

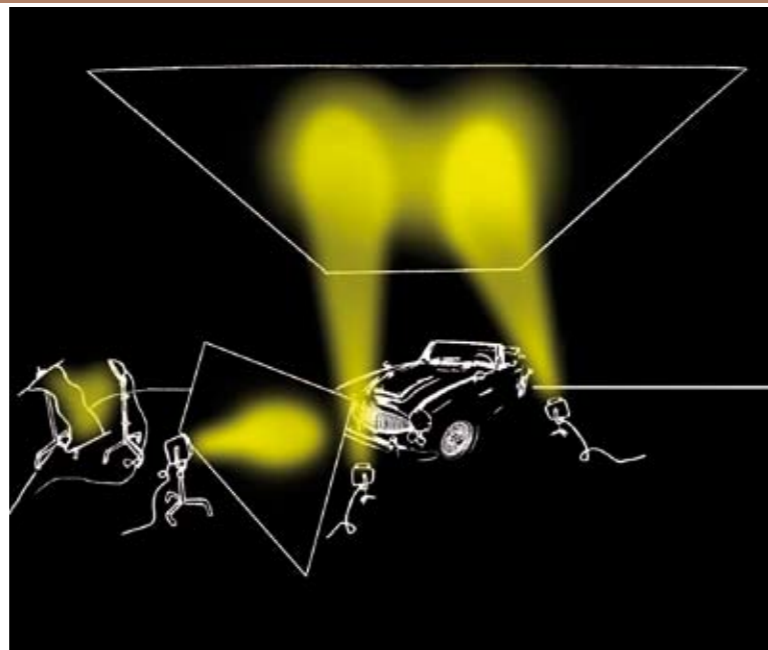
When a private collector of classic automobiles asked me to shoot his Austin Healy 3000 Mk III for an automobile art poster I was pretty excited. I was not just excited at getting to shoot such a beautiful car, but was excited because he asked for an art shot that would capture the emotion rather than the car, in other words, photograph the sizzle not the steak. As a starting point I chose a close-up of the Healy's front emphasising its beautiful chrome-work and decided that a little wide-angle distortion would help create more 'emotion'. The portion of the car I chose to shoot, as well as the wide-angle distortion, were only part of the equation, the strongest contributing factor to fulfilling the collector's requests was lighting – I wanted this image of the car to come across as slick and sexy.

If this car had been painted a lighter tone than black, such as white, you could get a serviceable image with an on-camera flash – wherever the curves and details of the car fall away from the flash-head, shadows will form. Since the shadowed areas would be darker than the white paint job, they would create contrast, helping us to see the beautiful curves of the bodywork.

A shadow is an area of a subject that receives no illumination whatsoever from the main-light source; therefore it is an area of the subject where the subject's tonality is under-exposed. If black is the absence or near absence of all light then you have to ask yourself, can you under-expose black? If a tone is truly black, that is to say that it absorbs all the light hitting and returns none, or at least returns so little that it does not register on our image, then how could black, the darkest tone possible, be made any darker? Visually it cannot – a true black object does not register any darker in the areas that are not hit by the main-light than the areas that are. So all this to say that trying to show shape and form on a near-black object by relying on shadows will render a poor image, there will be little to no contrast and definitely no 'slick and sexy'.

If I had lit the near-black Healy solely with an on-camera flash, we would see almost nothing of the car other than a few faint reflections of the dark studio walls on its surface plus several tiny burned-out hotspot reflections of the flash – in other words a black blob with a few white specks on it. For slick and sexy on this shoot I needed to forget about shadows and on-camera flash and think about another area of lighting that would create a suitable tonal contrast; somehow I needed to find a way to stretch those "hotspots" from the on-camera flash over the surface of the Austin Healy to show off its shape and form.

The sheen or shine we see wrapping around the curves of the Healy in Image 1 were created by strategically placed light sources. Sheen or shine is a layperson's term for a specular highlight (a mirror image of a light source seen as



a reflection on the surface of the subject). The terminology people use for specular highlights can be pretty funny; you can usually tell how they feel about a particular specular highlight by how they refer to them. If they feel that the specular highlights in their photo are too intense, they generally call them hot spots or glare. If the intensity is just right, usually less intense, they refer to them as shine, sheen or, with one client of mine, wet-lines.

Size is relative – this is one of the most important factors in lighting that many of us overlook. Hmm, perhaps that might make a good reply back to many of those spam emails I've been receiving. Getting back to the on-camera flash scenario, an on-camera flash is a huge source of illumination to an ant but is a tiny source to a car. To light big dark shiny things you need big sources of illumination; only a relatively big source can create large enough specular highlights to wrap around and reveal a large object's curves and details. An Austin Healy automobile is approximately 12 feet or 4 metres long so a suitable light source for it would have to be more than 12 feet/4 metres on the long dimension.

Size affects intensity – the size of the light source is one of the main determining factors of how bright a specular highlight will appear on a subject's surface. If you decrease the size of a light source, the resulting specular highlights will occupy a proportionally smaller area and will proportionally increase in brightness making them more opaque, allowing less or none of the subject's surface to show through. If you increase the size of a light source, the resulting specular highlights will occupy a proportionally larger area and will proportionally increase in brightness making them less opaque and more translucent, allowing more of the subject's surface to show through. It works like this: a smaller light source crunches all of the light energy to a smaller area and so the reflection of that small light source on the surface of the subject will then appear brighter because the energy



occupies less area. A larger light source spreads the available light energy over a bigger area and so the reflection of that larger light source on the surface of the subject will then appear less bright because the light energy is spread over a larger area. Kind of like a small swimming pool with 1,000 gallons of water in it compared to 1,000 gallons in a larger swimming pool – the water level in the smaller pool will be deeper (brighter) and the larger pool the water level will be less deep (less bright).

To create the beautiful specular highlights on the car hood, an 18 foot by 30 foot reflector was suspended with nylon cord above the car, just out of the camera frame (see Image 2). The frame of the reflector was constructed from lightweight but very strong aluminum tubing called Ultimate Support from the makers of Chimera soft-boxes. To construct the huge reflector light source two 9 x 40 foot rolls of white seamless paper were unrolled onto the floor side by side. The two rolls were overlapped a little and then taped together with clear packing tape. Ten feet of paper was trimmed off one end leaving an 18x30foot rectangle of white seamless paper. The frame was placed on top of the paper and then secured to the paper with more clear packing tape. The white paper made an excellent and inexpensive reflector with very neutral colour balance.

Two 1,000 watt inexpensive tungsten stage spotlights with Fresnel lens were positioned on the floor near the car and were pointed up at the underside of the reflector panel. The lights were adjusted to create soft-edged puddles of light on the paper. The reflection of these light-puddles can be seen all over the top of the car – notice how they appear bright in the centre and fall off gradually to dark; this gradation was caused by the Fresnel lens.

To add specular highlights to the frontal chrome-work that was off-angle to the top light-source, a 10x6.5 foot panel with two layers of white nylon stretched over it was placed on the floor in front of the Healy. A third tungsten light (500 watt) was placed on the opposite side of the panel and set to fire directly through the white nylon.

To create odd sweeping light patterns on the wall behind the Healy, light from a second 500 watt tungsten light was reflected off a bent and twisted Plexiglas mirror.

When shaping an object/subject with specular highlights, be aware that they are angle sensitive and so must be viewed from the camera angle. I spent considerable time staring through the camera lens while an assistant tweaked the position of the lights so that the specular highlights sat on the car right where I wanted them – sweet and sexy.

Camera: Hasselblad ELM with Sinar 54H digital back
Lens: Hasselblad/Zeiss 50mm
Exposure: f16 for 32 seconds @ 50 ISO single shot mode

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Dave Montizambert lectures internationally on lighting, digital photography and Photoshop. He is also a published author having written two books on lighting and digital photography plus numerous magazine articles on these topics in North America and in Europe. Dave also creates Photoshop tutorial DVDs for www.software-cinema.com, <http://www.software-cinema.com/> and is a beta tester for Adobe Photoshop.

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SLICK and SEXY

