

# Clone Stamp Tool

The clone stamp tool is used for copying (or “cloning”) one part of a picture to another. The clone tool is useful for the following purposes:

- Fixing defects in photographs (dust, scratches, tears, stains, etc.)
- Removing unwanted items from a picture (phone wires, trash)

The source is defined by holding ALT and clicking with the mouse. Once the source has been defined, the image is copied by clicking with the mouse.

## Three Methods For Cloning

There are at least three methods used for cloning:

- Cloning directly on the background layer
- Making a duplicate layer and clone on that layer
- Cloning on a separate empty layer

Cloning on the background layer is the most dangerous because any changes are permanent and can't be undone once saved. Therefore, this method should NEVER be used. The second method is better because no changes are made to the background layer. However, it is more difficult to undue mistakes. This isn't the best method either.

In practice, the third method offers many advantages and in most cases is the only one that should ever be used. If a mistake is made it can simply be erased from the image using the erase tool. It takes up less space on the disk, and it is easy to toggle the changes by simply clicking the visibility icon. Note that there can be multiple clone layers which can be useful for keeping organized.

Do your cloning before making other adjustments to contrast, color and other changes often made via adjustment layers

## Clone Tool Options

On the options bar there are setup options available. Of these, Mode, aligned and “sample all layers” and sometimes brush are most important for photography. Typically, the opacity and flow should be set to 100%. There are times though, when you want to sneak up on the cloning and clone multiple times at, say 50-70%.

## Brush Size and Hardness

The brush option allows the user to define the brush size and the hardness (or amount of feathering) of the brush. However, rather than select a brush it is much easier just to use the shortcut keys:

- Left bracket ( [ )                      Decreases the size of the brush
- Right bracket ( ] )                      Increases the size of the brush
- Shift left bracket (shift [ )              Decrease the amount of feathering

- Shift right bracket (shift ] )      Increases the amount of feathering

### **Aligned**

In the Options bar, the aligned option determines how the source and destination of the clone tool align with each other. If aligned is on, then the source follows along as the tool is moved so they are always the same relative distance from each other. This will probably be the option you want 99% of the time.

If the aligned option is turned off, then the source returns to the same point each time the mouse is clicked. Note that as long as the mouse is down the source follows along just as if it was turned on. This is useful if you want to clone any area where there is only a small source to choose from (perhaps a patch of blue sky on a gray day).

### **Sample All Layers**

In the Options bar, the Sample All Layers option determines how Photoshop determines the source image when it is empty or turned off. If “Sample All Layers” is turned off, then Photoshop will only sample from the original layer defined as the source. If that layer is empty then nothing is cloned. If “Sample All Layers” is turned on, then Photoshop will sample from the first layer where an image is defined and is also ACTIVE. The majority of the time this option should be left on.

### **Cloning from Multiple Images**

There is nothing saying that the source and destination have to be from the same image. For example, if you have a bird in one picture that you want to copy into a second picture, simply bring both pictures into Photoshop and set one as the source and one as the destination.

### **Advanced techniques**

- Open the Clone Source window ( from the menu, select Window > Clone Source)

#### **Changing the scale of the cloned source**

To change the scale of the source, click in the W(idth) or H(eight) field and then use Shift+Alt plus up or down arrow.

#### **Shifting the location of the cloned source**

To shift the source up, down or sideways, click in the X or Y fields and then use Shift+Alt plus up or down arrow.

#### **Rotating cloned source**

Also in the Clone Source window ( from the menu, select Window > Clone Source), highlight the number of degrees or rotation (next to the Arc icon). Select your sample area by holding the Alt key while clicking on the source. Move the mouse over the area you want to clone over. Hold the Shift key and press the Up or Down arrow to rotate the clone source until it matches the area you want to clone over.

#### **Reversing the cloned source**

In the Clone Source window ( from the menu, select Window > Clone Source), click on the icon to the left of the W:. It is two squares beside each other with an arrow over top. This will do a horizontal flip of the clone source.