



Processing Motorsport & Generating Motion



A Processing Tutorial for
Adobe Photoshop CC 2015.5

Created by
Jonny Henchman

Fireproof Creative
www.fireproof-creative.co.uk

DISCLAIMER:

This tutorial is an overview of the techniques I use to process motorsport shots in Adobe Camera raw and the method I use to add extra motion to images that occasionally benefit from it in Photoshop CC.

It is NOT an exhaustive guide to all the ways you can produce similar effects using Photoshop's various editing tools, nor is it an attempt to encourage people to fake an image rather than do it in camera... People asked me how I do it, this is the answer, that is all.



/// INTRODUCTION

You can use this guide to work through my process with the supplied sample file or apply the technique to your own images. It is most straightforward to work with parallel type pan shots but can be adapted to apply to 3/4 pans as well but it will not cover that.

The tutorial has been produced from a Windows user's point of view but will work just as well with Apple machines albeit with the equivalent shortcuts etc. If you can afford a mac you can look up what those equivalent key commands are so I won't bother going into that either, CMD instead of CTRL or something, dunno what you do about having one button on your mouse either? ;)

It's been done using Photoshop's latest version of CC (2015.5), it may well work with earlier versions depending on the features available - I can't remember what's been added, either way there are workarounds but you will have to research them yourself. The principles will apply to other editing programs too but again, you will need to adapt the instructions yourself.



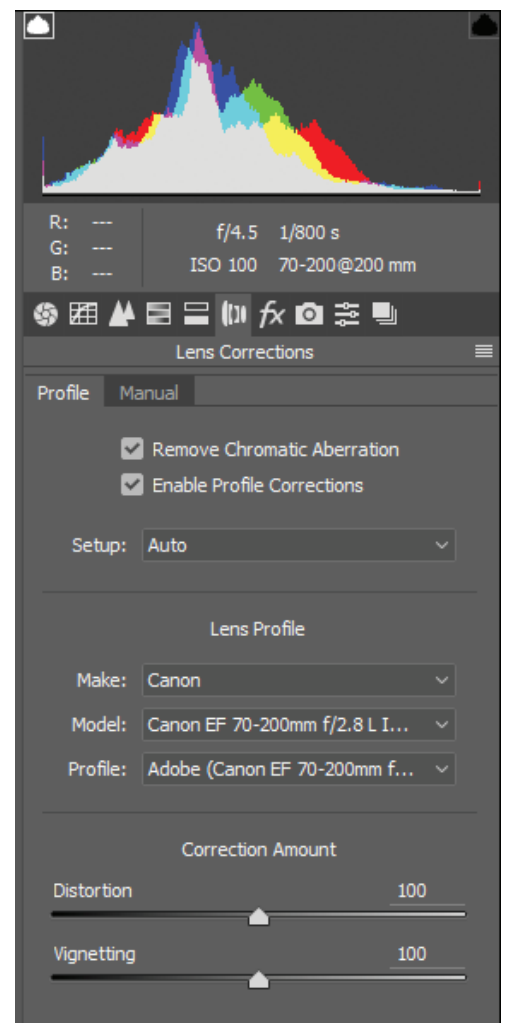
/// CAMERA RAW CORRECTION

To begin with you need to load Photoshop and drag in the supplied raw file, this will automatically load the Camera raw module for you to start adjusting the image. You will be greeted by something very similar, if not identical to the screen grab above.

This section of the guide is about tweaking the settings to get the basic image looking the way you want. This of course, is subjective, so feel free to use the following settings as a guideline and experiment with the sliders yourself to get to a stage you are happy with.

Step 1: [right] The first thing you are going to want to do is apply the Adobe lens corrections to sort out general optical issues associated with the lens used, while this step is not 100% necessary and may not even be available to you if you use a lens that doesn't have a correction profile in the system, there is a profile available for the 70-200 IS II that I used so I figure I may as well apply it. You can use manual adjustments here to correct for vignetting and various other issues, but I'm just going to leave it to the automatic profile.

Step 2: [next page top] Next you can compose the image as you see fit using the crop and/or straighten tool. The supplied image is very close to being level, but to make it 100% straight, click the spirit level icon to the right of the crop tool and then click on a point and drag out a line along a section of the image that you know is horizontal i.e. use the white line on the track or the two wheel nuts as reference. The crop tool will then overlay at an angle according to your selection, hit return and the image will crop straight.

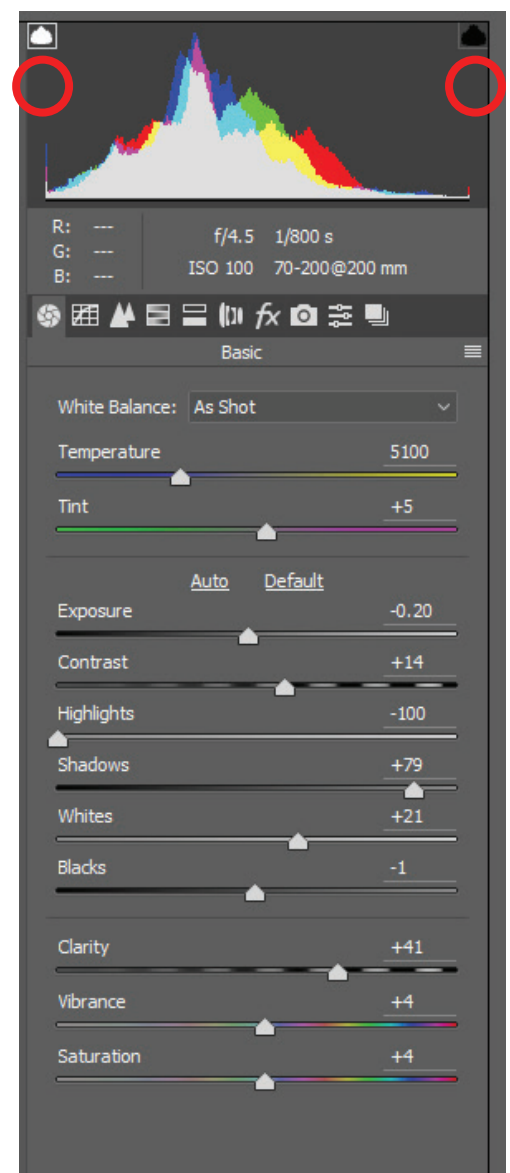


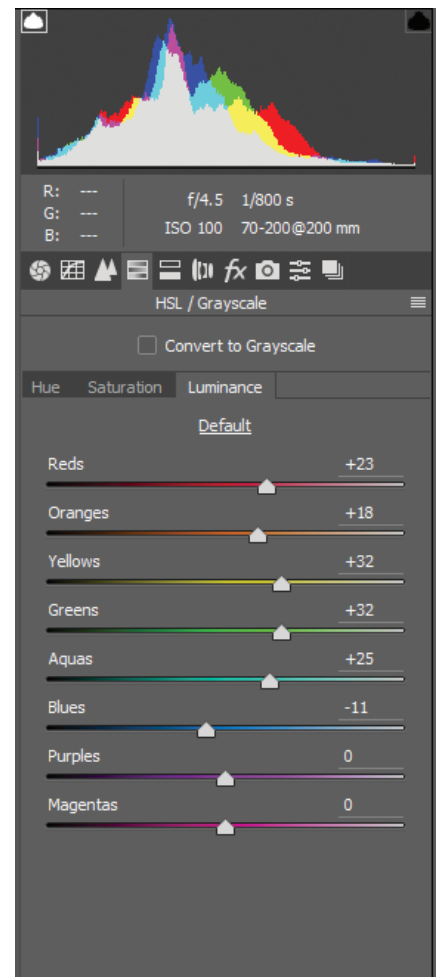
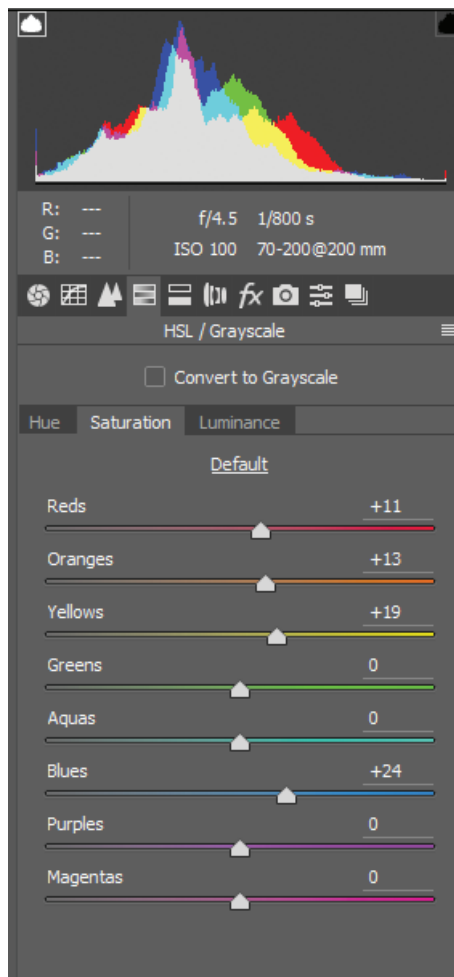
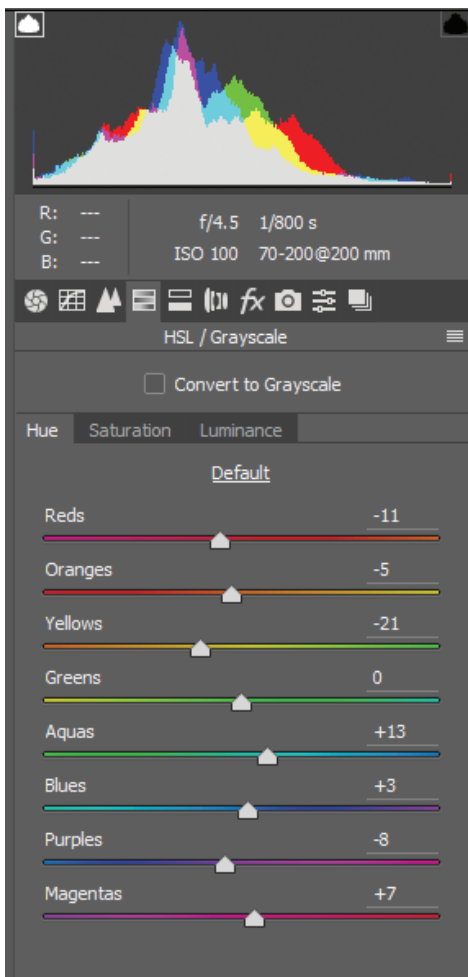


Step 3: [right] These are the basic image settings you can use to adjust the various bits of the image. Most are pretty self explanatory, but I suggest you move all of them around to see how each one affects the image.

Tip: click the markers in the corners of the histogram to overlay clipping indicators on to the image, the left will display clipped shadows in blue and the right, blown highlights in red.

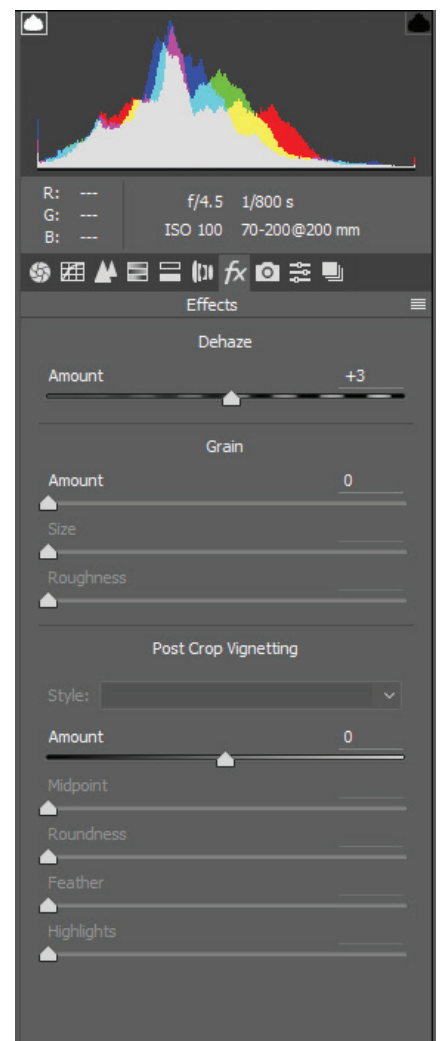
The settings I've used here for the sample image provided the look I was after, there's a little clipping to both shadows and highlights but nothing too serious. The image itself was slightly overexposed in camera so I've tried to correct for that.





Step 4: [below] The following settings are for the Hue, Saturation & Luminance Sliders (HSL), again this comes down to personal taste. Adjusting these will give you some control over the colours and 'pop' of your images - some amount of adjustment is usually required when working with Raw files as they can tend to look a little flat if you didn't use a filter. Shooting Jpeg will usually mean the camera applies a basic colour adjustment or custom preset that isn't applied when shooting raw - so there is often a difference in the look of raw and jpeg images captured at the same time (dual write).

Step 5: [right] This is another non essential step, with the latest version of Photoshop you can apply the dehaze feature. This is typically used to increase contrast in misty scenes but it can be also used on regular images to boost overall contrast in a slightly different way to the basic contrast/clarity sliders (translation: I don't know - I just liked the result) - be careful not to overdo it with this slider.

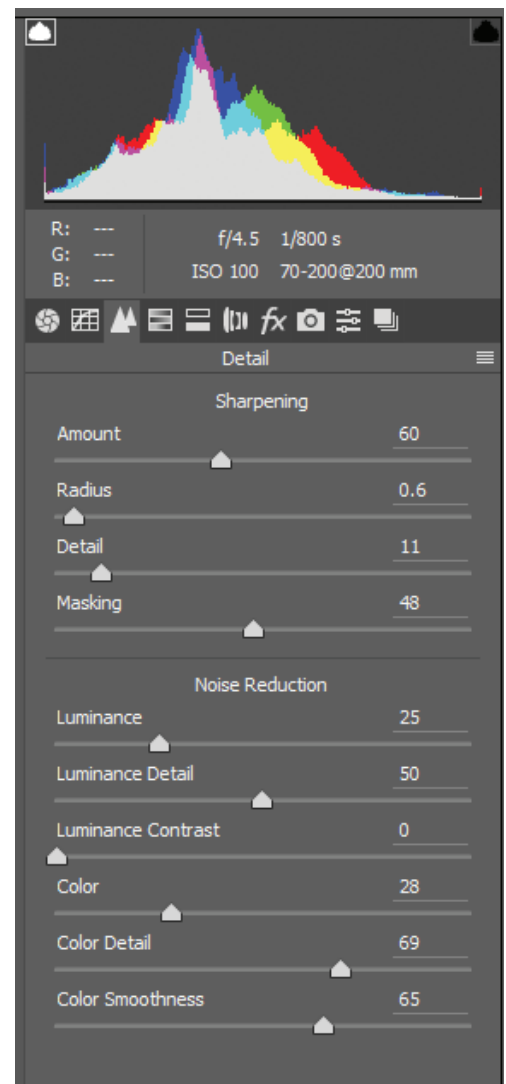


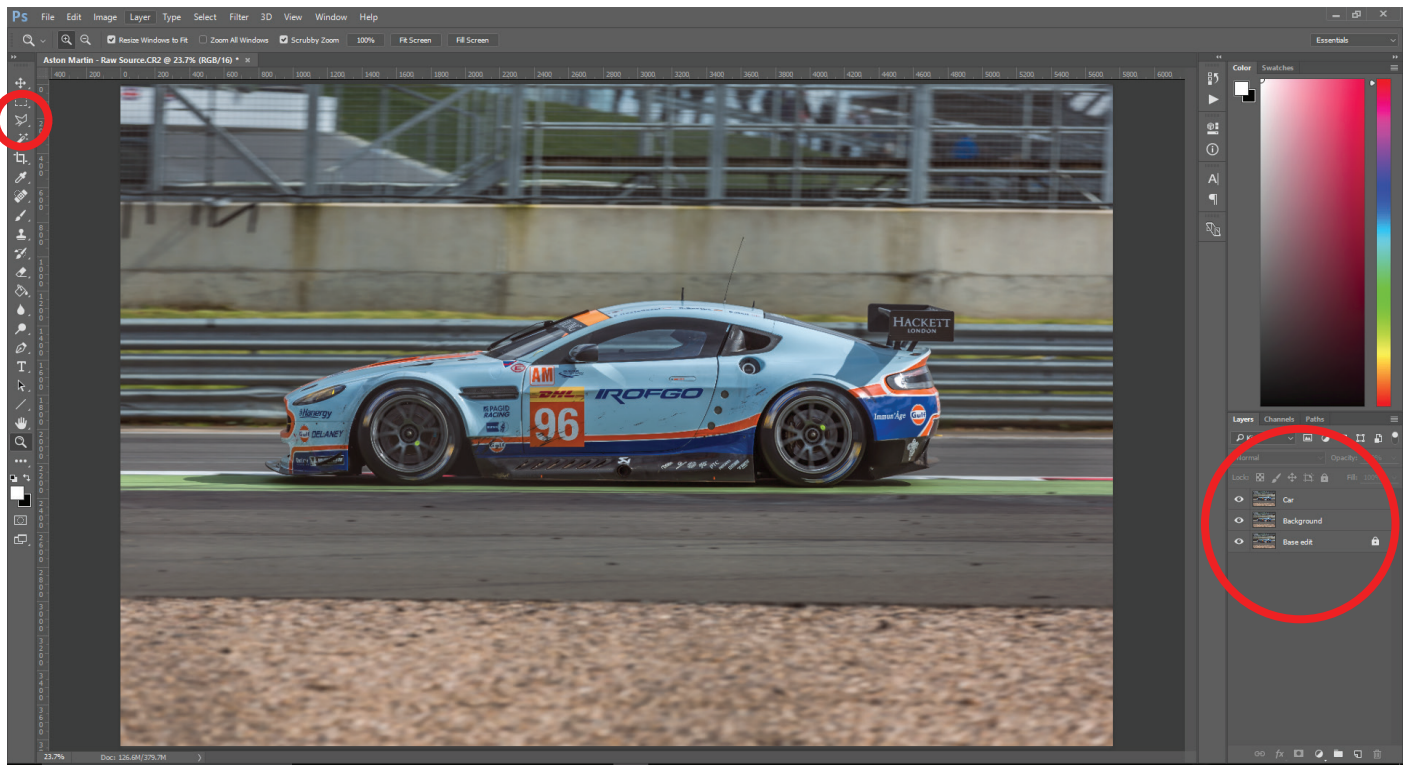
Step 6: [right] The final step in this Camera raw section is to adjust the sharpening and noise reduction. The reason this is done last is because adjusting all of the other settings can introduce noise and colour artifacts. So rather than having to do it twice, leave it until the end and as long as you were careful taking the original shot and didn't play too fast and loose with the clipping indicators you'll probably only be dealing with basic noise resulting from your choice of ISO. The sample image was shot with a full frame camera, so noise is pretty well controlled in this case, however I have still tweaked the reduction settings to smooth out a little bit of noise I introduced tweaking the other tabs.

Tip: Always adjust sharpening at 100% magnification, if you are looking at the image at anything less you risk over-sharpening and introducing jagged edges that you won't see. Lots of people make this mistake and wonder why their image looks bad at higher resolutions.

Bonus Tip: If you adjust the masking slider while holding the alt key the preview window will shift to an outline overlay so you can ensure you are targeting the edges specifically rather than blanket sharpening the whole image.

That's it for basic image adjustment, you can click the open image to launch it in Photoshop and start the more advanced manipulation.





///PHOTOSHOP MANIPULATION

This is where things start to get a bit more advanced. In the bottom right corner you can see the layers panel [above], duplicate the base layer twice (right click > duplicate layer) so you have three layers displayed, you can rename (double click the layer and change the name) as shown to help you keep track of what you are working on. For extra safety you can lock the very bottom layer by selecting it and click the padlock icon above.

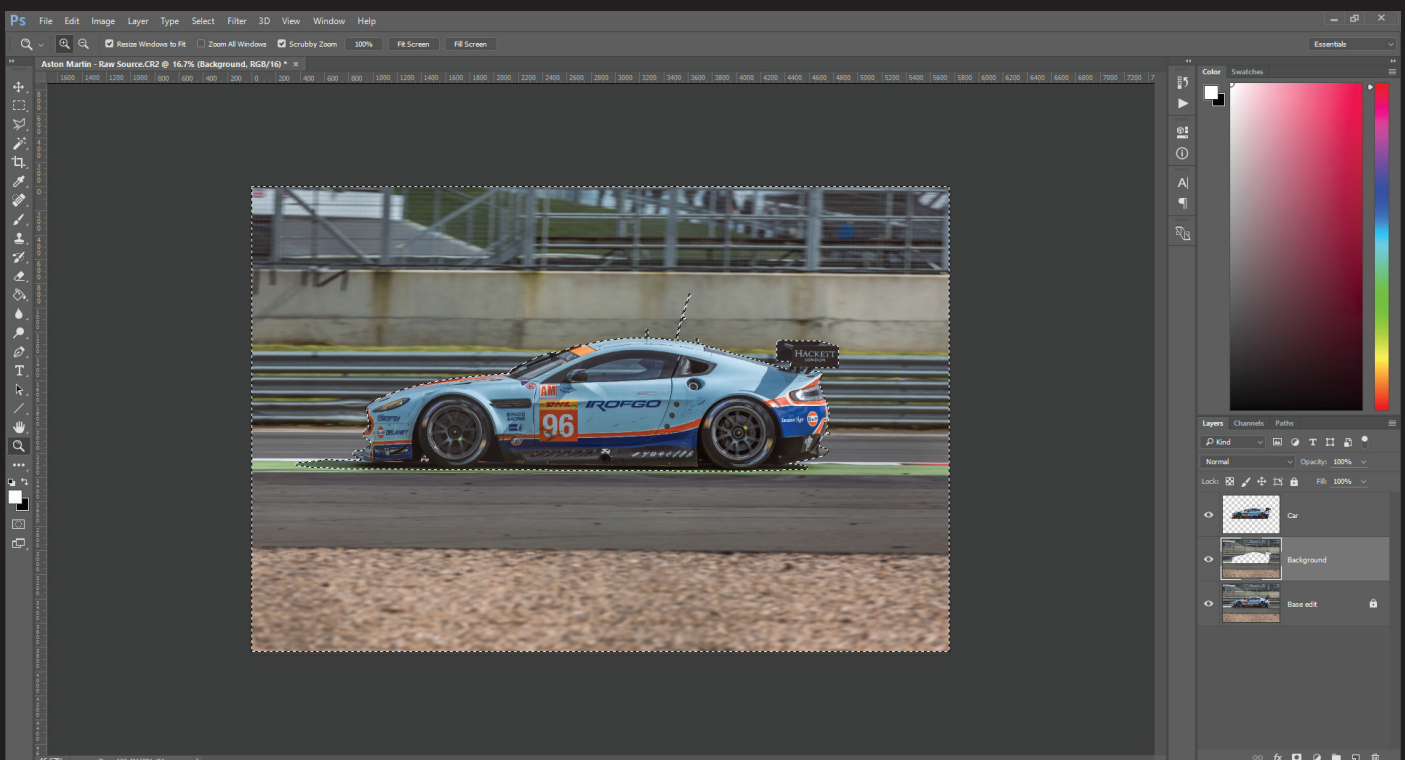
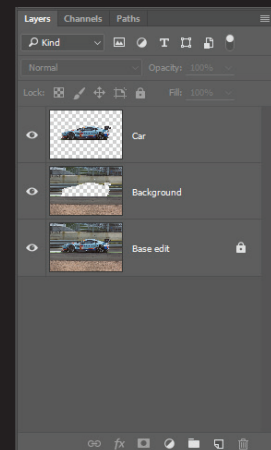
Once you have the layers set up, select the middle one. We are now going to select around the car and the shadow, there are numerous ways to do this, most of which are much faster but this is the most accurate in my experience. This next step is where most of the time goes, zoom in to about 300% and select the polygonal lasso (top left - you may have to click and hold to select the different lasso tools), this works by clicking and dragging a line and clicking again to anchor, don't worry straight lines at 300% will look like curves at 100% if you don't try and cut too many corners, carefully work your way around the edge of the car, this can take some concentration especially when you get the shakes and double click and have to start again... It's not for the faint hearted. When you've made it around click selection (in the tool bar)>save selection and call it 'car'.

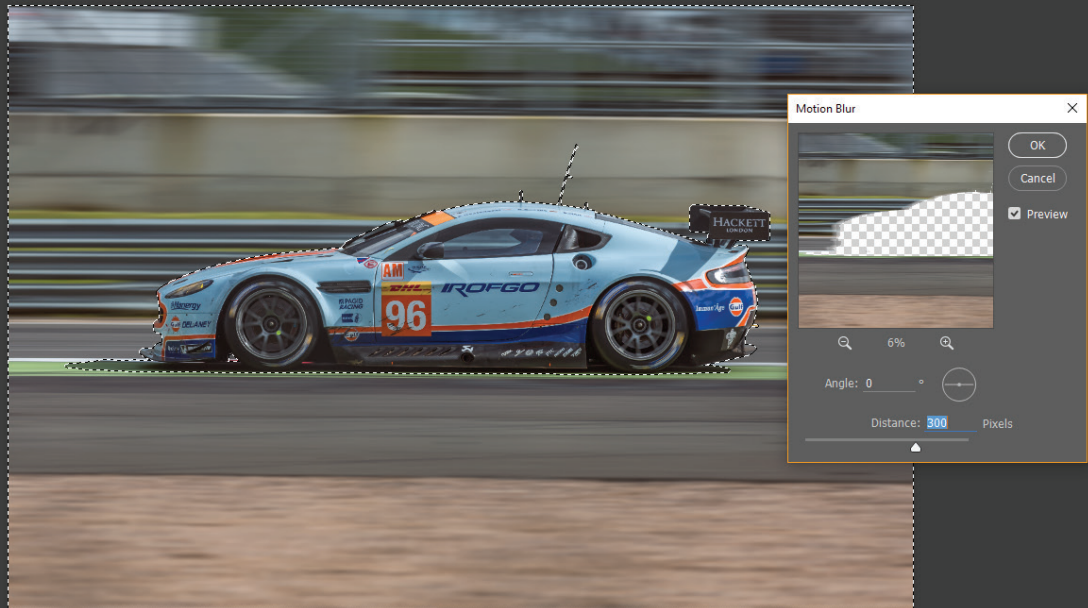


You should now have something like the above, with the car selected indicated by the marching ants. Double check you have saved the selection.

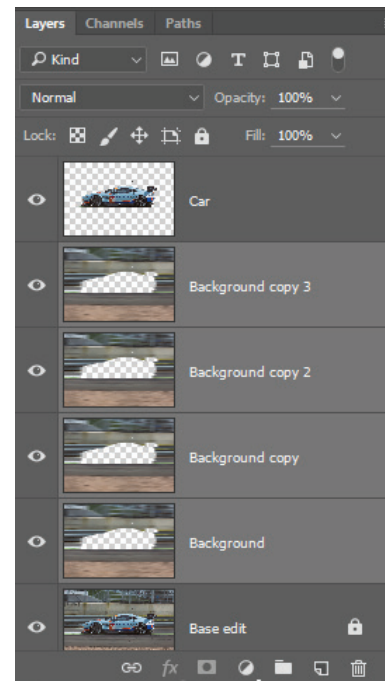
Now with the middle layer selected, hit the delete key, then select the top layer and go to the tool bar - selection>invert selection and again hit the delete key. You should now have one layer with just the background and one layer with just the car.

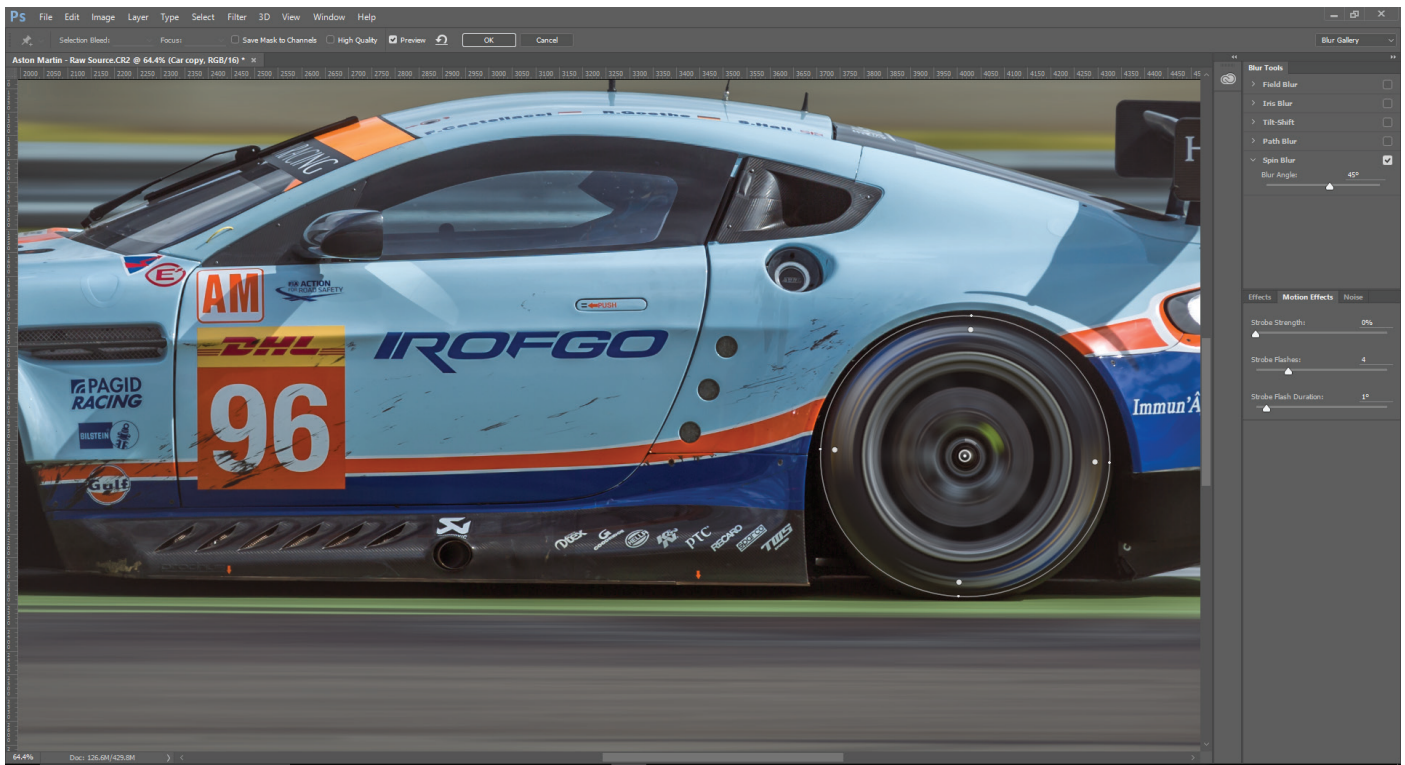
Select the middle layer, you should still have the inverted car selection active as below - if not, go to the tool bar - hit selection>load selection>pick 'car' from the drop down>OK then Selection>invert selection.





Now hit the filter button on the tool bar and select the 'motion blur' option. A window will load allowing you to adjust the amount of blur applied to the background layer. Make sure the angle matches the scenery, as we straightened the image back at the start it should be 0 degrees, but if you've chosen to use an angled crop make sure the blur follows the natural movement of the car. The amount of blur you select is completely up to you, but go too far and it'll start to look a bit unrealistic. When you are happy click OK and duplicate the layer with the motion blur three or 4 times, select all the duplicates right click and hit merge layers (this will help hide the feathered effect that occurs at the edges of the selection when using the motion blur filter).

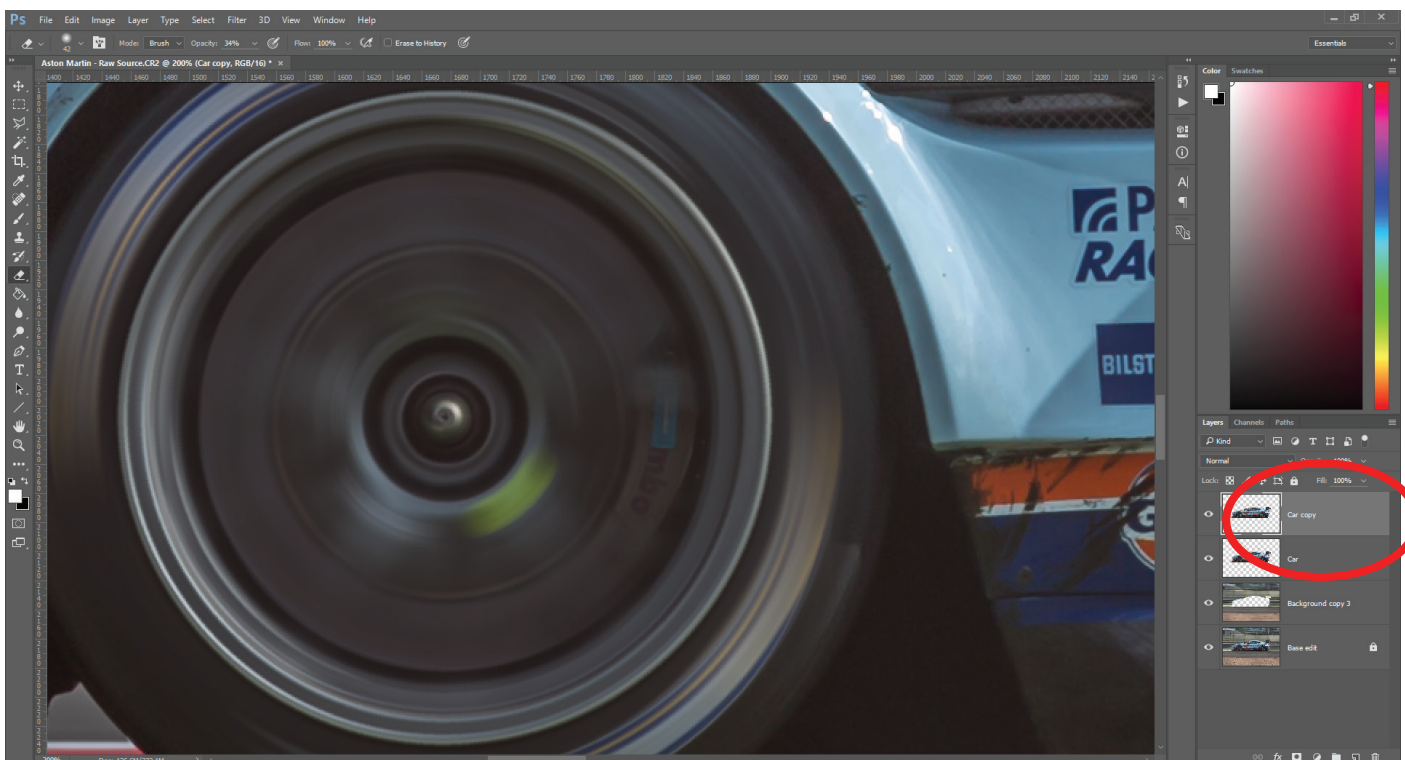




You should now have an image of a car moving fast, whilst looking like it's suffering a four wheel lock up, not cool. So we need to get those wheels moving as fast as the background.

To do this you'll need to use one of the new Photoshop features called Spin Blur. First Select the top car layer and duplicate it, select the copy and go to Filter>Blur Gallery>Spin Blur. Drag the circle around the wheel including the tyre markings, as pictured above. Adjust the blur angle option to a point where the wheels look like they are spinning at an appropriate speed. When you are happy, hold CTRL+ALT and click and drag the center point of the circle to duplicate it and position over the other wheel, tweaking dimensions slightly if necessary. Hit OK and you're done.

If you are feeling particularly fussy you may want to show static brake calipers, this is why we duplicated the car layer above. Tweak the transparency down a bit so you can start to see the brake discs on the layer underneath, then use the eraser on a soft setting with an opacity around 50% and carefully remove the area of the top layer over the brake caliper so it shows through... Up the transparency again and you are finished.





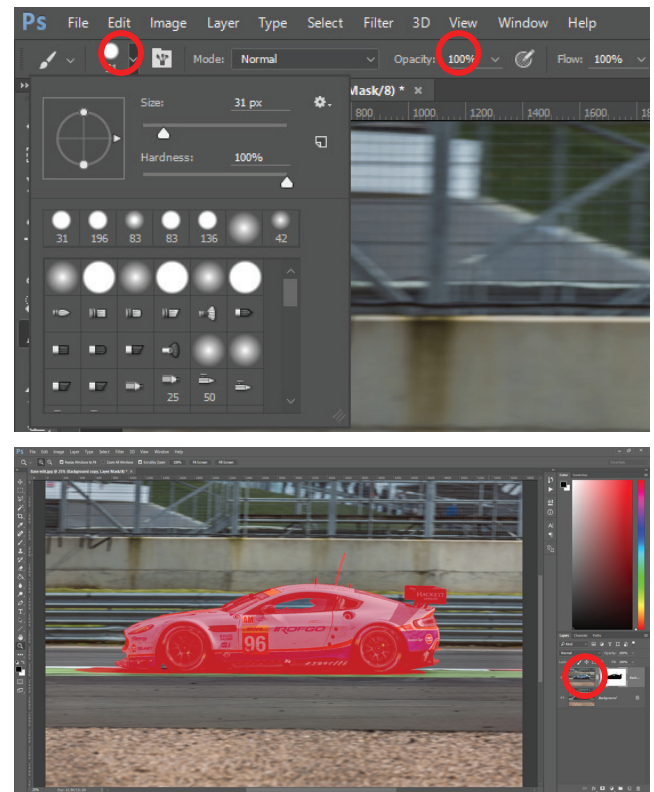
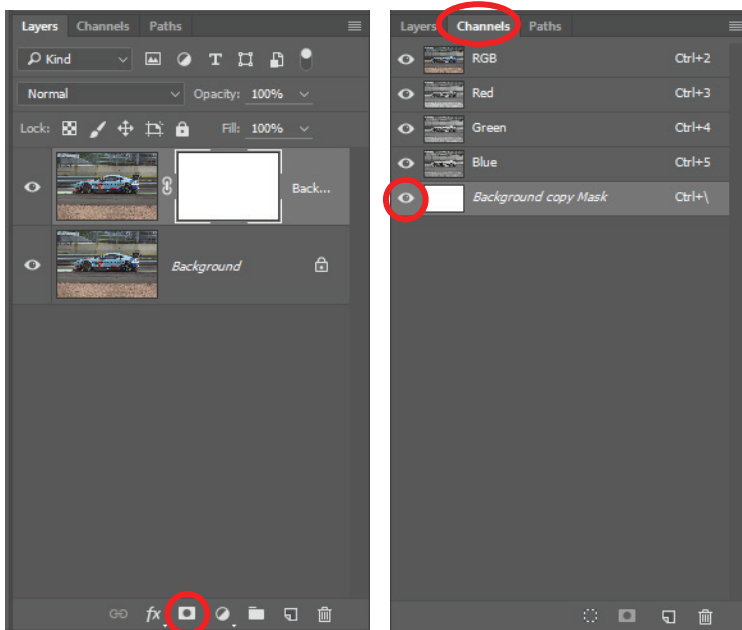
You should now have a colour corrected adjusted image that shows a lot more motion than the original. Select all the layers and right click then merge layers. You can use the blur tool on a medium opacity to carefully go over the shadow cast by the car to merge it into the background and remove any slight seams caused by the selection.

At this point you may want to tweak the completed image further using the camera raw filter or the various other Photoshop functions, thats up to you.

You can see my final effort below, with some extra colour tweaks applied.

I added blur to the window sections and in the gaps under the car using the same techniques listed in this guide. All in all it took me about 20 minutes to achieve the finished result from scratch.





///THE FAST METHOD

If all that seems like too much hard work, there is another way, it tends to be less accurate, but sometimes... Who cares right. So this section assumes you have completed the image adjustments in camera raw and you are ready to add some extra blur to your image.

Duplicate the base layer as you did in the previous method. This time we are going to use something called a layer mask, select the new upper layer and hit the icon displaying a grey dot inside a rectangle. A white canvas will appear next to your duplicated layer as shown in the image above.

Now click the Channels tab at the top of the layer pallet, then click the eye next to channel at the bottom that's all white. This will enable an overlay when we start masking so you can see what you are doing.

Click on the layers tab again to go back and then select the new white layer that we just created. Select the paint brush tool and change the colour to black - make sure the opacity and hardness are both set to 100%. Double check again you have the new white layer selected and your paint brush colour is set to black, now paint over all the bits of the car that you don't want to be effected by the blur filter, you'll see instead of black you are painting a semi-translucent red - this indicates where you are masking, if you make a mistake don't worry, just switch the brush colour to white and you can remove any mask areas you messed up. When you are done you should have something that looks like the image above right.

Now select the image next to your layer mask, anything you do to this layer will no longer be affected where you painted black, so go ahead and click the motion blur filter as in the full guide and rejoin that bit of the tutorial.

Tip: While this method is faster, you still need to pay attention - if you don't mask any bits of the car these will be blurred when you add the motion filter, as you may have seen on the internet where people try and do this but are too lazy it looks like the car has motion blur in front of it as well as behind it, not good, don't do it. It's better to mask slightly over the lines than leave any car exposed, but don't take the Michael or you'll be left with a static background halo around the car which also looks totally lame.

Bonus tip: If you can shoot the original image with a shutter speed that will contain at least a little movement in the background this will help hide any seams using this technique later. If you shoot at 1/10000000000th of a second you are going to need to be pretty accurate with your mask at the edges of the car.

///EXAMPLES OF THE TECHNIQUE IN ACTION



///REMEMBER YOU DONT HAVE TO USE PHOTOSHOP!





www.fireproof-creative.co.uk