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Introduction
The purpose of this document is to describe the proper method of photographing tire impression evidence by qualified personnel.

Recommended Equipment Includes:

- Professional camera, minimum 35mm or digital SLR with a minimum eight (8) megapixel native resolution, with interchangeable lenses, manual override for exposure and focus
- Detachable flash with a six (6) foot extension cord or a flash with remote capabilities to allow for sided lighting
- Remote shutter release
- Sturdy tripod mount capable of various angles and positions
- Artificial light sources (e.g., flood lights, flashlights)
- Level/Angle finder
- Suitable B&W and color negative film or digital storage media
- Flat rigid scales
- Tape measure
- Photographic log
- Reflector
- Device for blocking ambient light
**Procedure for Tire Impression Photography**

A typical standard operating procedure should include the following:

1) Locate visible impressions to be photographed.

2) Prepare photographic log or worksheet as per agency policy

3) Select suitable film or digital media.

4) Once the overall, midrange and close-up views of the area have been documented without scales and markers, photograph the overall and midrange views of the area with identifying markers and scales using appropriate lighting.

5) To document details of the impression for examination, photograph close-up views of the impression with identifiers and scales using appropriate lighting. Each image must fill the frame with the impression and scales:
   a) Mount camera on tripod with the focal plane parallel to the impression.
   b) Manually focus on the bottom of the impression and close aperture to maximize depth of field (e.g. set aperture to f16 or f22).
   c) If using digital camera, set camera to the highest resolution and uncompressed or with lossless compression. (e.g. RAW or TIFF).
   d) Take multiple overlapping exposures, mapping the entire tire impression, In this manner:
      - Light each overlapping section of the impression to bring out maximum detail. For a long tire impression, a series of overlapping photographs of 12 inches each should be taken. A tape measure should be extended along side the entire length of the impression for orientation purposes.
   e) Multiple exposures using various settings/bracketing and lighting techniques may be required. A minimum of three images should be taken with oblique lighting at least 100 degree increments around the entire tire impression.
   f) If impression is processed (e.g. with fingerprint powder or chemicals), re-photograph after each process.

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Reference SWGTREAD Guide for the Forensic Documentation and Photography of Footwear and Tire Impressions at the Crime Scene

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This document includes a cover page with the SWGIT disclaimer
## REFERENCE LIST

SWGIT and SWGIT/SWGDE documents can be found at:

[www.swgit.org](http://www.swgit.org)

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- Proficiency Test Program Guidelines
- Guidelines and Recommendations for Training in Digital and Multimedia Evidence
- Recommended Guidelines for Developing Standard Operating Procedures
- Glossary of Terms