Challenge: Eyeglass Reflections
Challenge: Eyeglass Reflections

In this lesson, we’re going to tackle a challenge image that was sent in by a Masters Academy member. More specifically, we’re going to learn how to remove some reflections in a pair of eyeglasses. The glasses in the photo appear to have a protective coating that creates a colored reflection, as you can see from the screen shot. We’re going to use a two-step process to remove those reflections. First, we’ll correct the color and second, we’ll retouch the detail in the reflections.

The challenge in this image will be to remove the reflections in the boy’s glasses.

Remove Color from the Reflections (Timestamp 0:40)

**New layer set to Color Mode** Start by creating a new empty layer by clicking on the New Layer icon [+] at the bottom of the Layers Panel. This new layer should be positioned directly above the image layer. Then, set the blending mode of this new layer to Color. (The Blending Mode menu can be found at the top of the Layers Panel.)

When a layer is set to the Color blending mode, the layer’s contents will be able to shift the color of the image but it will not shift the brightness. The image brightness will come from the underlying image layer and almost all the detail is coming from that brightness information.
Use Brush Tool to paint with skin color  Now, activate the Brush Tool from the Toolbar on the left side of the screen and use the brush settings in the Options Bar (above the image window) to make sure that you’re using a soft-edged brush. With the Brush Tool active, you can sample a color from within the image by holding down the Option key (Alt on Win) and clicking on the color you want to paint with. In this image, we want paint with the same color as the skin hue. Hold down the Option key (Alt on Win) and you’ll see that the brush tip turns into an eyedropper. Use the eyedropper to click on an area of skin that is close to the reflection in the glasses. When you release the Option key, it goes back to the regular brush tip. Now you can paint with that color you just sampled. Paint over the part of the colored reflection that is close to the area you just sampled. You may need to sample from different areas in order to match the skin color in all areas where the reflection is visible. You may also need to change the size of your brush to match the particular area where you’re painting. In the video example, you will see that I used a very tiny brush to sample and then paint in the crease of the eye.

This technique will change the color of the reflections to make them match the skin color and in doing so, it will make the glasses appear to be more clear. It is not, however going to completely remove the reflection because the detail is mainly coming from the differences in brightness, not color.

LEFT: With the Brush Tool active, we are sampling a color from the skin next to the reflection. RIGHT: We are using the Brush Tool to paint with that sampled color over the reflection.
Retouch the Bright Areas (3:12)

Spot Healing Brush to remove reflections The next thing we need to do is retouch the bright areas. Create another new, empty layer at the top of the Layers Panel. This is the layer on which we’ll do the retouching. (We can not apply the retouching on the previous empty layer because the blending mode of that layer is set to Color. We need to be using the Normal blending mode.)

Activate the Spot Healing Brush from the Toolbar. By default, this tool will only look at the active layer. Since the active layer is empty, that won’t work. In order to get the tool to look at all of the layers as a whole, turn on the “Sample All Layers” check box, which can be found in the Options Bar above the main image window.

Now, using a fairly hard-edged brush, use the Spot Healing Brush to paint over one of the reflections. Make sure that you encompass the entire chunk of reflection without bumping up against other objects. Repeat this for other chunks of reflection.

The Spot Healing Brush is being used to paint over chunks of the reflection.
Smooth out transitions There are still some hard edges from the reflections and you can soften these out by using the regular Healing Brush, which is grouped with the Spot Healing Brush in the Toolbar. Make sure that the Sample menu (in the Options Bar) is set to Current & Below. Also be sure to turn on the “Aligned” check box, which is also located in the Options Bar. With this tool, you need to specify where it should copy from. (This is unlike the Spot Healing Brush, which does this on its own.) To sample an area, hold down the Option key (Alt on Win) and click on a smooth area of skin. In the video example, I sampled from an area on the boy’s cheek. Then release the Option key and paint over the hard edge in the reflection. When doing this, try to avoid bumping into other objects, like the rims of the glasses or the eyelashes. Make the brush tip smaller or larger as necessary. This will try to match the smoothness of the area you’re copying from but also match the brightness of the areas surrounding the retouch area.

You can see some abrupt lines in the reflection.

The Healing Brush is grouped with the Spot Healing Brush in the Toolbar.

FAR LEFT: The Healing Brush is being used to sample from a smooth area of skin.
DIRECTLY LEFT: The tool is now being used to paint over the line in the reflection. You can see where we’re painting AND what area is being sampled from.
Retouching with the Clone Source Panel (6:40)

There is a chunk of reflection that overlaps the bottom of the boy’s eye, so this will be a little trickier to retouch. We need to sample from a similar area in order to cover up this reflection. The other side of the boy’s lower eye is clear, with no reflection blocking it. We can use the Healing Brush to sample from this area, but the problem will be that the sampled content will be oriented incorrectly. The curvature of the eye will be facing the wrong way. That’s ok though. The Clone Source settings can be used to change the orientation of the sampled content.

If the Clone Source Panel is not already open in your Photoshop interface, click on the Window menu and choose Clone Source. In the Clone Source Panel, there is an icon that will take the area you sampled and flip it horizontally so that you can paste a mirrored version onto your image. Click this icon (see screen shot) and then hover your cursor over the image. You will see that the preview inside the brush tip is now flipped.
In the video example, the angle is still not quite right, and that can be fixed using the rotation setting within the Clone Stamp Panel. You can either manually type in an angle or you can use a keyboard shortcut. I like to use the keyboard shortcut so that I can see the angle shift within the brush tip preview. To change the angle using the shortcut, hold down Shift+Option (Shift+Alt on Win) and then use the Greater Than and Less Than keys ( > < ) to rotate the sampled content. If your brush tip is large enough, you will be able to see the shift within the brush tip preview. This will be a gradual change that allows you to get the most precise alignment.

The angle of the sampled content is being adjusted so that it perfectly aligns with the part of the boy’s eye we want to retouch.

Once you think the alignment is correct, click once to apply. Now, this might sound counterintuitive, but I will immediately use the undo command. This will establish the correct alignment. Then, I will make the brush much smaller and then paint in the sampled content more carefully and gradually, knowing that the alignment is correct. This is a personal choice, but I find that it helps me to be more accurate.
NOTE: If you use this undo technique and the sampled content does not remain aligned with the retouch area, you might have the “Aligned” check box turned off (in the Options Bar). This needs to be turned on in order to maintain that alignment.

Additional Color Changes (9:44)

After removing the reflection, you may want to go in and make some additional color corrections. In the video example, I can still see some of that pinkish hue on the glasses. To do this, you will simply create a new, empty layer at the top of the layer stack. Again, set the blending mode of this layer to Color. Remember, when a layer is set to the Color blending mode, it can not affect the brightness of the image. It can only affect the color. Then, use the same technique as the first step in this lesson. Use the Brush Tool to sample from a nearby area of skin (Option+click, Alt+Click on Win). Then paint that color over the area you want to correct.

LEFT: We are sampling a color from a clean area of skin. RIGHT: We are using the Brush Tool to paint with that skin color over part of the image that has the pink hue.
**Curves Adjustment Layer to Darken Bright Spot (10:41)**

There is one area in the glasses that is a little brighter than the surroundings. If you would like to darken an area like this, you could use a Curves Adjustment Layer. Click on the Adjustment Layer icon at the bottom of the Layers Panel and choose Curves from the pop-up menu. The new layer will appear at the top of the Layers Panel and the Properties Panel will be visible on the screen. Make sure that the Targeted Adjustment Tool is active. It looks like a little hand icon on the left side of the Properties Panel. With this tool active, click on the area you want to darken and then drag down. This will place a point on the curve that represents that targeted tonal range. By dragging down, you will be moving that curve point down, darkening the tone you targeted.

When you darken an image, it may also end up being more colorful. If that’s the case, and you don’t want this color change, you can change the blending mode of the Curves Adjustment Layer to Luminosity. With this blending mode, the layer can only affect the brightness of the image, and not the color.

With the Targeted Adjustment Tool active, we are clicking and dragging down on the part of the image we want to darken. You can see that a point is placed on the curve and that it's being moved downward.
The layer mask that is attached to the Curves layer determines where the adjustment is going to apply. By default, the entire mask is white, which means that the adjustment will apply to the entire image. The white part of the mask reveals the layer and the black part of the mask hides the layer. You only want the adjustment to be visible in that bright area that we wanted to darken. This area should be the only white part of the mask. You can more easily achieve this by starting with a completely black mask. Use the keyboard shortcut Command+I (Ctrl+I on Win) and the mask will be inverted so that is completely black. Now, you can activate the Brush Tool and paint with white (using a soft brush) over the area you want to darken. This will add white to the mask, revealing that darkening adjustment in just that area. If the adjustment is too extreme, you can always lower the opacity of the layer, lessening the effect until it looks optimal.