



## Crazy Retouch: Part 1

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This is the first of a two-part retouching lesson where we will be focusing on more advanced retouching techniques. In the example image, we have a couple of trash and recycling bins that are obstructing the garage door of a vintage service station. We're going to remove the bins, but there will be a lot of work involved in doing so.

When tackling a problem like this, I will first look for other parts of the image that can be used in the retouch job. For example, the frame of the garage door is red and green, and the bottom part of the frame is obstructed by the trash bin. Fortunately, the upper part of the frame is not obstructed so I know that this upper part can be used to fill in the obstructed part. Each individual area will need to be looked at in this way and we'll need to evaluate the entire image, looking for pieces that can be used in the area we're retouching.

This particular retouch job has many challenges that call for more advanced techniques. One of these challenges is shadows. The retouch area is partially in shadow so we will need to make sure that we re-create the shadows in the appropriate areas. Perspective will create another challenge. It may look like a particular area can be cloned to fill in the retouch area, but the difference in perspective will cause the two areas to be out of alignment.



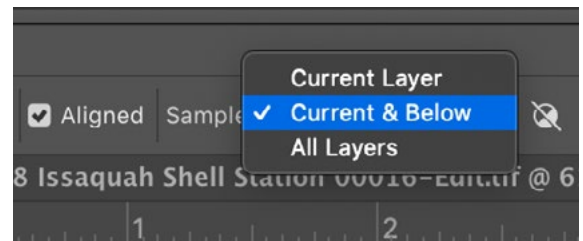
**In this complex retouch job, we are going to remove the trash bins from in front of the garage door.**

## Set Up Document & Retouching Tools (Timestamp 9:00)

**Work on an empty layer** When working on a complex retouch job, it's always a good idea to use layers. In the video example, we're going to place each part of the retouch job on its own layer. That will make things easier in the end, should we need to blend different areas together. You don't always need to use multiple layers, but it's good practice to apply the retouch work to an empty layer above the main image layer. This leaves the original image layer untouched. Create a new, empty layer by clicking the New icon ( [+ ] ) at the bottom of the Layers Panel.

**Set up retouching tools** There are some settings you will need to work with if you're going to use the retouching tools on an empty layer. The three retouching tools we'll be using are the Clone Stamp Tool, the Spot Healing Brush and the Healing Brush. Activate each of these three tools, one by one, and set up the following settings, which can be found in the Options Bar above the main image window.

- **Clone Stamp Tool:** Set the Sample menu to Current & Below and make sure the "Aligned" check box is turned on.
- **Healing Brush Tool:** Set the Sample menu to Current & Below.
- **Spot Healing Brush:** Turn on the "Sample All Layers" check box.



**With the Clone Stamp Tool is active, the Sample menu is being set to Current & Below.**

**How to use the retouching tools** To use one of the retouching tools, hold down the Option key (Alt on Win) and click on the area that you want to copy. This is the sample area. Then, release the Option key and paint over the area you want to retouch. This will apply the sampled content in the area where you paint. If you are using the Clone Stamp Tool, it will apply an exact copy of the sampled content. If you are using the Healing Brush or the Spot Healing Brush, it will attempt to match the color and tone of the surrounding area.

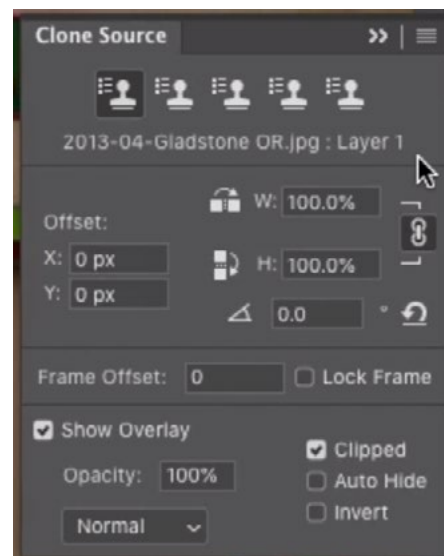


**LEFT:** The Clone Stamp Tool is being used to sample an area by holding down the Option key (Alt on Win) and then clicking on the area. **ABOVE:** The Clone Stamp Tool is being used to paint in the sampled content in a different area.

**Open Clone Source Panel** The Clone Source Panel contains additional settings for the retouching tools. It allows us to manipulate the content that we sampled before pasting it within the retouch area. If this panel is not already open on your screen, you can open it by clicking on the Window menu and choosing “Clone Source.”

After using a retouching tool to sample an area, some text will appear just beneath the five icons at the top of the Clone Source Panel. This text includes the name of the document from which the content was sampled from, as well as the name of the layer that contains that sampled content.

There are keyboard shortcuts that can be used to change the settings in the Clone Source Panel. A few key shortcuts are as follows:



The settings inside the Clone Source Panel can be used to manipulate the content sampled by the retouching tools.

**Scale sampled content up:** Shift+Option+Right Bracket key ( ] ) on Mac, Shift+Alt+Right Bracket key ( ] ) on Windows

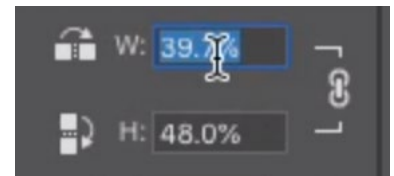
**Scale sampled content down:** Shift+Option+Left Bracket key ( [ ) on Mac, Shift+Alt+Left Bracket key ( [ ) on Windows

**Rotate sampled content clockwise:** Shift+Option+Greater Than Key ( > ) on Mac, Shift+Alt+Greater Than Key ( > ) on Win

**Rotate sampled content counter-clockwise:** Shift+Option+Less Than Key ( < ) on Mac, Shift+Alt+Less Than Key ( < ) on Win

**Adjust offset to move sample position:** Shift+Option+Arrow Keys on Mac, Shift+Alt+Arrow Keys on Win

By default, when you scale the sampled content, the width and height will scale together. Any time you use the keyboard shortcuts for scaling, the width and height will also scale together. You will occasionally need to scale the width and height separately. In order to do this, you will need to click the little link icon between the width and height fields in the Clone Source Panel. Then you can manually enter in different percentage numbers for the width and height. Personally, I leave the link icon turned off. I use the keyboard shortcut for scaling the sampled content when I want the width and height to scale together, and I use the width and height text fields when I want the width and height to scale separately.

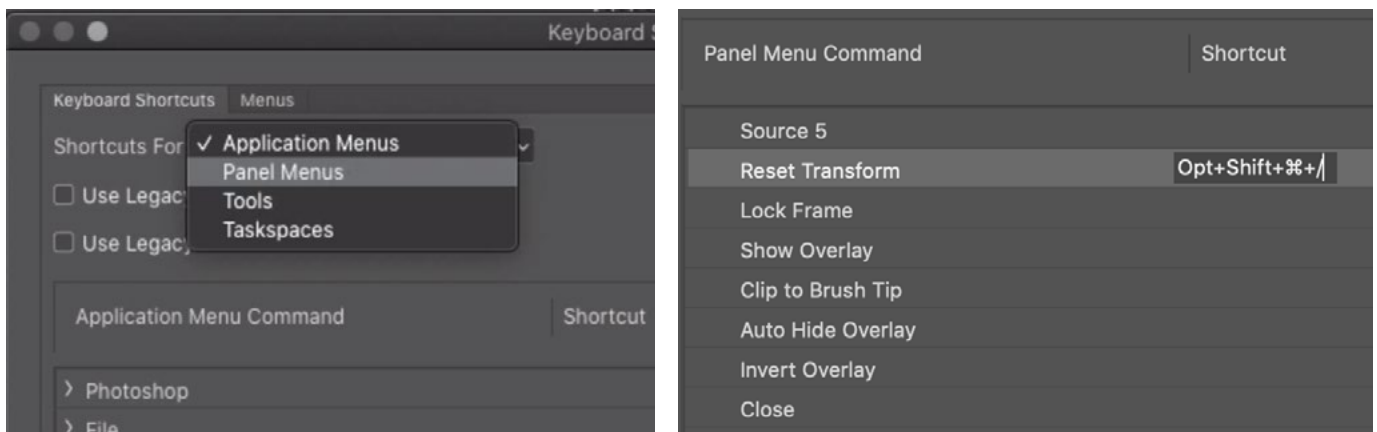


**Click the link icon if you want to scale the width and height separately.**

**Reset Clone Source** You can reset all of the settings in the Clone Source Panel by clicking the Reset button, which looks like a little U-turn arrow, on the right side of the panel. It's always a good idea to reset the panel when you're done working with a retouching tool. The panel will remember the last settings you used, so the next time you use a retouching tool, the scaled content will be manipulated in some way and that's usually not what you want. By resetting the panel settings when you're done using a tool, you will be starting fresh the next time you activate a retouching tool.



By default, there is no keyboard shortcut assigned to this reset button. I, personally, need to reset the panel all the time, so I like to define a shortcut for this button. You can assign a keyboard shortcut to a particular function by clicking on the Edit menu and choosing Keyboard Shortcuts. The Keyboard shortcuts dialog will appear. At the top of this dialog, change the “Shortcuts for” menu to the Panel Menus option. This will cause the dialog to display all of the menu items that can be found within the Photoshop panels. Scroll down and expand the Clone Source option to reveal all of the settings that can be found within that panel. Click on the Reset Transform option and a text field will become highlighted. Here, you can type in the keyboard shortcut that you’d like to use for this command. I used Shift+Option+Command+/. Click OK to exit the dialog.



**LEFT: At the top of the Keyboard Shortcuts dialog, the “Shortcuts For” menu is being set to Panel Menus. RIGHT: A new shortcut is being assigned to the Reset Transform command.**

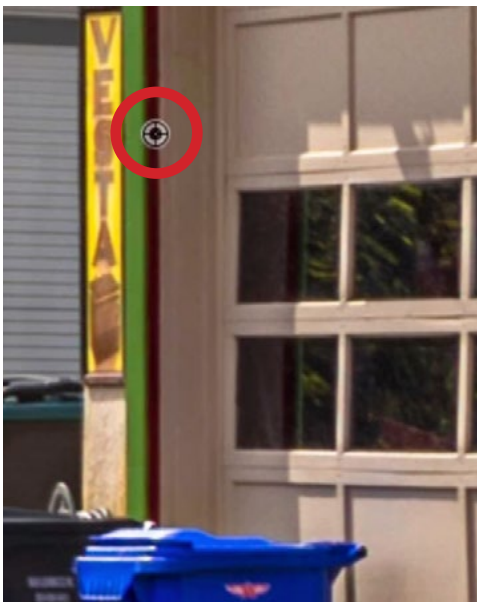
I often use a trick when using the retouching tools. I will sample from an area and then I’ll click once in the retouch area, applying the sampled content so that the alignment is correct. I may even use a really large brush in order to better align things. Then I will immediately use the Undo command. This might sound counter-intuitive because it removes the retouching, BUT it remembers the location where I clicked and it locks in the relationship between where I sampled from and where I am retouching. I just use that initial click to lock in the alignment. Then, I can either use a smaller brush or work with the Clone Source settings in order to refine the sampled content that I’m applying. Note that the “Aligned” check box needs to be turned on in order for the tool to remember the alignment.



## Retouch Edge of Garage Door Frame (22:00)

We'll start with the most straight-forward task of retouching the frame of the garage door where it is obstructed by the trash bins. The top part of the frame is clean (unobstructed) so we will take that part and extend it down in order to cover up the trash bin. We'll make sure that we're working on the empty layer and we'll activate the Clone Stamp Tool. The Clone Stamp Tool creates a blatant copy of the sample area and applies it in the area where we paint. We will sample from an edge of the garage door frame, somewhere in the upper portion. Remember, hold down the Option key (Alt on Win) and click the mouse button to sample an area.

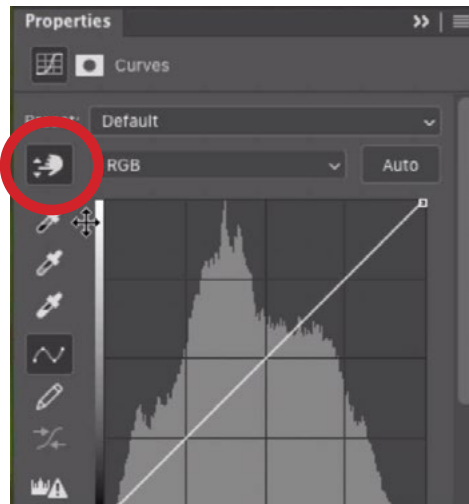
Then, we will position the cursor over the trash bin and make sure that the brush is large so that we can see the preview inside the brush tip. (The brush tip displays a preview of what we're about to paste.) We'll line up the preview with the edge of the garage and click once to apply the cloning. Then we'll immediately use the Undo command (Command+Z, Ctrl+Z on Win). This will undo the retouching but it will have established the offset, which is the position of the retouch area in relation to the sample area. Now that we have that alignment, we will paint again to retouch the area. We'll start to paint, extending the garage edge downward in order to cover up the trash bin. We'll paint over a larger area than is necessary (see screen shot) and that's ok. The main goal is to extend the green and red edge of the garage door downward.



**LEFT:** The Clone Stamp Tool is being used to sample from an upper part of the garage door frame.

**DIRECTLY LEFT:** The Clone Stamp Tool is being used to paint the sampled content over the bottom, obstructed part of the door.

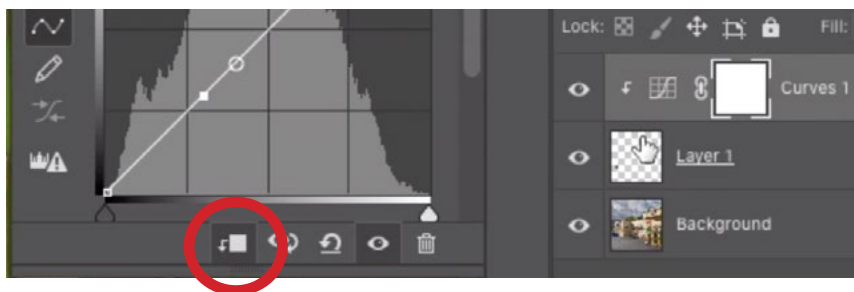
**Curves Adjustment to match tone** That edge looks good, but the tan part of the door area looks darker in the area where we painted. It doesn't quite match up with its surroundings. We will correct this by using an adjustment layer. We'll click on the Adjustment Layer icon at the bottom of the Layers Panel and choose Curves from the pop-up menu. The Curves adjustment layer will be added and the Properties Panel will appear. Here, we'll make sure that the Targeted Adjustment Tool is active. It looks like a little hand icon on the left side of the panel. This tool will allow us to click and drag within the image in order to place a point on the curve and move it around.



**The Targeted Adjustment Tool can be found on the left side of the Properties Panel.**

Note: I like the Targeted Adjustment Tool to be active all the time and there's a setting you can use to specify this. If you would like this tool to be active all the time, click on the little menu in the top right corner of the panel and choose "Auto-Select Targeted Adjustment Tool" from the pop-up menu.

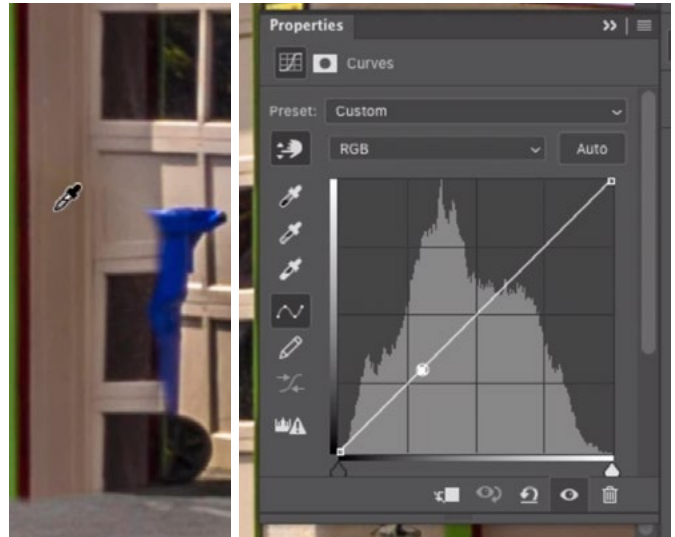
The Curves Adjustment Layer is at the top of the layer stack, which means it's going to affect all of the layers beneath it. We only want the adjustment to affect the retouching layer. You can tell an adjustment layer to affect only the underlying layer by "clipping" it to that layer. Do this by clicking the left-most icon at the bottom of the Properties Panel. It looks like a square with a down-pointing arrow next to it. When a layer becomes clipped to the underlying layer, a little down-pointing arrow will appear to the left of its thumbnail in the Layers Panel.



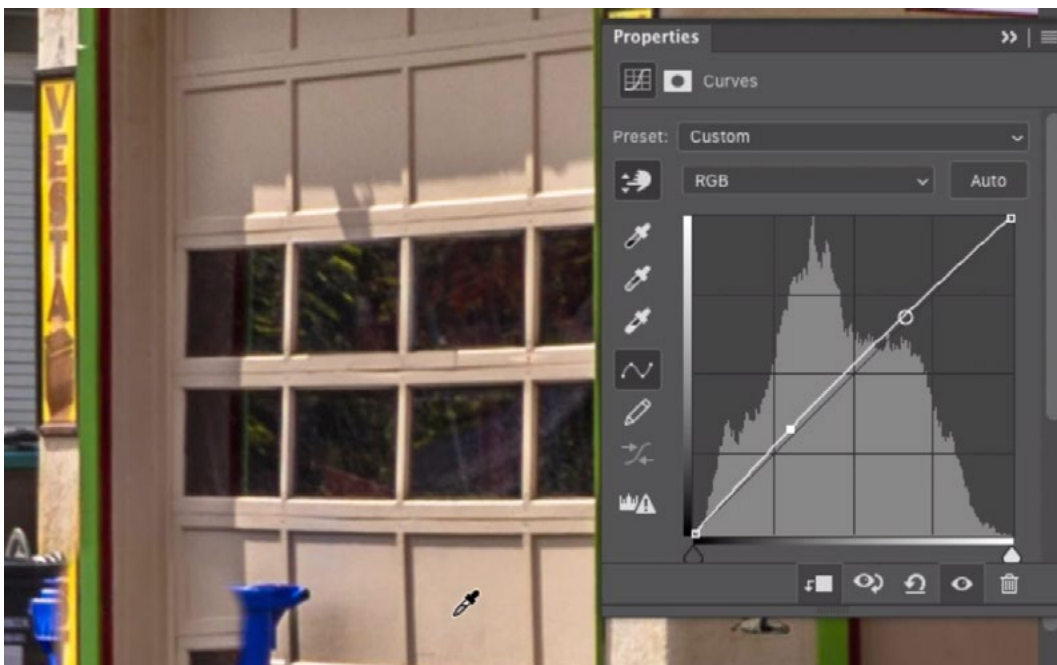
**Click the circled icon to clip an adjustment layer to the layer beneath it. You can tell that a layer is clipped because a down-pointing arrow will appear to the left of its thumbnail in the Layers Panel.**



Now the Curves adjustment will only affect the retouching layer. We'll use the Targeted Adjustment Tool to click once within the tan part of the garage door (the part that's too dark). This will place a point on the curve that represents that tone. We need to move that curve point up in order to lighten the targeted area. To move a curve point, you can either click and drag on it or you can use the arrow keys to nudge the point. In this example, we need a lot of precision, so we'll use the up arrow key to nudge the curve point up. As we do this, we'll watch the retouch area and stop when the tan area matches its surroundings.



**The Targeted Adjustment Tool is being used to click on the area that is slightly too dark. A point is placed on the curve that represents the tone we clicked on.**



**After placing a point on the curve, we are using the up arrow key to nudge the point upward, lightening the area we targeted.**

Looking at the results, the green part of the layer no longer matches the surrounding green edge. We had lightened the entire retouch area in order to match the tan part of the garage, but as a result, the green area became too bright. That's ok though. We are using an adjustment layer that has a mask attached to it. By painting on the mask with black, we can hide the adjustment in specific areas. We'll make sure the layer mask is active and we'll use the Brush Tool to paint with black over the green edge part of the retouch layer. This hides the adjustment in the area where we paint, removing the lightening effect from the green edge.

**Hide the excess parts of the retouching layer** When we used the Clone Stamp Tool to retouch the edge of the garage door, we painted in more areas than we needed to. Now, we'll remove those parts of the retouch layer that we don't need. That can be done by either using the Eraser Tool or by using a layer mask. The layer mask method is more forgiving because we can bring content back if we make a mistake. We'll make sure the retouch layer is active and we'll click on the Layer Mask icon at the bottom of the Layers Panel. The layer mask thumbnail will appear next to the layer thumbnail and it will be white by default. When a layer mask is white, it means that the entire layer is visible. We need to add black to the mask in order to hide it in specific areas.

We'll activate the Brush Tool and make sure that the foreground color is set to black. We'll use a relatively hard-edged brush. The setting for this can be found in the Options Bar above the main image window. In the lesson video, we set the hardness to about 75%. Now, we'll use the Brush Tool to paint on the mask with black in the areas where there is excess. We don't want this retouching layer to cover the front face of the garage door, so we'll paint over that area. Adding black to the mask hides parts of the retouch layer.



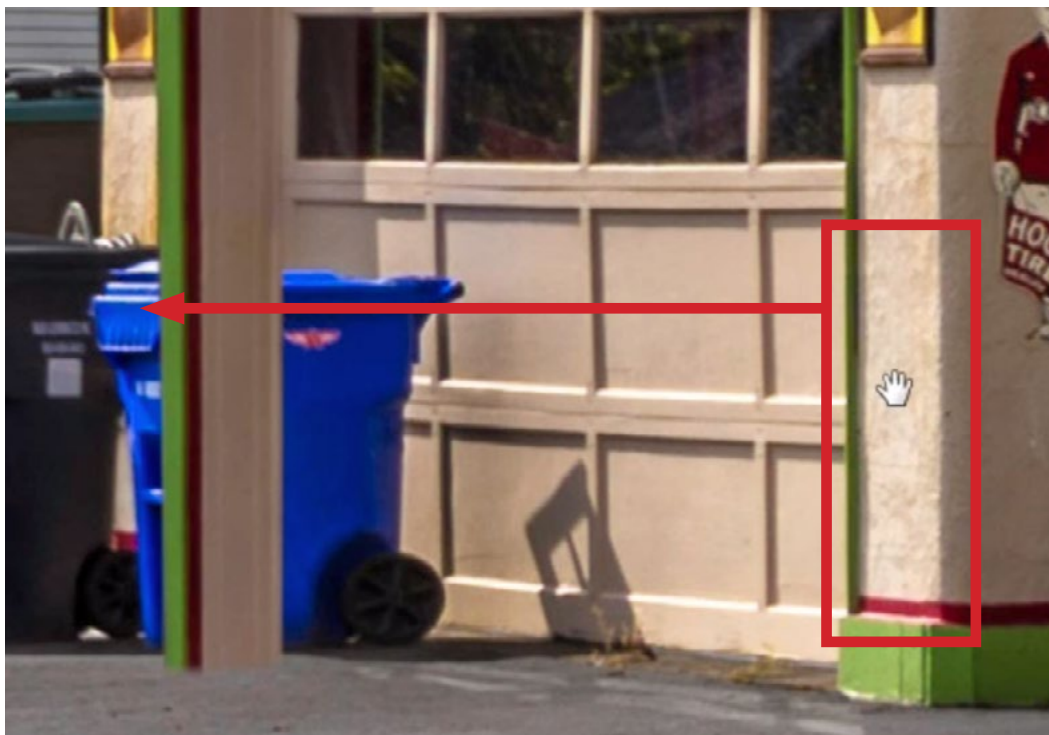
**A layer mask was added to the retouch layer and we're painting with black in order to hide parts of the layer, removing the excess retouching.**

Tip: When using the Brush Tool, there is a trick for creating a perfectly straight line. Click once on the image. Hold down the Shift key and click somewhere else. The Brush Tool will create a perfectly straight line between the two points in which you clicked. That's what we did in the video example to create a straight line along the front face of the garage door.

## Retouch Wall left of Garage (32:40)

The next area we're going to retouch is the stucco wall that appears on the left side of the garage door. The bottom portion is obstructed by the trash cans. The stucco wall on the right side of the garage door is not obstructed and it is also in the sun, so we can use this area to sample from and then paste to the obstructed side.

We will apply this part of the retouching on its own layer, so we'll click the New Layer icon ( [+ ] ) at the bottom of the Layers Panel. We ultimately want this wall portion that we're going to recreate to be tucked under the green garage door frame, so we will drag this new layer down in the layer stack, so that it is positioned just above the background layer.



**We're going to sample from the wall on the right side of the garage and then paste it on the left side, hiding parts of the trash bins.**

We'll activate the Clone Stamp Tool and open the Clone Source Panel. We'll make sure that the options within the Clone Source Panel are at their default settings. Then we'll use the Clone Stamp Tool to sample an area from the stucco on the right side of the door. In the video example, we sampled right on the corner of the wall. We'll align the sampled area with the retouch area and then click and drag down to paint in the sampled content over the wall to the left of the garage door. We'll paint in more than we need, knowing we can remove the excess later.



**LEFT:** The Clone Stamp Tool is being used to sample part of the wall to the right of the garage.

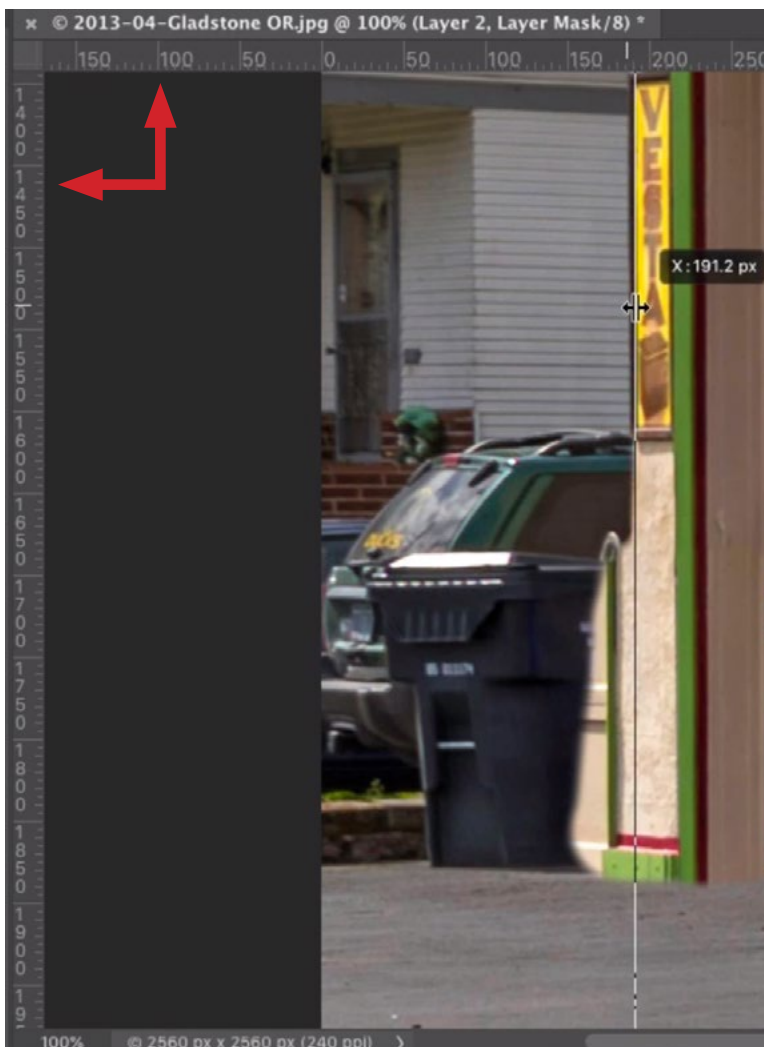
**BELOW:** The Clone Stamp Tool is being used to paint the sampled area to recreate the wall on the left side of the garage.





**Using guides when painting** We now need to remove the excess retouching and we'll again use a layer mask to do that. We'll add a layer mask to this retouching layer by clicking the Layer Mask icon at the bottom of the Layers Panel. Then, we'll use the Brush Tool and paint with black (on the mask) in the areas where there is overspill in the retouching area.

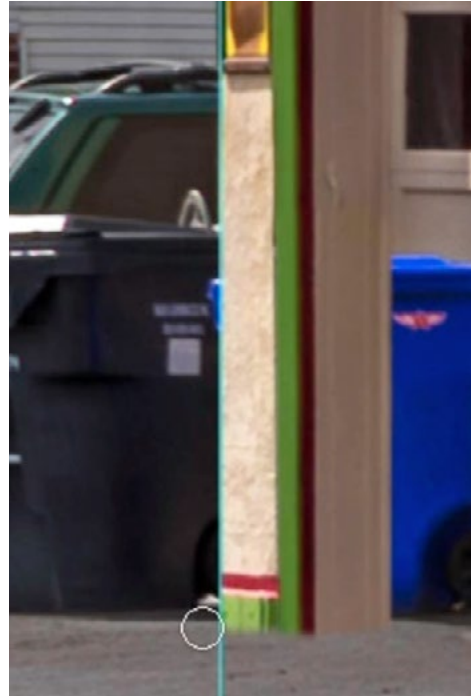
In this example, we have a challenge because we can not see where the edge of the stucco wall should be. The retouching layer is covering it up. The edge of the wall is perfectly vertical though, so we can use a Photoshop guide to help us see where we should paint.



The rulers are visible (arrows) and we are dragging out a guide (from the left ruler) into the document.

In order to use Photoshop guides, the rulers must be visible in the interface. Toggle the visibility of the rulers by using the keyboard shortcut Command+R (Ctrl+R on Win) or by clicking on the View menu and choosing Rulers. We want to create a vertical guide and we can do that by clicking within the vertical ruler on the left side of the image window and dragging the guide into the document. When we release the mouse button, the guide will be placed. We'll position the guide to align with the left side of the building. This will help us to see where we should paint on the mask.

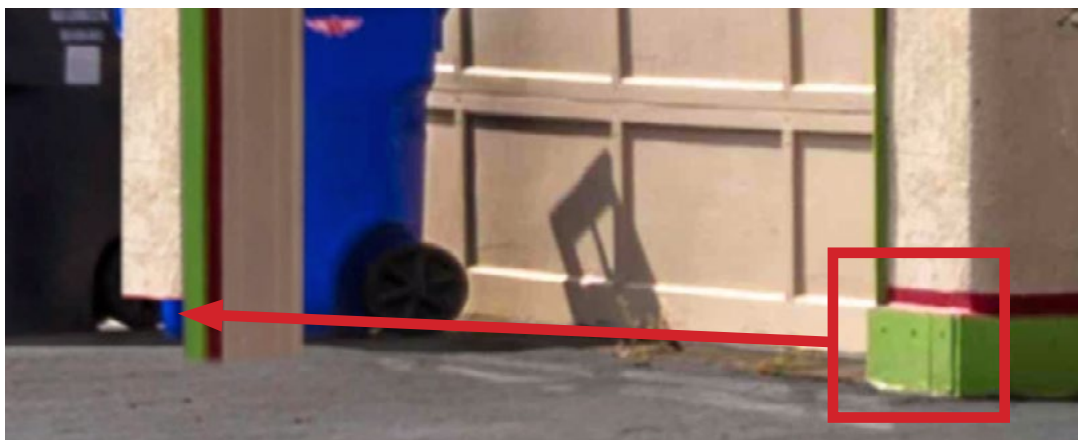
With the guide now visible, we can continue to paint, hiding the excess retouching on the outside of the building (to the left of the guide). If we no longer want the guides to be visible, we can click on the View menu and choose Clear Guides.



**We are using the vertical guide to paint on the mask, hiding parts of the retouching layer.**

## Retouch Base of Building (37:36)

If you look on the right side of the garage door, you can see that there is a green base that wraps around the building. This base should appear on the left side as well. Since both areas are in the sun and equally lit, we can sample the right base and apply it to the left side. This brings up some challenges. We need to know how that base should be scaled, as the left side of the garage is farther from the camera than the right. We also need to know where the base should be positioned (vertically) to make sure it is aligned with the perspective in the image.



**We're going to sample from the base on the right side of the garage and then paste it on the left side.**

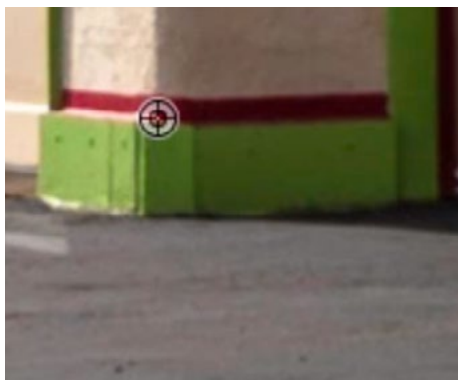


We'll turn off the visibility of all retouching layers, so that we can get a temporary view of what's going on in the base layer. When we do this, we can see a hint of red paint between the two bins. This is the red horizontal line that runs above the building base and we can use this as a guide to determine how high up the base should be. We'll turn the visibility back on for the retouch layer that recreated the edge of the garage door. This will also help us to determine the positioning of the base.



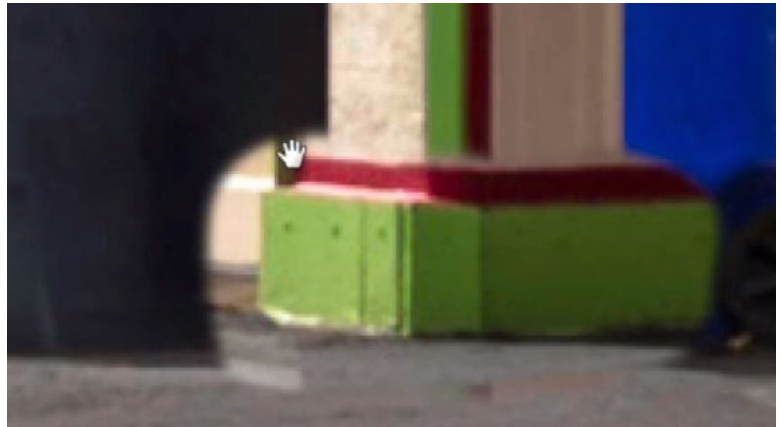
**We can see a bit of the red line that runs along the top of the building base. This will help us to determine how high the base should be inserted.**

We'll create a new, empty layer on which to place the retouching for the building base. This needs to be above the other retouching layers so we'll move this new layer to the top of the layer stack. We'll activate the Clone Stamp Tool and sample from the corner of the right building base. Then, we'll make the brush large enough that we can better see the preview of what we sampled inside the brush tip. We want to make sure we align those red lines above the building base. Then we'll click and drag to paint in the base, again painting in a little more than we need.



**FAR LEFT: The Clone Stamp Tool is being used to sample from the base on the right side of the garage. DIRECTLY LEFT: We are painting in the sampled content on the left side.**

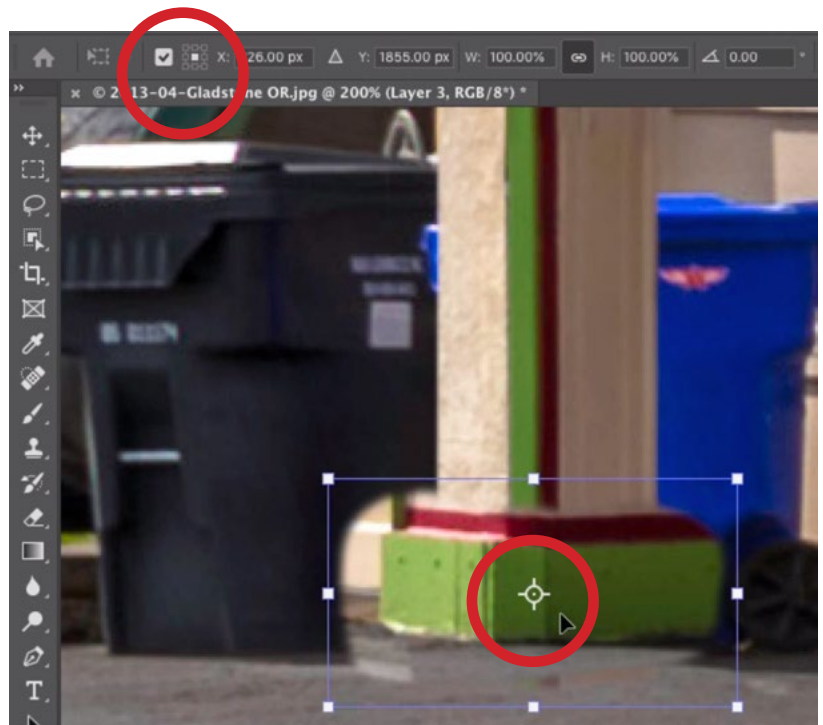
The result doesn't look quite right, and that's because of perspective. We directly copied the base from the right side and applied it to the left side. The problem is that the left side is farther from the camera and therefore the base should be smaller. If we turn on the visibility of the stucco retouch layer, we can see how wide the base should truly be.



**After retouching the base, you can see that it's larger/wider than it should be.**

**Free Transform to scale a layer** We can scale the base down by using the Free Transform command. We'll click on the Edit menu and choose Free Transform. Transform handles will appear around the layer. When scaling this way, you can set a reference point which will stay in place as you scale the layer. The point you determine will stay in place and the layer will scale around it. This can help us in making sure the corner of the base stays aligned with the corner of the building.

The reference point may not be visible by default. (It depends on your version of Photoshop and your preferences.) If there is no crosshair point in the middle of the transform handles, you can make it visible by turning on the Reference Point check box in the Options Bar. Click and drag on the point to position it on the part of the layer you want to stay in place. In the video, we placed the point on the corner of the building base.

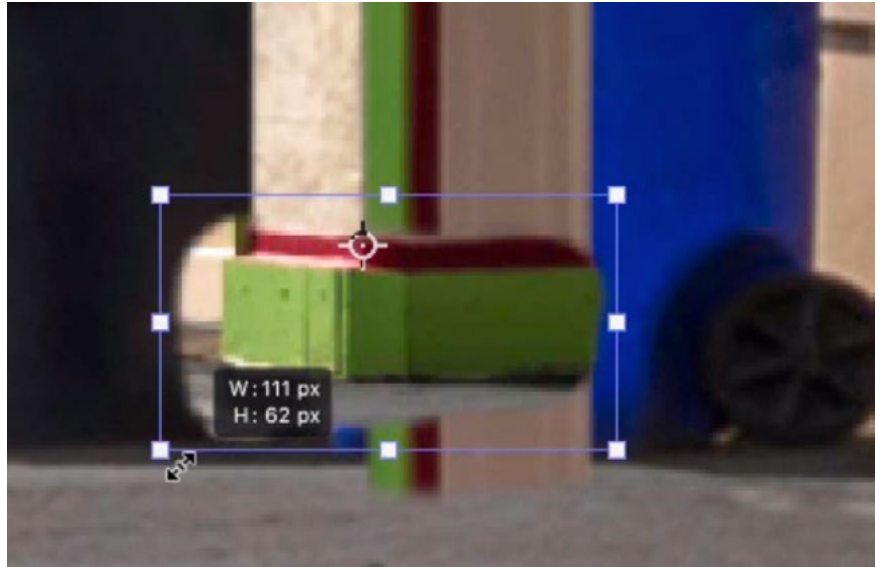


**Turn on the Reference Point check box in order to see the point when using the Free Transform command.**

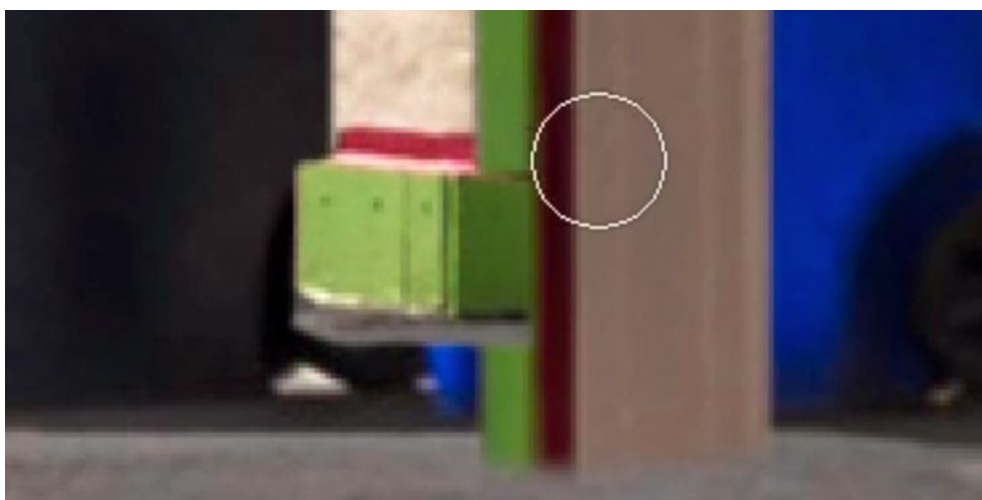
To scale the layer around this reference point, hold down the Option key (Alt on Win) and drag the corner handles. We'll scale the layer until the edges of the building align. We'll hit the Return/Enter key to lock in the transformation and remove the transform handles.

Note: When using the Free Transform command, you may notice that the width and height are not scaling proportionally. If that's the case, hold down the Shift key as you scale. This setting is determined by your version of Photoshop and your preferences.

Again, we'll remove the excess content from this retouching layer by creating a layer mask. We'll activate the Brush Tool and then paint on the mask with black in order to remove any overspill. It can be useful to use other parts of the image for reference. There are other garage doors that we can refer to in order to determine what the bottom of this door should look like.



**We are scaling down the retouch layer and holding down the Option key (Alt on Win) so that it scales around the Reference Point.**

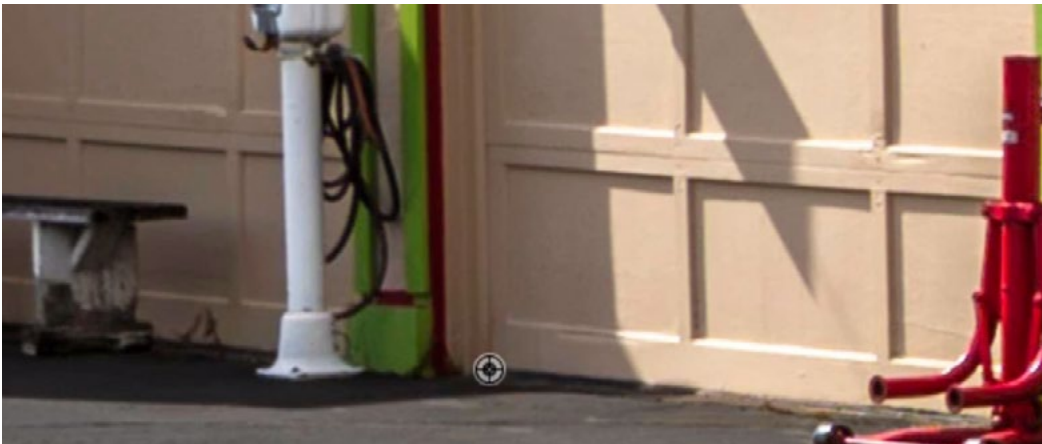


**We added a layer mask to the retouch layer and we're painting on the mask with black in order to hide parts of the layer that we don't need.**

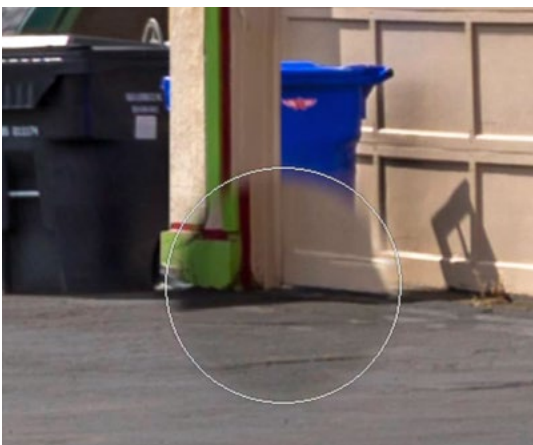
## Clean up the Area Where Building Meets Concrete (50:52)

Now we need to clean up the area where the building meets the concrete. We can steal content from another part of the image in order to fill this area in. The area where the building hits the ground is in a shadow area. There is another garage door in the image, where the bottom is in the shade, so we can use this area to sample from.

We'll create a new, empty layer on which to place this part of the retouch job. We'll use the Clone Stamp Tool to sample from the bottom corner of the clean (unobstructed) garage door.



**We're using the Clone Stamp Tool to sample from a different, unobstructed garage door.**



**The Clone Stamp Tool is being used to align the sampled garage door with the door we're retouching.**

Then we'll make the brush very large so that we can easily see the preview inside the brush tip. This will better help us to align the sampled content with the retouch area. We'll click once to apply the retouching and then immediately use the Undo command (Command+Z, Ctrl+Z on Win). This will remove that bit of retouching but it will lock in the offset, which is the position of the retouch area in relation to the sample area. The garage door that we sampled from is closer to the camera than the door we're retouching, so we're going to need to scale down the sampled content.



Remember, the settings in the Clone Source Panel can be used to do this. We can use the keyboard shortcut, Shift+Option+left bracket ( [ ) to scale the content down.

When the size matches up, we'll use the Clone Stamp Tool to paint over the bottom corner and bottom edge of the garage door. Again, we'll paint more than we need and then we'll use a layer mask to remove any excess that we know we can't use.



**The Clone Stamp Tool is being used to paint in the content that was sampled from the other garage door.**

## Clean Up Pavement (57:57)

The pavement in front of the garage door still has some shadows from the trash bins as well as some other messy areas. We'll clean that area up next. There is an area of clean pavement to the right of the garage, so we'll use that as the sample area.

We'll create a new, empty layer at the top of the layer stack on which to place this retouch job. We'll use the Clone Stamp Tool to sample from that area of clean concrete and then paint over the area in front of the garage door.



The Clone Stamp Tool was used to sample from an area of clean concrete and then paint over the messy area in front of the garage door. You can see that the tone doesn't quite match.

Because the sample area was a little darker than the concrete in front of the garage door, we'll need to blend the retouch layer into the underlying image layer. Anytime we need to blend the retouch area with the surrounding area, we can use the Healing Brush. With the Healing Brush active, we'll look for an area of concrete that has the right texture and is relatively consistent in brightness. We'll sample from this area and then we'll paint over the transition between the retouch area and the surroundings. This will cause the areas to blend together.



The Healing Brush is being used to blend the retouch area with the surrounding area.

