

Tripods, Polarizers, and Flash

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**SAE C1729 *Photography for Accident
Recon, Product Liability, and Testing***

1

Gathering Data & Capturing Details

2

Accurate
Good Quality
Consistent
Useful

3

Tripod

4

A tripod needs to be:

- ***versatile***
- ***stable***
- ***tall enough***
- ***quick to set up***
- ***easy to adjust***

5



Workhorse: RRS TVC-24L (5.5') w/BH-40

6

Center Column

Which is more stable?

A side-by-side comparison of two tripods. The tripod on the left has a traditional design with a central column that extends upwards from the head. The tripod on the right has a more modern design with a shorter central column and a more compact head assembly. Both tripods are black with silver accents and have a camera with a flash mounted on top.

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A photograph showing two tripods laid flat on a surface. The tripod on the left, which has a traditional design with a central column, is shown with its legs spread out. The tripod on the right, which has a more compact design, is shown with its legs spread out. The central column of the left tripod is clearly visible, extending upwards from the head assembly. The text 'Center column prevents laying flat' is overlaid on the bottom of the image.

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**Buy the best,
and you only cry once.**

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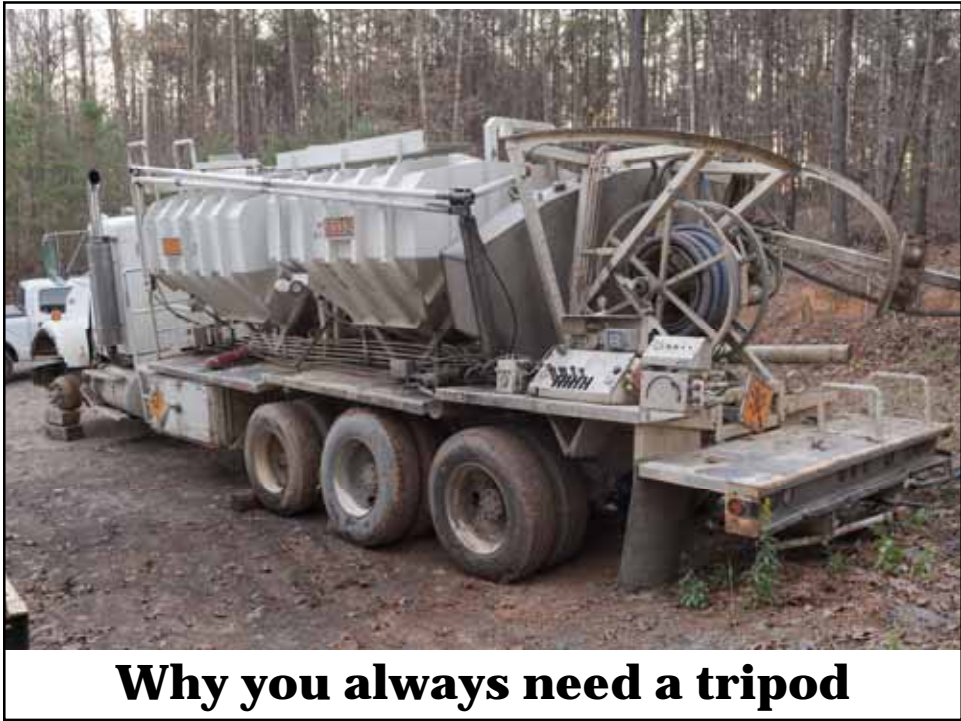


How high should you go? 7 feet!

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Flash batteries died at sunset

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Ambient: f/14, 1.6 sec, ISO 200

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Before & After Images

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When You Need To Be In The Shot

When You Need To Be In The Shot



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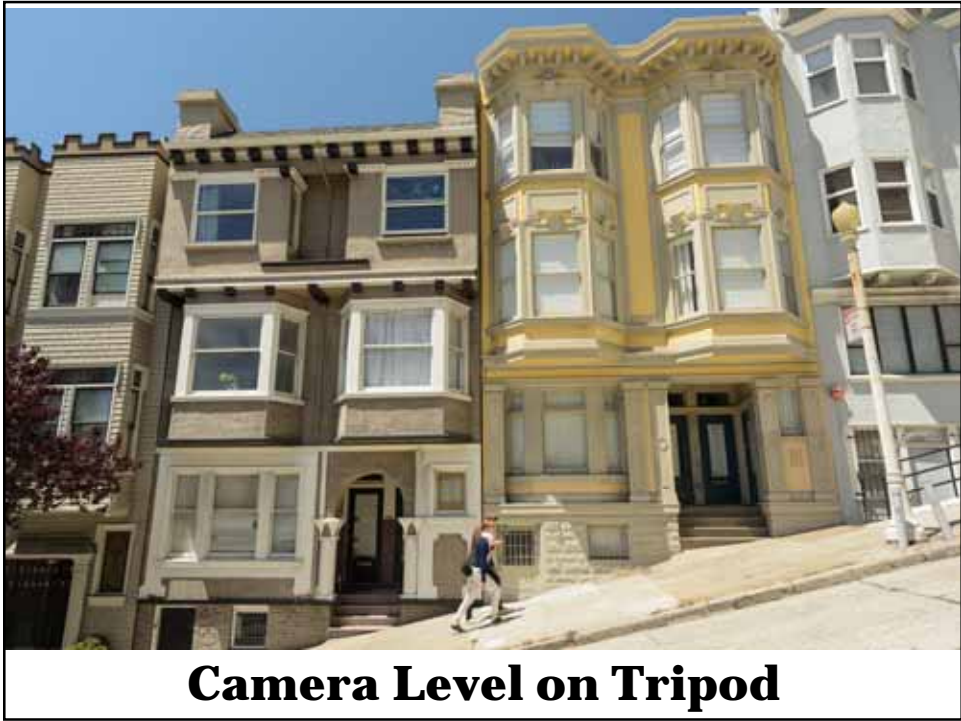
20

Aligned vs. Level

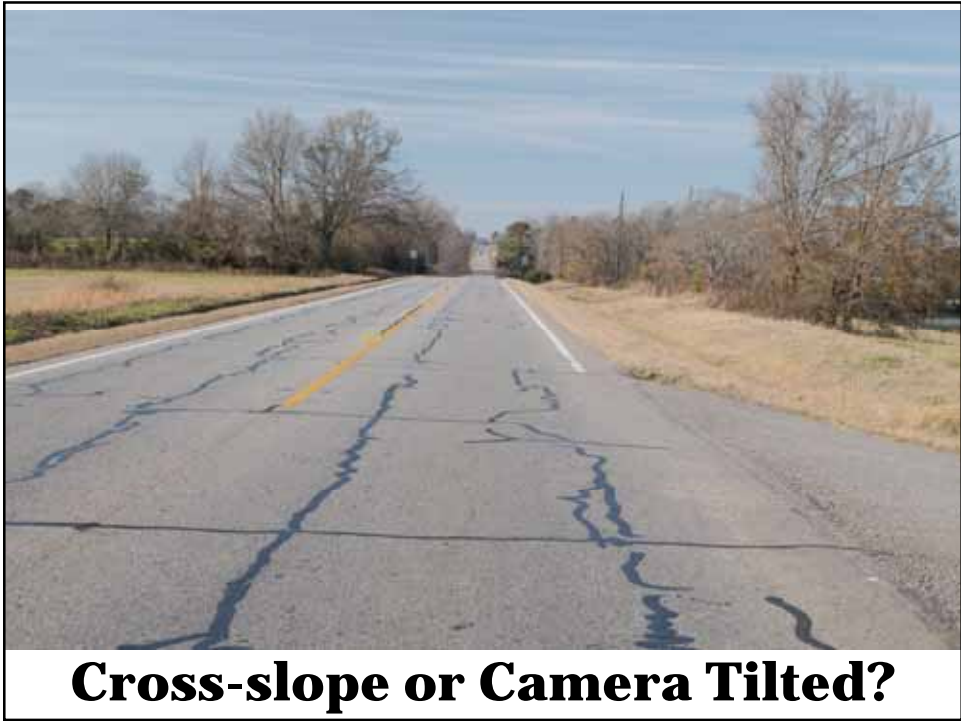
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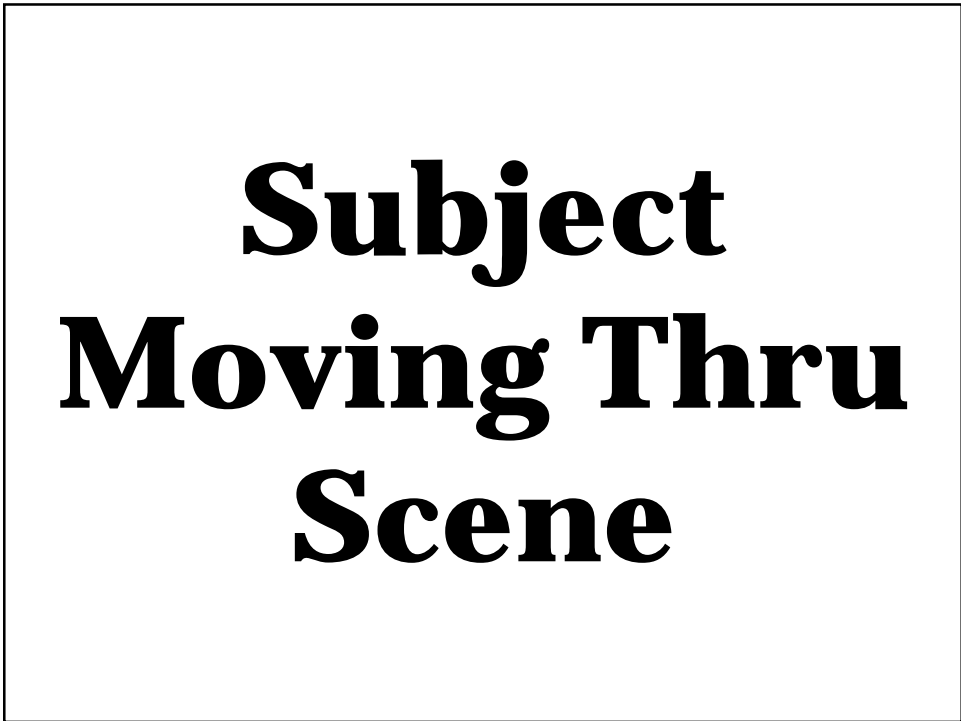
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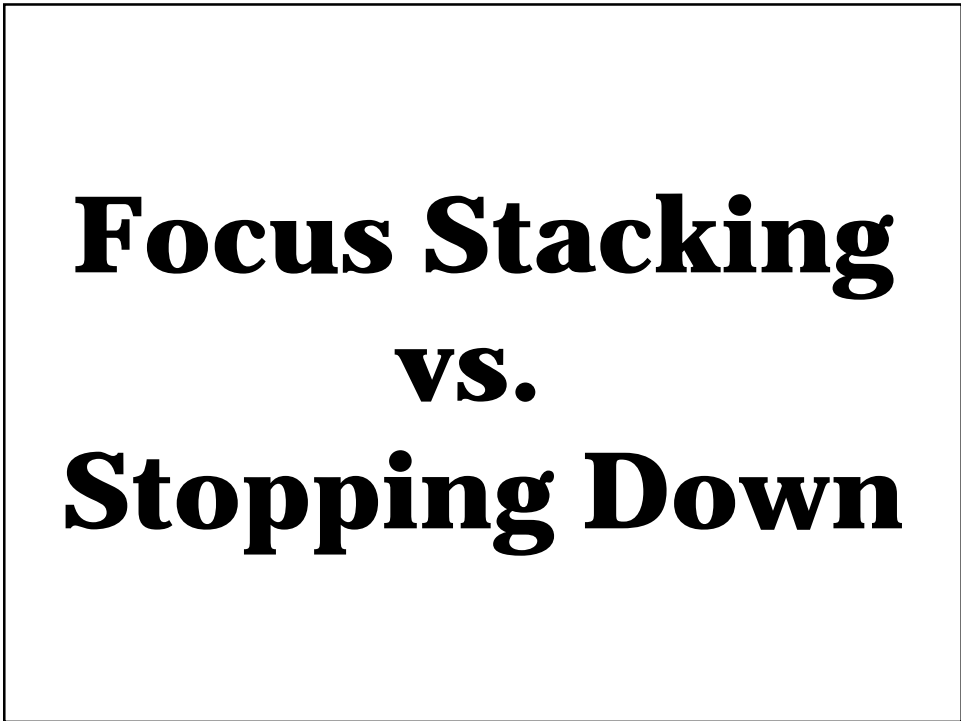


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Forklift Cleared Lane @ 12:34:13

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52

Polarizer

- **Reduces glare**
- **Increases saturation**
- **Loses 1 to 2 stops of light**
- **Only filter PS can't replicate**
- **As essential as flash & tripod**

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Hot Exhaust without Polarizer

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56



Country Squire—w/Polarizer Only

57

**You must
rotate the
polarizer
for each shot.**

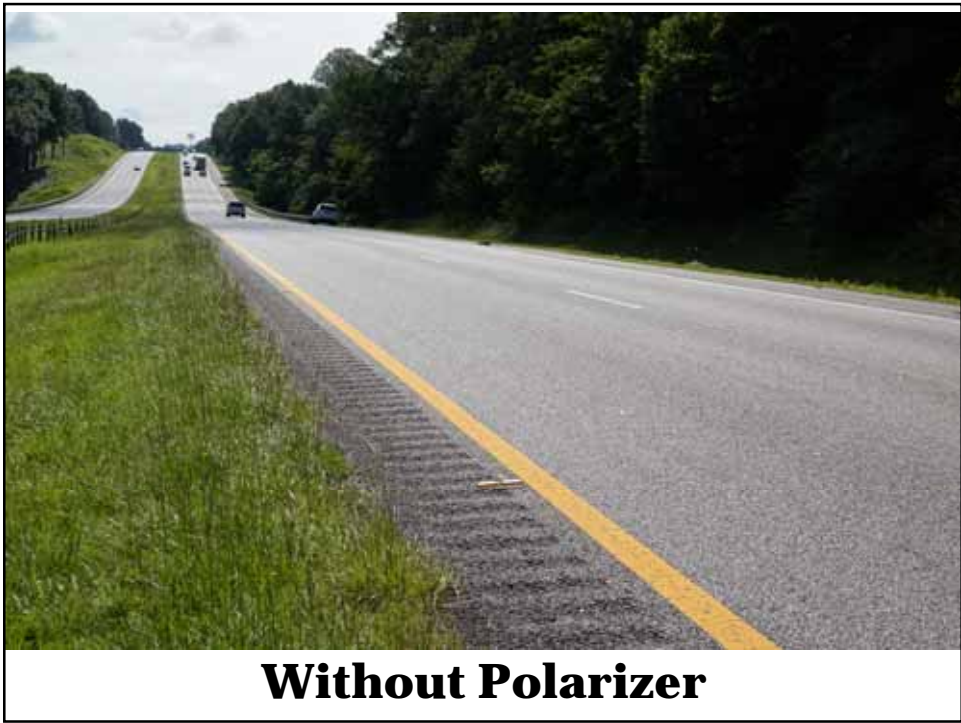
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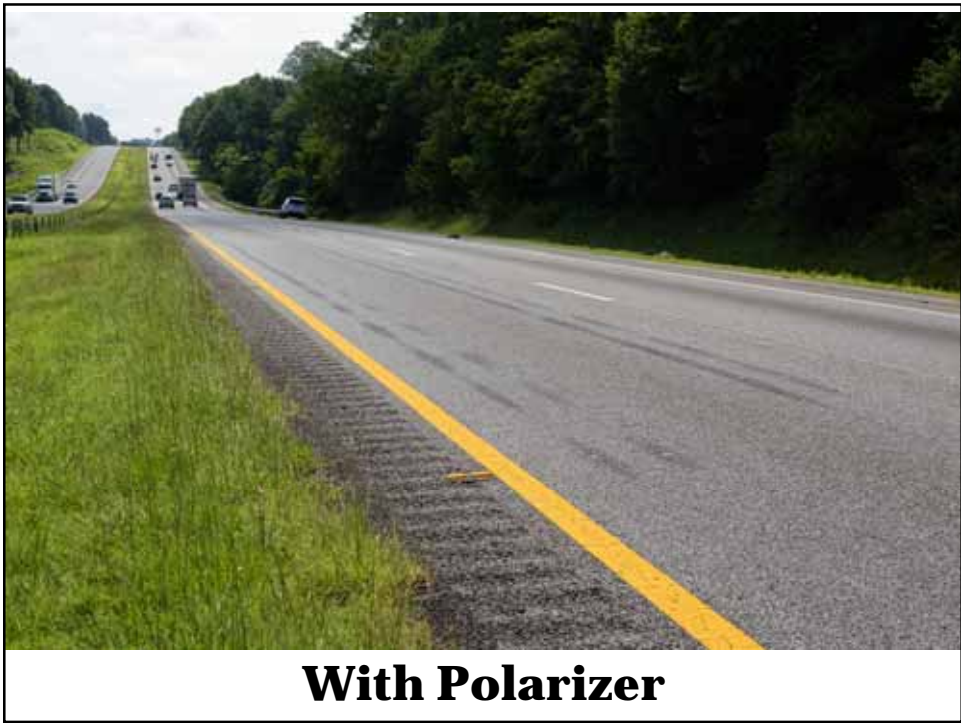
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Flash

- **Illuminate dark areas**
- **Add light where it's needed**
- **Fill in shadows**
- **Reduce contrast**
- **Show textures**
- **Freeze motion**

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**Think Light
&
Shadow**

64

Flash vs. Ambient Light

Ambient – No flash

Full Flash – No ambient

**Fill Flash – Ambient
augmented with flash**

65

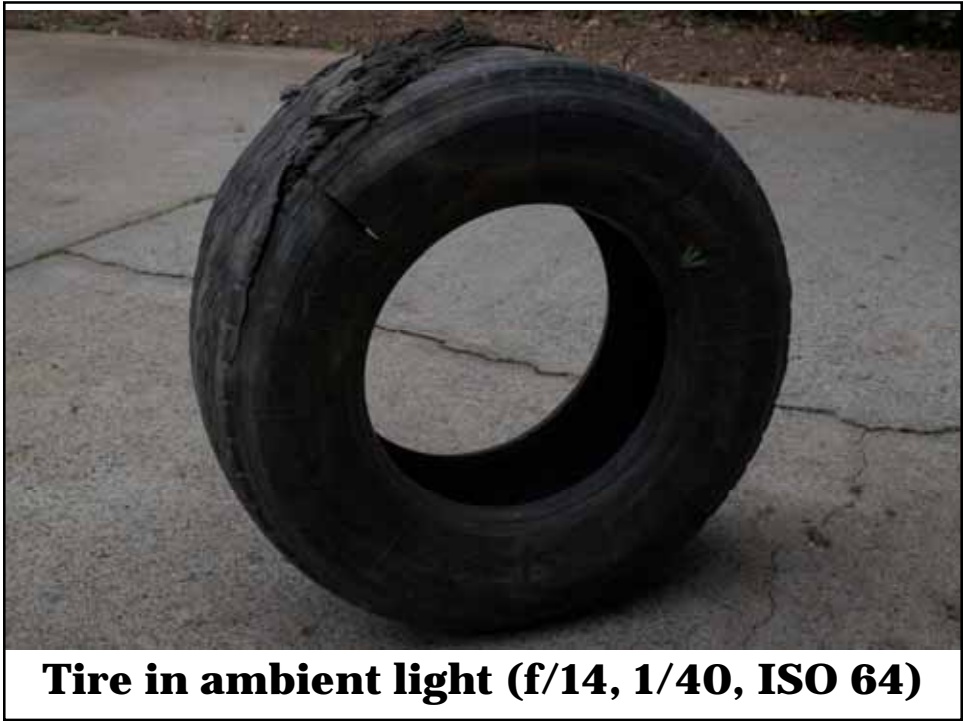


Wheel without flash

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67



68



69

Polarizer Plus Fill-flash For Vehicles

70



Top lit BMW – No pol, no flash

71



Top lit BMW w/pol & fill flash

72

Data & Details

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Backlit Nissan GTR w/pol & fill flash

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**Remember
to rotate the
polarizer
for each shot.**

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Polarizer Plus Fill-Flash Indoors

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Flash, no polarizer

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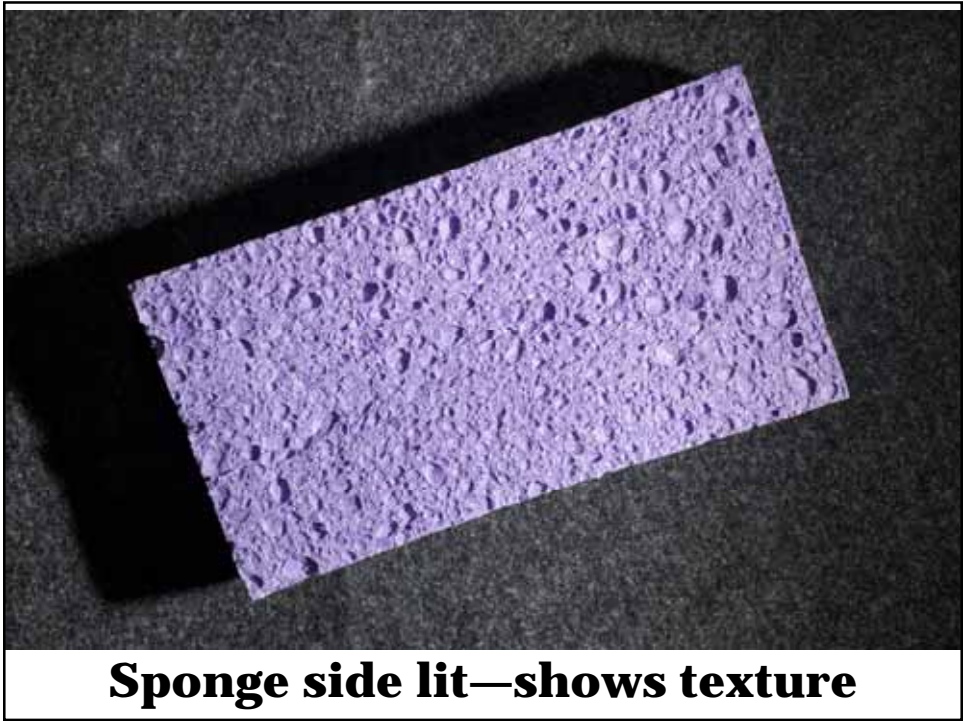
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Bringing Out Textures

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Using Multiple Flashes

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Flash from camera hot shoe only

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Second off-camera flash other side

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Flash from camera hot shoe only

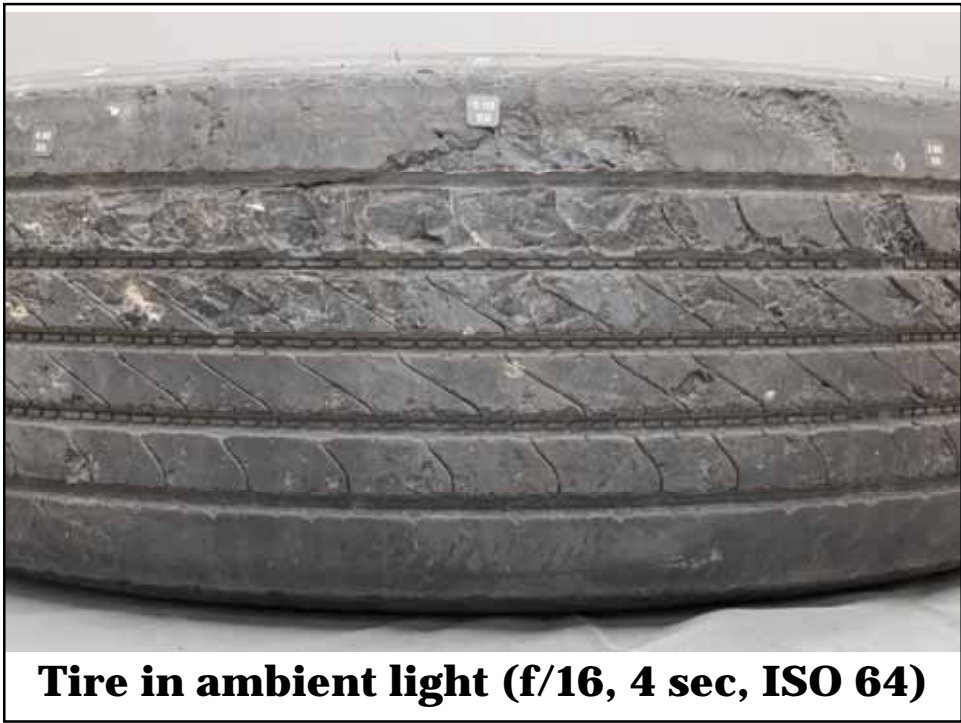
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Tire in ambient light (f/16, 4 sec, ISO 64)

93



Tire w/2 side flashes (f/16, 1/200, ISO 64)

94

Think Light & Shadow

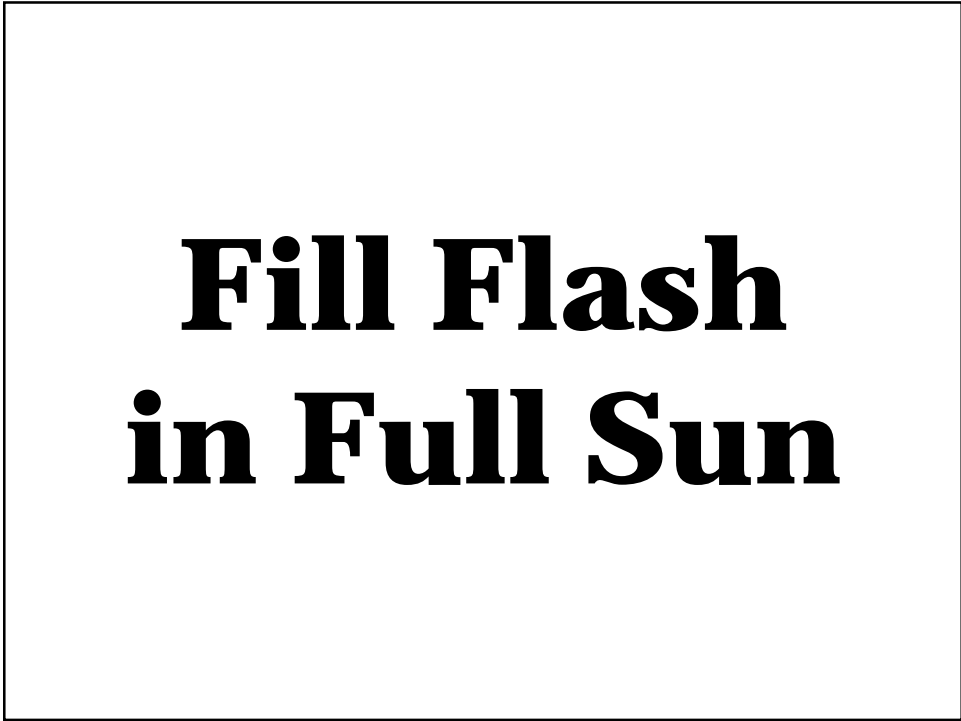
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100



101



102

Dealing with Lighting Inside

103



Tire inside warehouse w/shop lights

104



Light from shop lights

105



Using flash to overpower shop lights

106



“Is that it?”

**“Yep.
We’re done!”**

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