Stop Stick - Tire Deflation Device

Purpose

The purpose of this Training Bulletin is to establish guidelines and procedures for the safe and proper deployment, maintenance and replacement of the Department’s Stop Stick tire deflation devices.

Introduction

Stop Stick tire deflation devices are designed to slow down or stop four wheeled vehicles driving on paved surfaces. The device is “placed” or “tossed” across the path of an oncoming pursued vehicle. As the vehicle drives over the device, hollowed spikes puncture the tires causing them to slowly deflate. The deflated tires result in the slowing or stopping of the targeted vehicle.

I. Description

The Stop Stick is a portable, hand deployed tire deflation device. It consists of three; 3 foot long, individually molded polymer cores. Each polymer core or “stick” has 72 Teflon coated spike tips that are inserted into individual quills. The polymer core is encased in a TARTAN tape glass filament frame to contain the quill/spike assembly during impact. A polypropylene housing contains the inner subassemblies and protects officers from being punctured when handling the device. Three “sticks” are encased in a nylon sleeve and linked together creating nine feet of spike strip. The entire assembly is tethered to a plastic cord reel with eighty feet of 100 pound test braided polyester cord. The Stop Stick is secured in a metal tray attached to the inside of the trunk lid and is held in place by nylon straps.

II. Guidelines

1. Only sworn personnel who have been trained in the operation of the Stop Stick device are authorized to deploy them in the field.

2. Stop Sticks are to be used on four-wheel vehicles only and are not to be used on motorcycles. The Stop Stick may be used on vehicles with six or more wheels, but may not be as effective.

III. Procedures for Deployment
1. Notify other officers participating in the pursuit as to where and when the stop stick will be deployed to avoid causing damage to the pursuing police vehicles.

2. Exercise extreme caution when moving onto a highway or within the approach of pursuing vehicles.

3. Deploy the Stop Stick from a position that provides cover and/or concealment from the approaching violator.

4. Deploy the Stop Stick in a manner that limits the suspect’s ability to swerve or avoid the tire deflation device.

5. Place the Stop Stick across the road and out of the way of non-targeted vehicles.

6. Insure that there is at least fifteen feet of clear area to safely move backwards during deployment. (Note curbs, fences and other objects, which could block your path.)

7. Lock the cord reel in place and watch for oncoming vehicles.

8. KEEP THE CORD LINE FLAT ON THE ROAD SURFACE TO PREVENT IT FROM BEING CAUGHT ON A MOVING VEHICLE AND PULLED OUT OF YOUR HAND. DO NOT WRAP THE CORD AROUND ANY PART OF YOUR BODY.

9. As the targeted vehicle approaches, step backward with the locked cord reel in hand, flat on the ground and pull the Stop Stick into the path of the approaching vehicle.

10. Do not wait until the last possible second to deploy the device.

11. After the Stop Stick has been struck, step back with the cord reel in hand and pull the Stop Stick from the roadway and away from approaching non-targeted vehicles.

IV. Replacement

If the deployment of a Stop Stick is reasonably associated with a vehicle collision, the device shall be booked as evidence.

If the Stop Stick was deployed but not struck, it can be returned to the tray mounted in the trunk and it is ready for the next deployment. If the Stop Stick was deployed and struck by the targeted vehicle, the device is no longer fully functional and should be replaced as soon as possible. Contact CDC and exchange the struck Stop Stick with a new device. CDC personnel will be responsible for contacting Stop Tech, Ltd. at 1-800-537-0102 or at www.stopstick.com to order necessary replacements.

Summary

Stop Stick is a tire deflation device designed to slowly deflate air pressure in four wheeled vehicles. It is lightweight and simple to deploy, however, proper deployment requires the use of extreme caution and adherence to the guidelines set forth in this Training Bulletin.

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