Fig. 7-29. Signage can help instruct bicyclists on how to use the detector loop.

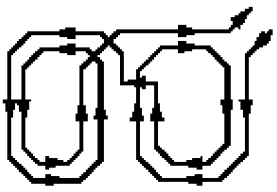
Bicycle-Activated Detector Loop

Changing how intersections operate can help make them more "friendly" to bicyclists. Improved traffic signal timing for bicyclists, bicycle-activated loop detectors, and camera detection make it easier and safer for cyclists to cross intersections. Bicycle-activated loop detectors are installed within the roadway to allow the weight of a bicycle to trigger a change in the traffic signal. This allows the cyclist to stay within the lane of travel and avoid maneuvering to the side of the road to trigger a push button, which ultimately provides extra green time before the light turns yellow to make it through the light. Current and future loops that are sensitive enough to detect bicycles should have pavement markings to instruct cyclists on how to trip them.

Loop detectors are important at cross streets, left-turn-only lanes and other travel lanes where cyclists may become stuck, unable to get a green light. Lane markings or signage that show cyclists where to position their bicycle maximize the capability of the sensor.

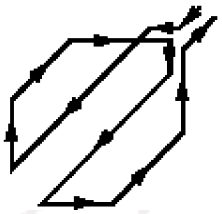
Quadruple Loop

- Detects most strongly in center
- Sharp cut-off sensitivity
- Used in bike lanes



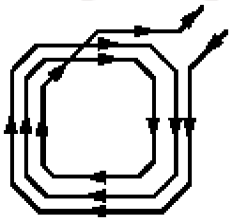
Diagonal Quadruple Loop

- Sensitive over whole area
- Sharp cut-off sensitivity
- Used in shared lanes



Standard Loop

- Detects most strongly over wires
- Gradual cut-off
- Used for advanced detection



From: Implementing Bicycle Improvements at the Local Level, FHWA, 1998, p. 70.

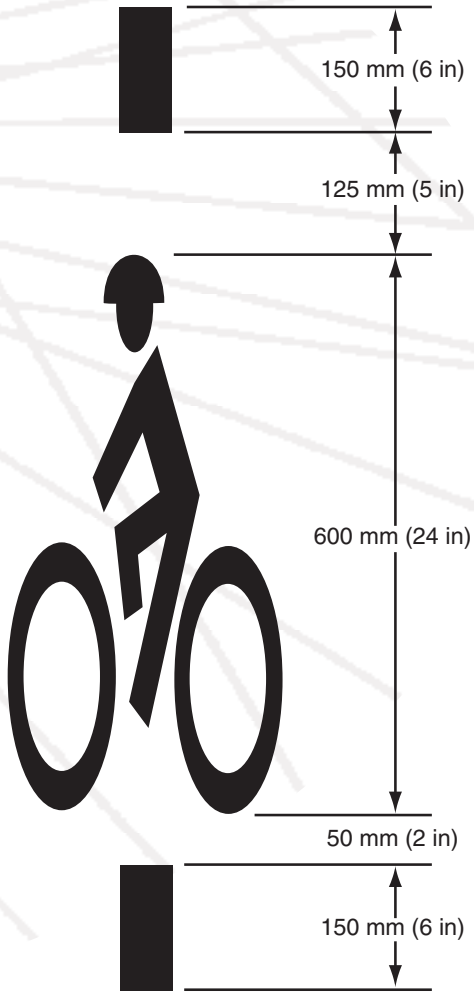


Fig. 7-30 — 7-31. Use pavement marking (top) to aid bicyclists in locating loop detectors at intersections (bottom).