Digital Restoration from Start to Finish

Ctein

Acquisitions Editor: Diane Heppner

Assistant Editor: Stephanie Barrett M

Project Manager: Paul Gottehrer

Marketing Manager: Christine Degon Veroulis

Cover Design: Alisa Andreola

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30 Corporate Drive, Suite 400, Burlington, MA 01803, USA Linacre House, Jordan Hill, Oxford OX2 8DP, UK

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Fig. 8-37 This negative has a tear at the bottom that makes it impossible to print conventionally without a lot of print retouching.

Paving Over Tears and Holes

Tears and small holes, while catastrophic to original photographs, are really not all that hard to repair. Clean tears, especially, produce damage that is is localized and well defined. In principle, you can repair it with nothing more than judicious use of the Clone tool, but there are lots of ways to make the job go faster.

Figure 8-37 shows a negative with a tear along its lower edge. The fi rst tool I used to attack it was Image Doctor's Smart Fill function. (*Note:* Image Doctor only works on 8-bit files.) I circled the crack with the Lasso tool (Figure 8-38) and brought up Image Doctor. Image Doctor's default settings fi lled in the tear with detail extracted from neighboring undam-aged areas (Figure 8-39).

If you look closely, you'll see that Image Doctor didn't get it quite right in some places, but it did a good enough job that a little spot-cloning would wipe out those artifacts. In fact, the proper way to use Image Doctor would've been to select different parts of the tear for individual correction, depending on the kind of background it was against. I did this with a single selection to show how powerful this filter is.

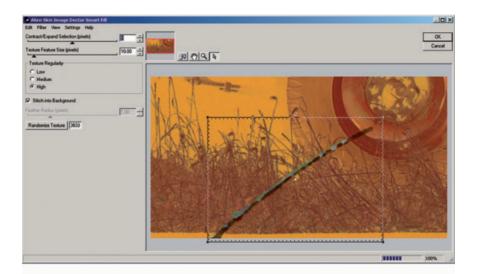
Some of Photoshop's built-in tools can do good jobs, too. This is not a place to use the Spot Healing Brush because it doesn't know which background textures to use to replace the tear. When there are lots of different nearby textures, as in this photograph, the brush will fre-quently guess wrong. The regular Healing Brush is a much better choice because you tell it what area to sample to fill in the tear. Picking a sample point adjacent to the tear worked well everywhere except along the tire, where the smooth curves were hard to reproduce. The result is shown in Figure 8-40, top.

HOW TO REPAIR A

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Fig. 8-38 This screenshot shows an enlargement of the tear in Figure 8-37. I've lassoed it for correction by Image Doctor.



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Fig. 8-39 Image Doctor's Smart Fill function samples the area around the selected crack (hatched rectangle in the top figure) and computes new detail to fill in the selection (bottom). A small amount of cloning will clean up the patches that Image Doctor got wrong.





Fig. 8-40 I used Photoshop's Healing Brush to accomplish the repair in the top figure. I repaired the bottom figure with the Patch tool. Each tool has its strengths and weaknesses.

The Patch tool will also work well on tears. Much like the Healing Brush, it lets you select what part of the photograph is going to be blended over the area you want to repair. Because the tool previews the results as you drag the selection around, it's easy to find which area and alignment work the best. For my taste, the Patch tool behaves a little too much like the Clone tool; it reproduces the sampled detail a bit too faith-fully, and sharp-eyed viewers may notice repeated detail. You'll want to follow up with tools like the Clone tool and the Spot Healing Brush to "randomize" the results a bit, but the Patch tool doesn't leave too many artifacts to clean up (Figure 8-40, bottom).

HOW TO REPAIR A TORN NEGATIVE (continued)