

## 7. MASKS AND CHANNELS

In this lesson, you'll learn how to do the following:

- Create a mask to remove a subject from a background.
- Refine a mask to include complex edges.
- Create a quick mask to make changes to a selected area.
- Edit a mask using the Properties panel.
- Manipulate an image using Puppet Warp.
- Save a selection as an alpha channel.
- View a mask using the Channels panel.
- Load a channel as a selection.
- Isolate a channel to make specific image changes.

### GETTING STARTED

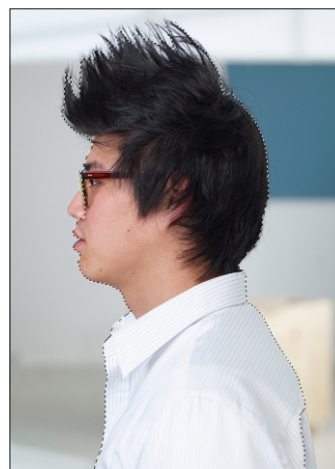
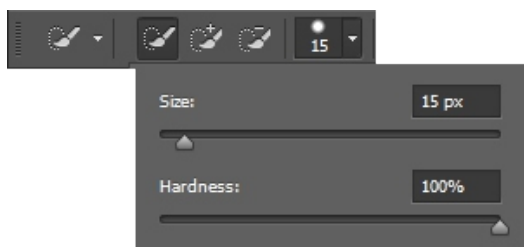
*In this lesson, you'll create a magazine cover. The model for the cover was photographed in front of a different background. You'll use masking and the Refine Mask feature to place the model on the appropriate background.*

*Open the file 06Start.psd.*

### CREATE A MASK

You'll use Quick Selection tool to create the initial mask in order to separate the model from the background.

1. Choose **File > Save As**, rename the file **06Working.psd**, and click Save.  
(Saving a working version of the file lets you to return to the original if you need it).
2. Select the **Quick Selection** tool. In the option bar, set up a brush with size of **15 px** and hardness of **100%**.
3. Select a man. It's fairly easy to select his shirt and face, but the hair is trickier. Don't worry if the selection isn't perfect.



4. At the bottom of Layer panel, click the **Add Layer Mask** button to create a layer mask.

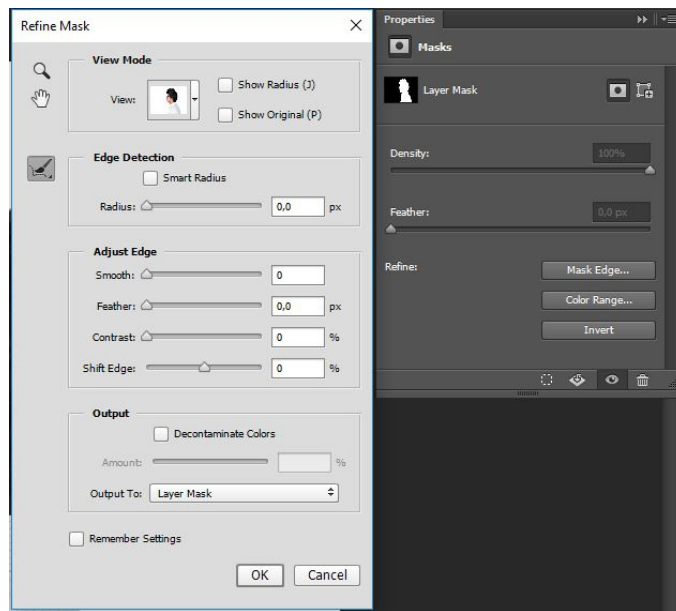


*The selection becomes a pixel mask, and it appears as part of Layer 0 in the Layers panel. Everything outside the selection is transparent, represented by a checker-board pattern.*

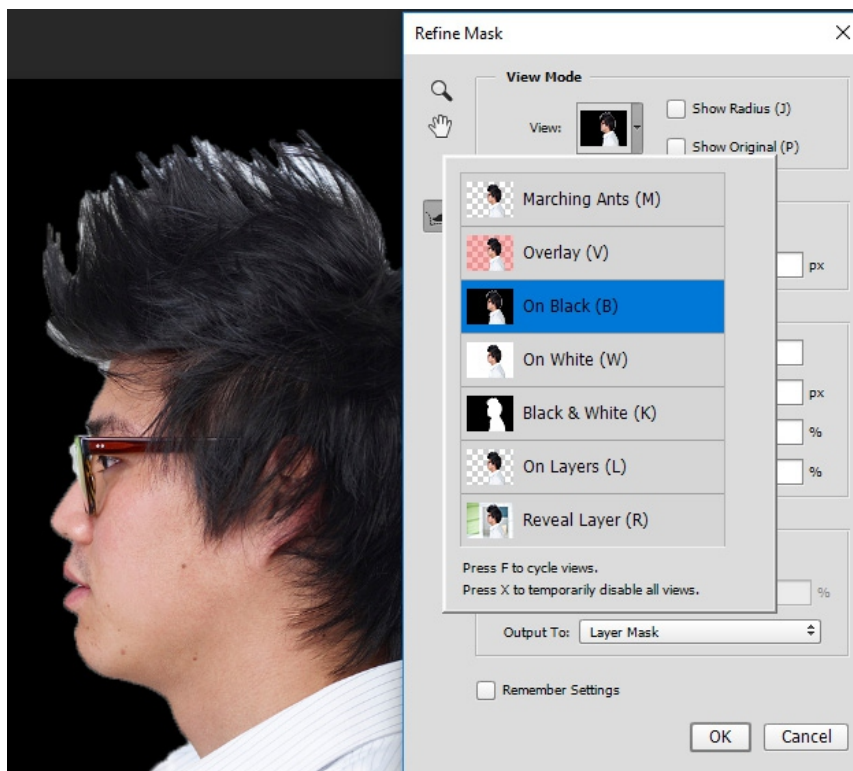
## REFINING A MASK

*Quick Selection tool couldn't quite capture all the model's hair. The mask also a little choppy around the contours of the shirt and face. You'll smooth the mask, and then fine-tune the area around the hair.*

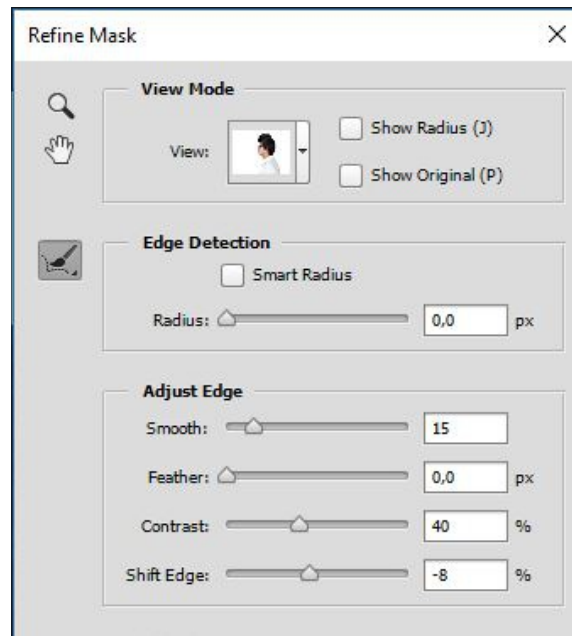
1. Choose **Window > Properties** to open the Properties panel.
2. If isn't already selected, click the mask on **Layer 0** in the Layer panel.
3. In the Properties panel, click **Mask Edge**. The Refine Mask dialog box opens.



4. In the View Mode area of the dialog box, click the arrow next to the preview window. Choose **On Black** from a pop-up menu.



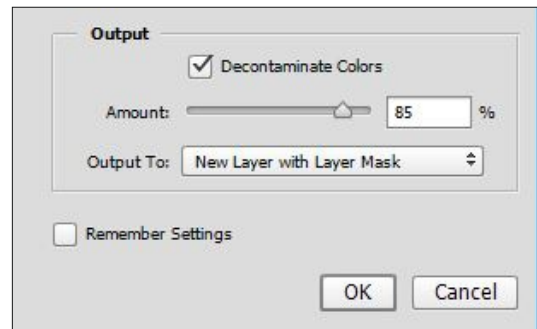
- In the Adjust Edge area of the dialog box, move the sliders to create a smooth, unfeathered edge along the shirt and face. The optimal settings depend on the selection you created, but they'll probably be similar to ours. We moved the **Smooth** slider to **15**, **Contrast** to **40%**, and **Shift Edge** to **-8%**.



- In the Output area of the dialog box, select **Decontaminate Colors**. Choose **New Layer With Layer Mask** from Output To menu.
- Select the Zoom tool in the Refine Mask dialog box, and then click the face to zoom in so you can see its edges more clearly.
- Select the **Refine Radius** tool in the Refine Mask dialog box. Use it to paint out any white background that remains around the lips and nose. Press the left bracket ([) to decrease the brush size and the right bracket (]) to increase it.
- When you're satisfied with the mask around the face, click OK.  
*A new layer, named **Layer 0 copy**, appears in the Layer panel. You'll use this layer to add the spikes to the mask of the hair.*
- With Layer 0 copy active, click **Mask Edge** in the Properties panel to open the Refine Mask dialog box again.
- From the View pop-up menu, choose **On White**. The black hair shows up well against the white matte. If necessary, zoom out or use the Hand tool to reposition the image so that you can see all of the hair.
- Select the **Refine Radius** tool in the Refine Mask dialog box. Press the ] key to increase the size of the brush. (The options bar displays the brush size; we used 300 px at first). Then, begin brushing along the top of the hair, high enough include the spikes. Press [ key to decrease the brush size by about half. Then, paint along the right side of the head, where the hair is a solid color, to pick up any small, fine hairs that protrude.
- Select **Erase Refinements** tool, hidden behind Refine Radius tool in the Refine Mask dialog box. Click once or twice in each area where background color shows. When you erase an area, the Refine Mask feature erases similar colors, cleaning up more of the mask for you.



14. Select **Decontaminate Colors**, and move the **Amount** slider to **85%**. Choose **New Layer With Layer Mask** from Output menu. Click OK.

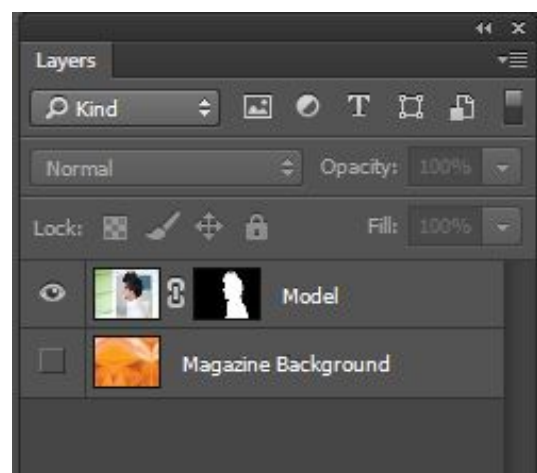


15. In the Layers panel, make the Magazine Background layer visible. The model appears in front of an orange patterned background.



### CREATING A QUICK MASK

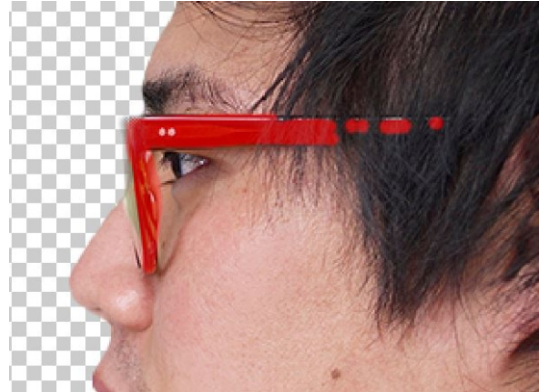
1. Hide the Magazine background layer so you can focus on the model. Then delete the Layer 0 and Layer 0 copy layers.
2. Rename the Layer 0 copy 2 layer to MODEL.



3. Click the **Edit In Quick Mask Mode** button in the Tools panel.
4. Select the small **Brush** tool a diameter of **13 px**.
5. In the options bar, make sure that the mode is **NORMAL**.



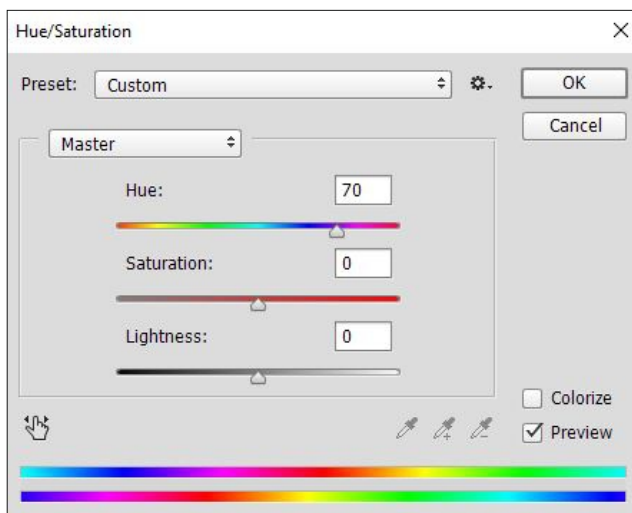
6. Paint the earpiece of the glasses frames. The area you paint will appear red, creating a mask.
7. Don't worry about the part of earpiece that overlapped by hair: the color change won't affect that area.



*In Quick Mask mode, Photoshop automatically defaults to Grayscale mode, with a foreground color of black, and a background color of white. When using a painting or editing tool in Quick Mask mode, keep this principles in mind:*

- *Painting with black adds to the mask (the red overlay) and increases the selected area.*
- *Painting with white erases the mask (the red overlay) and increases the selected area.*
- *Painting with gray partially adds to the mask.*

8. Exit Quick Mask Mode.  
*The unmasked area is selected.*
9. Choose **Select > Inverse** to select the area you originally masked.
10. Choose **Image > Adjustment > Hue/Saturation**.
11. In the Hue/Saturation dialog box, change Hue to **70**.
12. Deselect the selected area **Ctrl+D**.

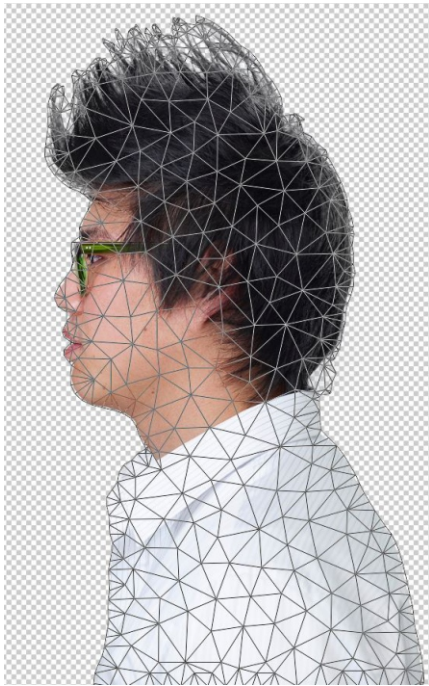


## MANIPULATING AN IMAGE WITH PUPPET WARP

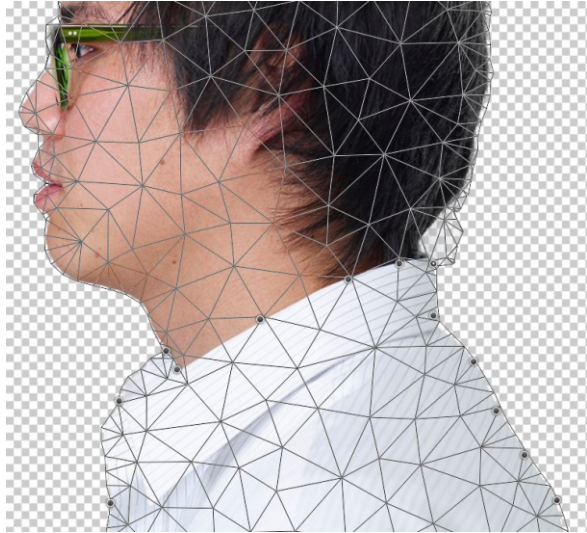
*The Puppet Warp feature gives you flexibility in manipulating an image. You can reposition areas, such as hair or an arm, just as you might pull the strings on a puppet. You place pins where you want to control movement. You'll use Puppet Warp to tilt model's head back, so he appears to be looking up.*

1. With the Model layer selected in the Layers panel, choose **Edit > Puppet Warp**.  
*A mesh appears over the visible areas in the layer – in this case, the mesh appears over the model. You'll use the mesh to place pins where you want to control movement.*
2. Click around the edges of the shirt. Each time you click, Puppet Warp adds a pin. Approximately 10 pins should work.  
*The pins you've added around the shirt will keep it in places as you tilt the head.*

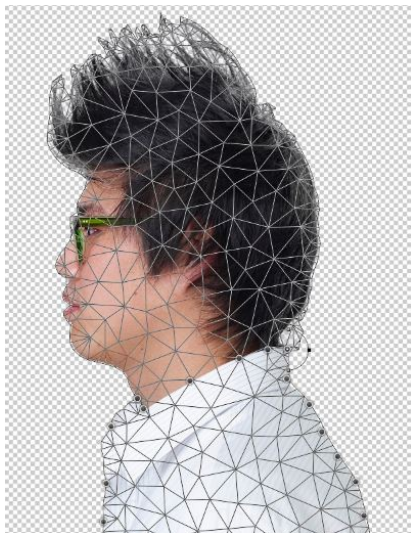




3. Select the pin at the nape of the neck. A white dot appears in the center of the pin to indicate that it's selected.



4. Press **Alt** (Windows) or **Option** (Mac OS). A larger circle appears around the pin and a curved double arrow appears next to it. Continue pressing **Alt** as you drag the pointer to rotate the head backwards. You can see the angle rotation in the options bar; you can enter **135** there to rotate the head back. Enter on time more **135** to get a result.
5. Click the **Commit Puppet Warp** button to finish the action.

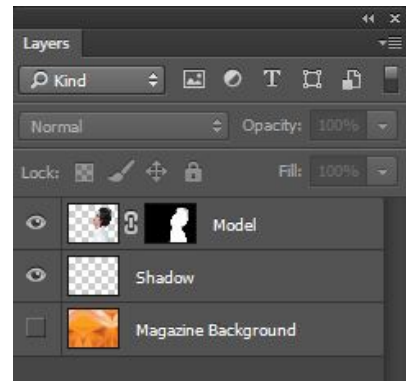


### USING AN ALPH CHANNEL TO CREATE A SHADOW

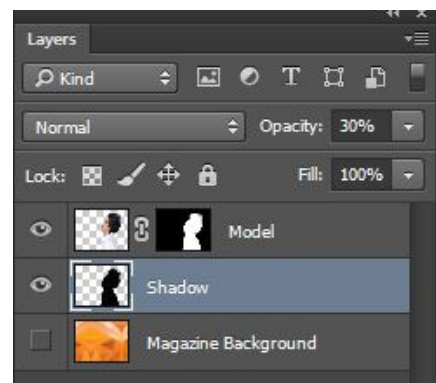
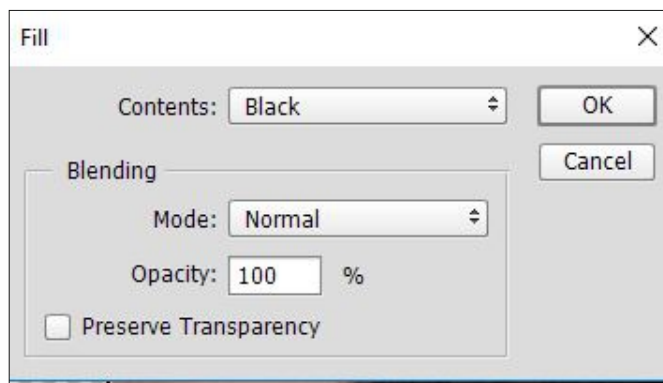
*You've already create a mask of the model. To create a shadow, you want to essentially duplicate that mask and the shift it. You'll use an alpha channel to make that possible.*

1. In the Layers panel, **Ctrl-click** (Windows) or **Command-click** (Mac OS) the layer icon in the Model layer. The masked area is selected.
2. Choose **Select > Save selection**. In the Save Selection dialog box, make sure **New** is chosen in the Channel menu. Then name the channel **Model Outline**, and click **OK**. The new channel names **Model Outline** has been added to Channels panel.

3. Drag the new layer below the Model layer. Then rename it to **Shadow**.



4. Select the Shadow layer. Choose **Select > Refine Edge**. In the Refine Edge dialog box, move the Shift Edge slider to **+36%**.
5. Choose **Edit > Fill**. In the Fill dialog box choose Black.
6. In the Layers pane, change the layer opacity to **30%**.



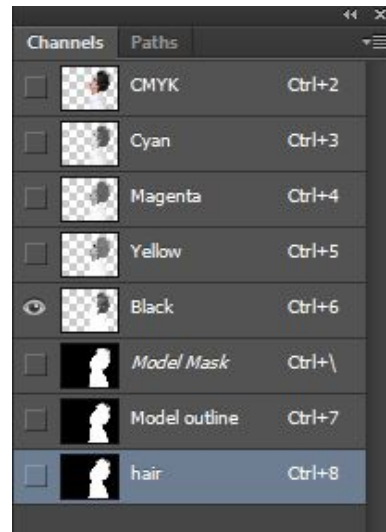
7. Deselect selection **Ctrl+D**.
8. Choose **Edit > Transform > Skew**. Rotate the shadow by hand, or enter **-15°** in the rotate field in the options bar. Then drag the shadow to the left, or enter **845** in the X field in the options bar. Commit the transformation.



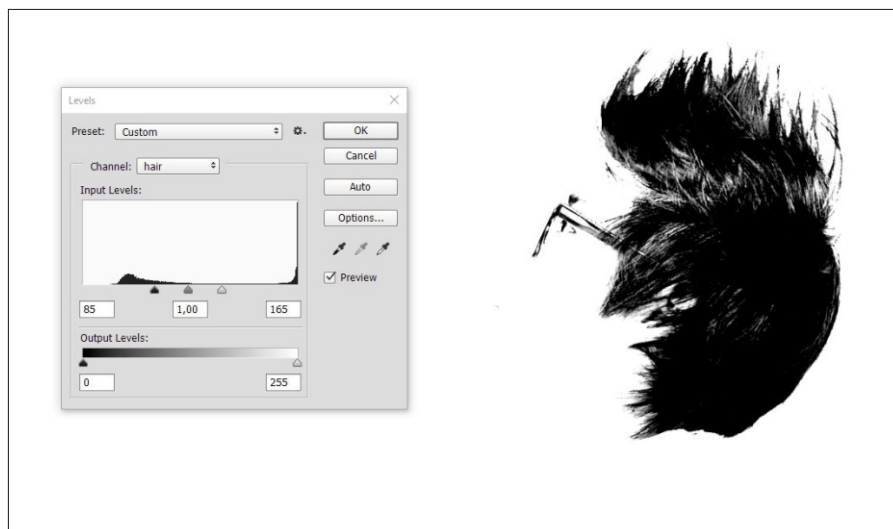
9. Save the file.

### ADJUSTING AN INDIVIDUAL CHANNEL

1. Select the Model layer in the Layers panel.
2. Choose **Image > Mode > CMYK Color**. Click Don't Merge in the dialog box that appears, because you want to keep your layers intact. Click OK.
3. **Alt-Click** (Windows) or **Option-Click** (Mac OS) the visibility icon for the Model layer to hide other layers.
4. Select the Channels tab (open **Window > Channel**). In the Channels panel select the Black channel. Then choose **Duplicate Channel** from the Channels panel menu. Name the channel **Hair**.

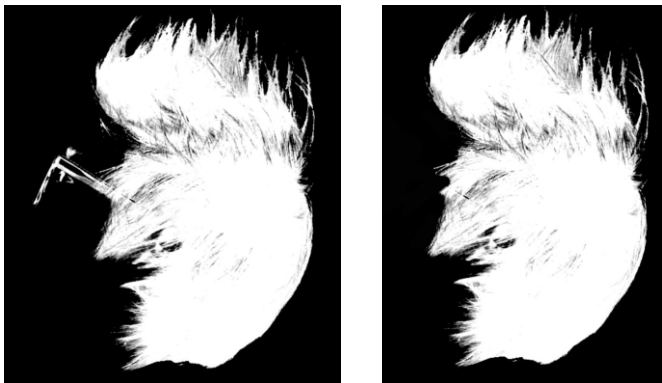


5. Make the Hair channel visible, and hide Black channel. Then select the Hair channel, and choose **Image > Adjustment > Levels**.
6. In the Levels dialog box, adjust the levels to move **Black to 85, Midtones to 1, and White to 165**. Click OK.

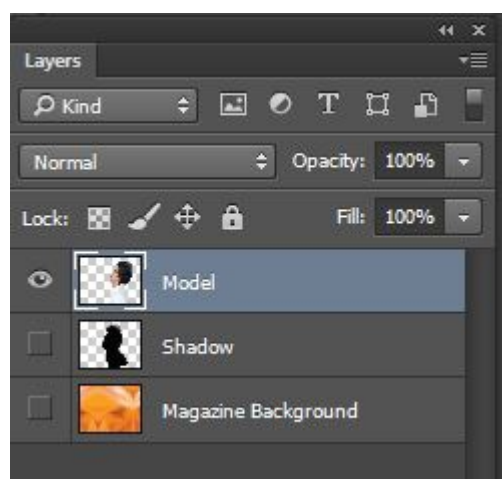
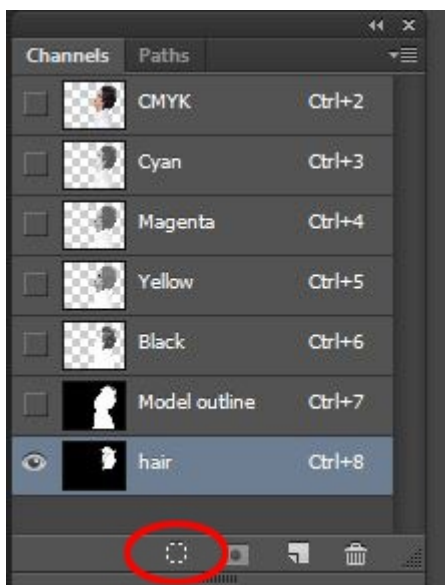


7. With the hair channel still selected, choose **Image > Adjustments > Invert**. A Channel appears white against a black background.
8. Select a **Brush** tool, and click **Switch Foreground And Background Colors** icon in the Tools panel to make the Foreground color black. Then paint over the glasses, eyes, and anything in the channel that isn't hair.

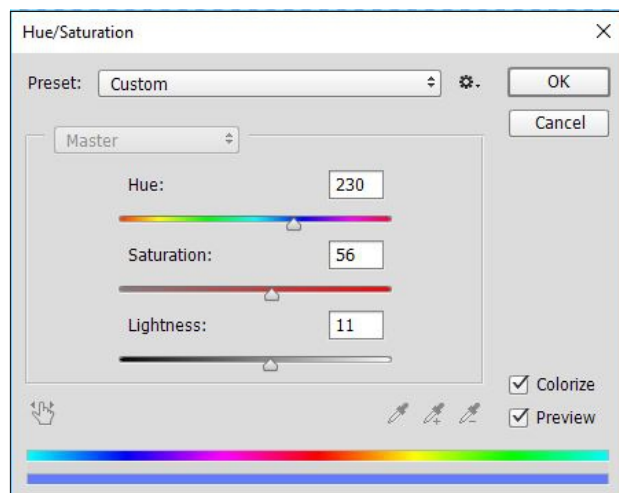




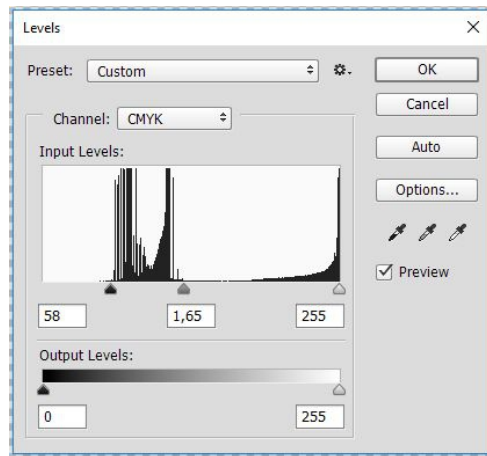
9. Click the **Load Channel As Selection** icon at the bottom of the Channels panel.
10. Select the Layer tab. In the Layers panel, select the Model layer.



11. Choose **Select > Refine Edge**. In the Refine Edge dialog box, move the **Feather** slider to **1.2 px**, and click OK.
12. Choose **Image > Adjustments > Hue/Saturation**. Select Colorize, and then move the sliders as follows: **Hue: 230, Saturation: 56, Lightness: 11**. Press OK.



13. Choose **Image > Adjustments > Levels**. In the Levels dialog box, move the sliders like in the example. We used the values **58, 1.65, 255**, but your values may vary.



14. In a Layers panel make the Shadow and Magazine Background layers visible.  
15. Deselect selection **Ctrl+D**.  
16. Save file.  
*Your magazine cover is ready to go!*

