five miles per hour, traffic going the wrong way causing damage or any part which has been altered or repaired by any person not expressly authorized, by GUARDIAN, in writing to do so.

There is no warranty of merchantability or fitness for any particular purpose nor is there any other warranty, express or implied, except as specifically stated in the above paragraph. GUARDIAN does not represent that the products purchased may not be compromised or circumvented; that the products will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained spike system may only reduce the risk of a burglary, robbery, fire or other event occurring without providing an alarm, but it is no guarantee that such will not occur or that there will be no personal injury or property loss as a result.

GUARDIAN shall in no event be liable neither for personal injury, tires, property damage or other incidental or consequential damages nor for any special damages or any further loss, which may arise in connection with any claim. However, if GUARDIAN is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of the cause or origin, GUARDIAN'S maximum liability shall not in any case exceed the purchase price of the individual product or products which shall be the complete and exclusive remedy against GUARDIAN.

Any legal action or proceeding relating to your use of GUARDIAN Products shall be instituted in a state or federal court in Pima County in the State of Arizona. You by purchasing these products and GUARDIAN agree to submit to the jurisdiction of, and agree that venue is proper in, these courts in any such legal action or proceeding.

This warranty may vary from State to State and certain restrictions may apply.