



Animating a Car

# Animating a Car

In a previous Masters Academy lesson, we talked about basic animation and we used a series of techniques to animate some text within a Photoshop document. In this lesson, we're going to build on that and work on a more complex animation project that involves a photograph.

In the video example, we have a photo of a car and we want to animate this car to make it look as if it's moving through a scene. This will involve making the wheels turn, making the car move up and down a bit (as if it's hitting bumps in the road) and making the windows actually transparent so you can see through them to what's behind in the scene. Let's look at the step-by-step process used to achieve this.



**In this lesson, we're going to remove the background and then animate the car.**

## Image Size and Mode (Timestamp 00:48)

**Image Size** Before getting started on an animation project like this, take a look at the size of the image and what mode it's in. When I first opened the example image, it was over 7000 pixels wide. That might be great for printing, but an animation is only going to be shown on a screen, which means that the file does not need to be that large. The resolution of an HD TV is 1920 x 1080 pixels. If you plan on using the animation on a 4K TV, the resolution is double that of HD. I scaled the image down to 1920 pixels wide to limit the file size so that Photoshop would work more efficiently.

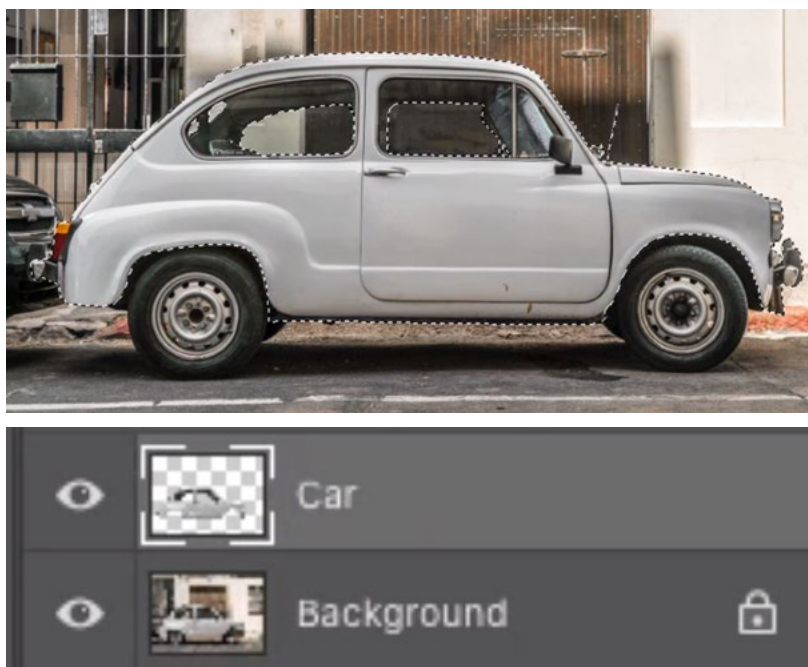
**8-bit vs. 16-bit** I usually have Lightroom set to open images in 16-bit when moved into Photoshop. This can produce higher quality results when making some adjustments and performing certain retouching tasks. This also produces a much

higher file size and is not necessary when working with animation. When it comes to animation, 16-bit will slow Photoshop down considerably so I will make sure that the image is set to 8-bit mode. You can change the mode by clicking on the Image menu and choosing “Mode.”

## Place Body of Car onto its Own Layer (2:25)

The first thing that we’re going to do is get the car onto its own layer so that the body will be able to move independently of the wheels. This will require a precise selection of the car. You could use the Select Subject command (under the Select menu) as a starting point and then use additional selection tools to refine the selection. To make this project easier, I created a saved selection, which is included in the practice file. To load this selection, click on the Select menu and choose “Load Selection.” A dialog box will appear. In this dialog, use the Channel menu to choose the “Precise Car” selection and then click OK. The “marching ants” selection will appear around the car.

We’ll copy the contents of the selection to its own layer by using the keyboard shortcut Command+J (Ctrl+J on Win). Then, to keep things organized, we’ll rename the new layer to “Car.”



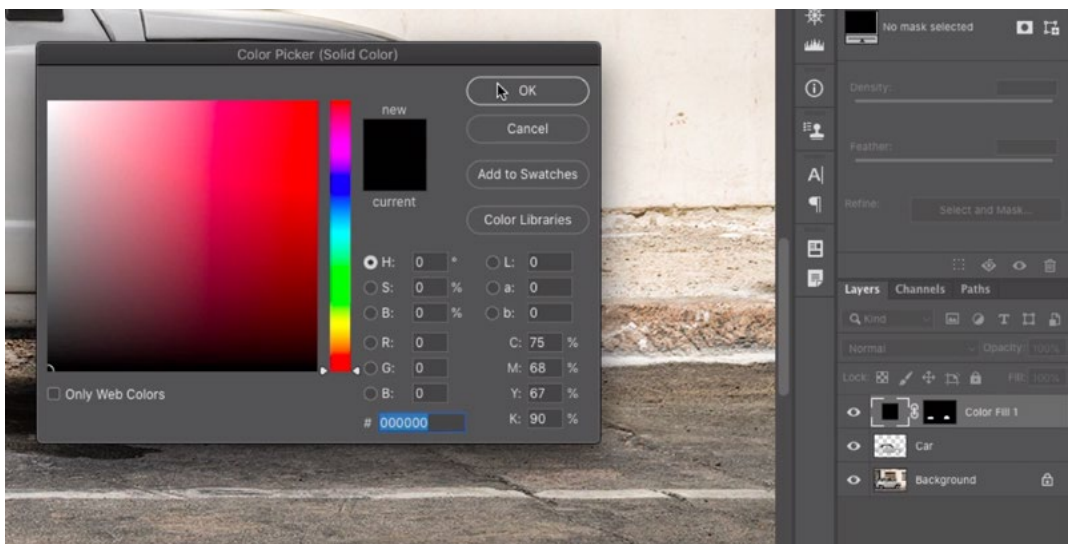
**A selection was made of the car body and that selection was copied to its own layer.**

If we look at the car body layer with the background layer turned off, we can completely see through the wheel wells. Another layer will eventually contain the wheels, but what's behind them will be transparent, and that won't look natural. We'll need to fill in that gap between the wheels and the body of the car. We need to select an area to define where the inside of the wheel well would be and then fill that selection with black. This could be done quickly using the Lasso Tool, but there is also a saved selection for the wheel wells in the lesson file. Click on the Select menu and choose "Load Selection." When the dialog appears, use the Channel menu to choose "Inner Wheelwells" and click OK. The selection will appear around the wheel wells of the car.



**A selection was made of the wheel wells.**

We will fill this selection with black on a new layer by clicking on the Adjustment Layer icon at the bottom of the Layers Panel and choosing Solid Color from the pop-up menu. The Color Picker will appear, we'll choose solid black and then click OK. The new layer will be created and it will contain black in the areas that were selected. We'll drag this new layer beneath the car body layer in the Layers Panel.



**With the selection of the wheel wells active, we are creating a Solid Color layer and using the Color Picker to set that layer (the wheel wells) to black.**



## Place the Wheels on Separate Layers (5:03)

Next, we need to copy the wheels to separate layers because they will be rotating independently from the rest of the image. We'll temporarily turn off the visibility of the wheel well layer so that we can better see what we're doing. In this image, the front wheel is angled slightly and this will cause it to look wrong when rotating. Because of this, we'll use the back wheel twice, moving a copy to replace the front wheel.

We'll zoom in on the back wheel and activate the Elliptical Marquee Tool. We'll click on the very center of the wheel and start to drag out a selection. We'll then hold down the Option key (Alt on Win), as this will take the location where we initially clicked and make it the center of the selection. We'll also hold down the Shift key, which will constrain the selection to be perfectly round. Note that you need to press these two keys (Option and Shift) AFTER you start to drag out the selection.

With the active selection of the wheel, we'll make sure that the Background layer is active (because this is the layer containing the entire car) and we'll jump the selection to its own layer by using the keyboard shortcut Command+J (Ctrl+J on Win). We can now turn on the visibility of the wheel well layer again and drag it beneath the wheel layer in the Layers Panel.



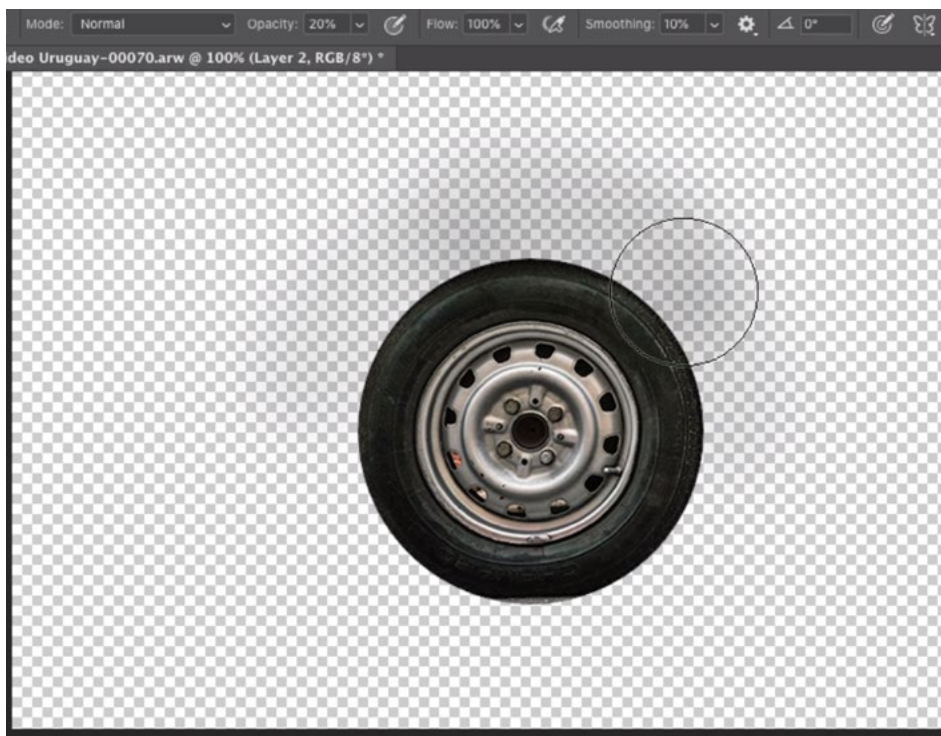
**A selection was made of the wheel and that selection was copied to its own layer.**

## Optimize the Wheel Layer (8:45)

The wheel is now on its own layer and we will inspect it closely. We'll turn off the visibility of all the other layers so that we can better see the wheel. I immediately see two problems: The bottom has flat surface (from where it was sitting on the ground) and the top of the wheel is brighter than the bottom. We don't want to have any flat areas and we'll also need to adjust the layer so that the whole tire is evenly lit.

**Fix Lighting with a dodge and burn layer** Let's first adjust the lighting on the tire. We'll create a dodge and burn layer to do that. We'll create a new, empty layer above the wheel layer and we'll set the blending mode of this layer to Soft Light. (The Blending Mode menu can be found at the top of the Layers Panel.)

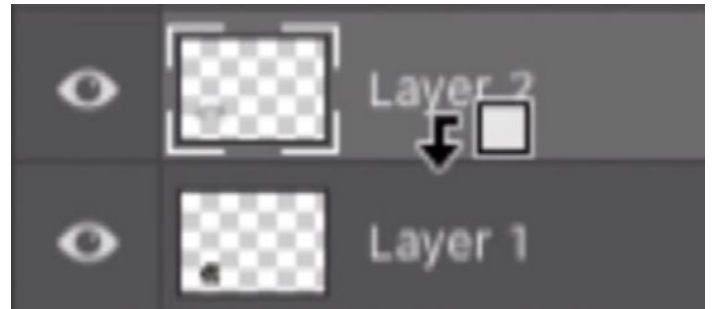
We'll activate the Brush Tool and set the foreground color to black. That's the color we'll be painting with. We'll use a really soft-edged brush and we'll set the opacity very low, around 20%. These Brush Tool settings can be found in the Options Bar above the image window. We'll use a soft brush to paint over the brighter parts of the tire, building up the paint just enough so that the brightness matches the bottom part of the tire.



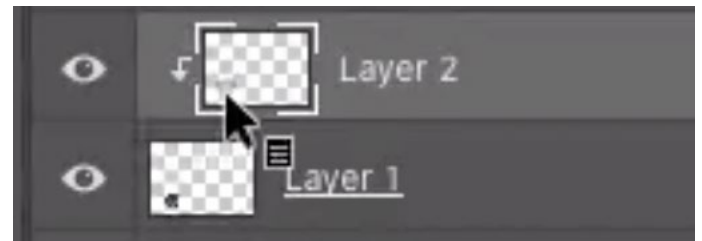
A soft brush is being used at 20% opacity to paint with black on a new, empty layer in the areas where the tire is too bright. This layer's blending mode is set to Soft Light.

As we do this, we will get paint over-spray outside of the tire, and we can correct this with a clipping mask. When we “clip” a layer, it will only show up in the areas where there’s something on the underlying layer. There are several ways to clip a layer. In this example, we’ll hold down the Option key (Alt on Win) and hover the cursor over the horizontal line between the paint layer and the wheel layer. When the cursor turns into a little square with a down-pointing arrow, we’ll click on the line. This will clip the layer and you can see that the layer becomes indented in the Layers Panel. A down-pointing arrow will appear to the left of the layer, indicating that it’s been clipped. Now, the paint will only appear in the area where the tire is visible.

**Un-flatten the bottom of the tire** The next thing we need to fix is that flat, bottom portion of the tire. We can use the Clone Stamp Tool to do this. With the Clone Stamp Tool, we’ll copy from the top edge of the tire and paste it on the bottom, removing the flat edge. We’ll activate the Clone Stamp Tool and we’ll make sure that the tire layer is the active layer.



The Option key (Alt on Win) is being held down while hovering the cursor on the line between layers. When the cursor changes to look like the square and arrow, we can click to clip the upper layer.



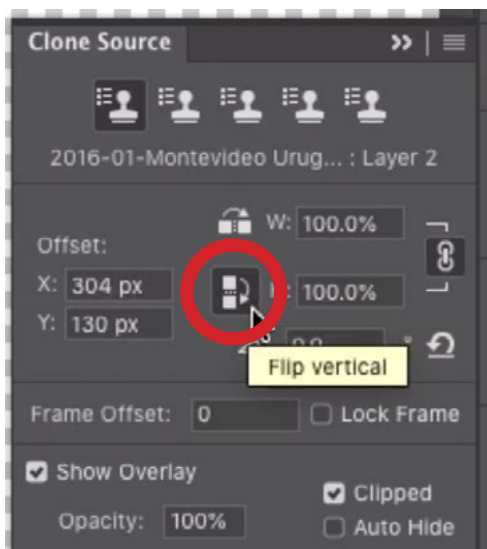
The dodge and burn layer is clipped to the underlying wheel layer.



The Clone Stamp Tool is being used to sample an area from the very top of the tire.

Using the Clone Stamp Tool, we'll Option+Click (Alt+Click on Win) on the very top edge of the tire. This will set this part as the sample area. Now we will need this sampled content to be flipped (or rotated 180 degrees) before we paste it on the bottom of the tire. We can use the settings in the Clone Source Panel to manipulate that sample area. If the Clone Source Panel is not visible in the interface, it can be accessed by clicking on the Window menu and choosing Clone Source.

In the Clone Source Panel, we'll turn on the Flip Vertical icon (see screen shot). Now, if we make the brush tip large, we can see that the top of the wheel we sampled has been flipped upside down. We'll use a soft brush and we'll paint over the bottom, flat part of the wheel, pasting the sampled content over that area. Before moving away from the Clone Stamp Tool, we'll turn off the Flip Vertical setting within the Clone Source Panel so that the content is not flipped the next time we use the tool.



After sampling from the top of the tire, the Flip Vertical setting (circled) was turned on and at left, we are painting the sampled content over the bottom of the tire.



**Fill in the wheel holes** There is one more issue with the wheels. There are little holes in the wheels and we can see through some of those holes to the original background. We need those holes to be transparent so that we can see through to what's behind them in the final animation. We need to make a selection of the holes. The Quick Selection Tool could be used for this, but I have a pre-made, saved selection that is included in the image file. To activate this selection, click on the Select menu and choose Load Selection. In the dialog that appears, set the Channel menu to Wheel Openings and then click OK. The selection will appear around the holes. We can remove the contents of the selection either by deleting it or creating a layer mask. To create a layer mask, we'll hold down the Option key (Alt on Win) and click on the Layer Mask icon at the bottom of the Layers Panel. By holding down the Option key, the selection will be converted into the black part of the mask. The black parts of the mask will hide the layer, so the contents of the holes will be hidden.

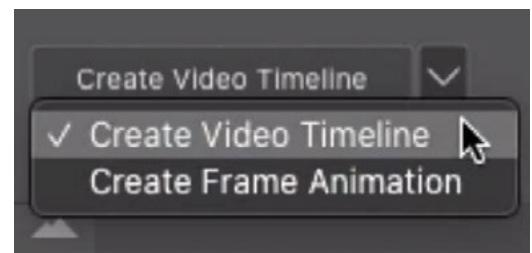


**We want to be able to see through the wheel holes to what's behind, so we made a selection of the holes and then removed the contents by using a layer mask.**

## Spin the Tire (18:36)

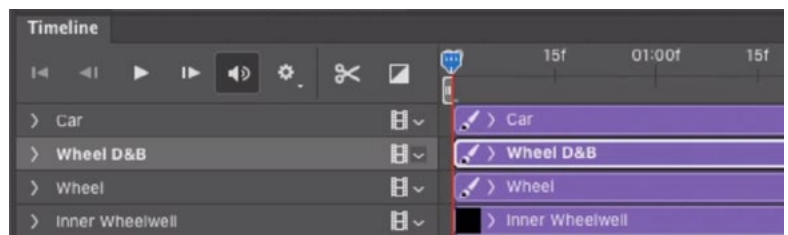
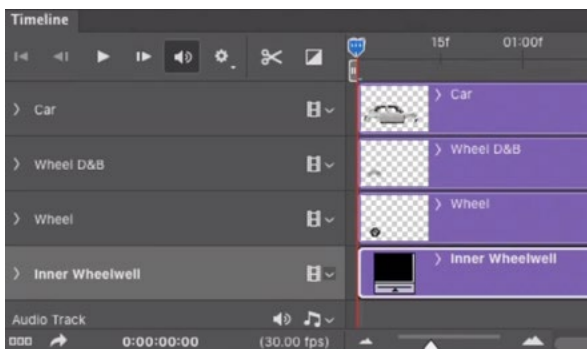
Now let's start to create some animation by spinning the tire. To keep things neat, we will first rename all of the layers to represent what they are. This will make things easier to understand within the Timeline. We will also merge the Wheel layer with the dodge & burn layer that was used to darken part of the wheel. We need these two elements on a single layer. To merge the two layers, we'll click on the dodge & burn layer to make it active. Then, we'll click on the Layer menu and choose "Merge Down."

We need the Timeline Panel to be visible so we'll click on the Window menu and choose Timeline. The panel will appear along the bottom of the screen. There are two types of timelines to choose from and we'll use the menu in the middle of the panel to choose "Create Video Timeline." We'll click the "Create Video Timeline" button and the panel will change to list all of the layers.



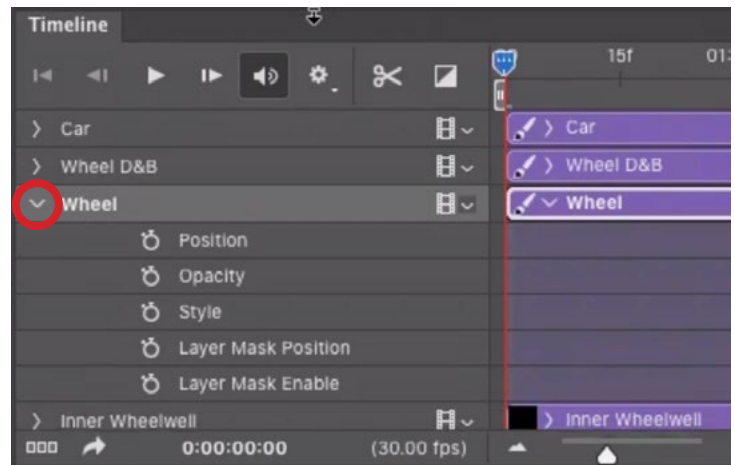
**In the Timeline Panel, we are opting to create a Video Timeline.**

**Hide layer thumbnails in Timeline** In the Timeline Panel, the layer thumbnails take up a lot of room and I, personally like to condense them. We will be using the Layers Panel to switch between layers so it's not necessary to have them expanded like this. We'll click on the little menu in the top right corner of the Timeline Panel and we'll choose "Panel Options" from the pop-up menu. A dialog will appear with settings that allow you to choose how large the layer thumbnails should be. There is also the option of "None," which will hide the thumbnails entirely. That's what I chose in the video example.



**LEFT: The layer thumbnails are large in the Timeline Panel. ABOVE: We removed the thumbnails so they don't take up so much space.**

We want to work on the wheel so we'll hide all of the other layers in the Layers panel. In the Timeline Panel, we'll click on the little arrow to the left of the Wheel layer and it will expand to display a list of the things that we can animate over time. These include the layer position, opacity, style, etc. We need the wheel to rotate, but that is not one of the options. We can get around this, however. To do that, the layer we're working on needs to be a Smart Object. We can convert the layer into a Smart Object by clicking on the Layer menu and choosing Smart Objects > Convert to Smart Object. Now that the layer is a Smart Object, the "Position" element is replaced with a "Transform" element and this will allow the animation to keep track of the wheel rotation. (Transform includes changes that include scale, rotate, move distort, etc.)



**We clicked on the disclosure triangle for the wheel layer (circled) to see all of the elements that the animation can keep track of.**

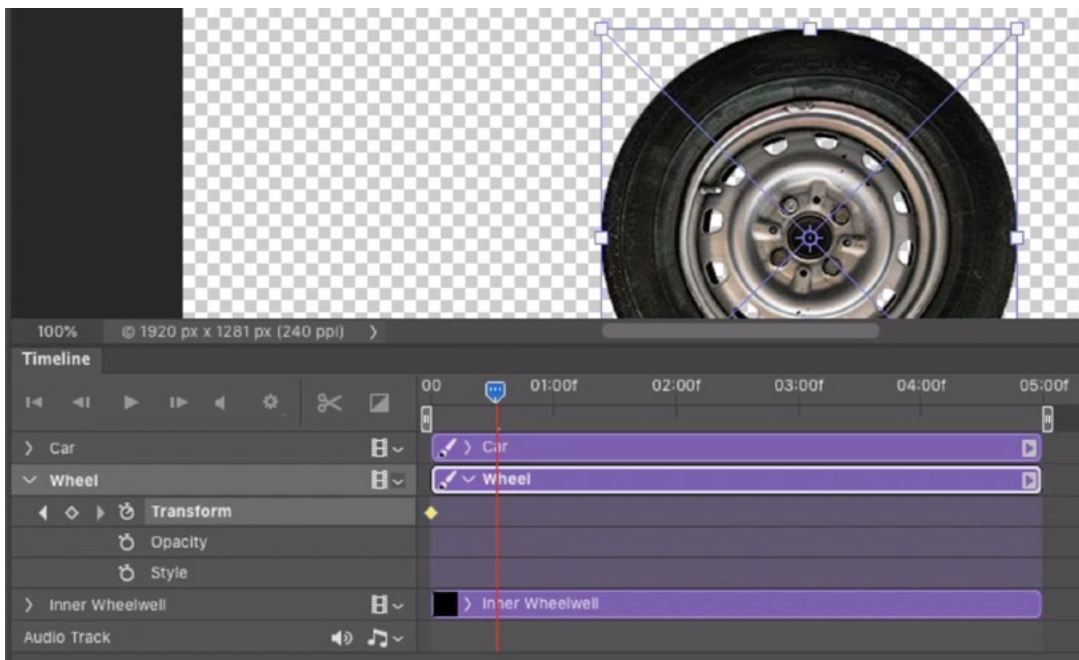


**The Wheel layer was converted into a Smart Object and the animation now has the ability to keep track of "Transform" adjustments.**

The frame of time taken by the animation is shown at the top of the Timeline. It will display seconds as well as frames. In our document, 30 frames make up one second of time. We can zoom in and out on the Timeline by using the slider at the bottom of the panel. It can sometimes be helpful to zoom out on the timeline so that we are seeing seconds instead of individual frames.

The Playhead is the red line that runs vertically down the Timeline and it can be repositioned by dragging the little blue scrubby slider at the top of the Timeline. It starts off on the far left side, at the very beginning of the animation. While the Playhead is in this location, we'll click on the little stopwatch icon to the left of the "Transform" element beneath the Wheel layer. This tells the animation to keep track of the position, rotation and size of the layer at this point in time. A little yellow diamond will appear in the Timeline, indicating that the location is marked.

Next, we'll move the playhead to the point in time when the tire should be rotated half-way around. That will be at about the half-second point. Then, we'll click on the Edit menu and choose "Free Transform." The Free Transform handles will appear around the wheel and we'll use them to rotate the wheel half-way around.



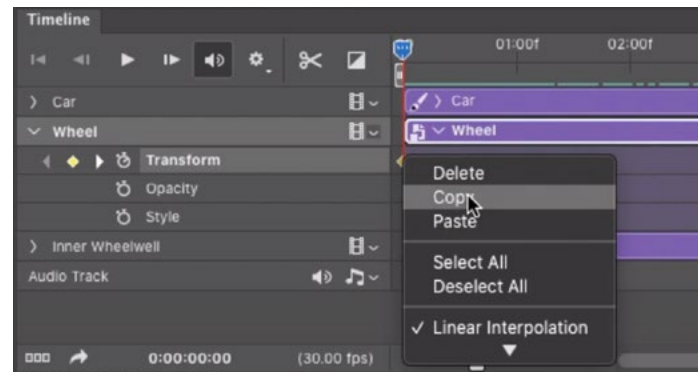
We clicked on the watch icon to tell the animation to record any transformations. Here, we moved the Playhead to the half-second mark and we are using the Free Transform command to rotate the wheel half-way around.



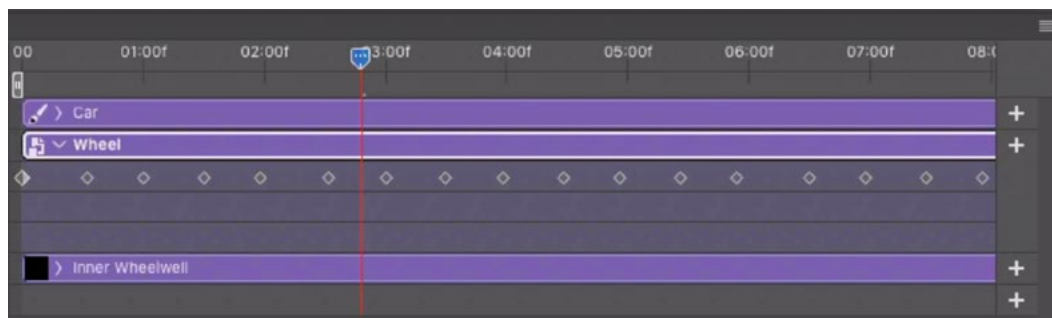
If, instead, we wanted to be really precise, we could type in 180 degrees in the rotation field that appears within the Options Bar. We'll click Return/Enter to lock in the transformation. A second little diamond will appear on the Timeline, recording the transformation.

Now we already have the first yellow diamond that records the wheel in the upright position so we can simply copy that marker and position the copy at the one-second mark. To copy the marker, we'll right-click on it and choose "Copy" from the pop-up menu. Then, we'll move the Playhead to the one-second mark, we'll right-click on one of the diamonds and choose "Paste" from the pop-up menu.

At this point, we have the wheel starting out at its upright position. It rotates upside down over the course of the first half second and it rotates back up to normal during the second half-second. Now, we just need to repeat this process. We'll select the second and third diamond markers (we can select more than one by holding down the Shift key.), we'll right-click on one of the diamonds and again choose "Copy." Then, we'll position the Playhead to 1.5 seconds, right-click on an existing diamond and choose "Paste" from the pop-up menu. The two markers will be pasted onto the Timeline. We'll repeat that process, this time selecting and copying four of the diamond markers and then pasting them after another half second.



**We are copying the diamond marker by right-clicking on it and choosing "Copy" from the pop-up menu.**



**The diamond markers that represent the wheel rotation have been copied and pasted to the end of the Timeline.**

Eventually, we may need to extend the Timeline, and we can do that by dragging the right ends of the purple bars to the right. We'll do this and extend the animation to 10 seconds. Then, we'll continue copying and pasting the markers until they reach the end of the timeline. It is important that we ensure that there are an even number of markers so that the position of the wheel is the same at the start and end of the Timeline. This will allow for seamless looping of the animation. To see what the animation looks like, we can position the Playhead at the beginning of the Timeline and then click the triangular Play button on the left side of the Timeline Panel.

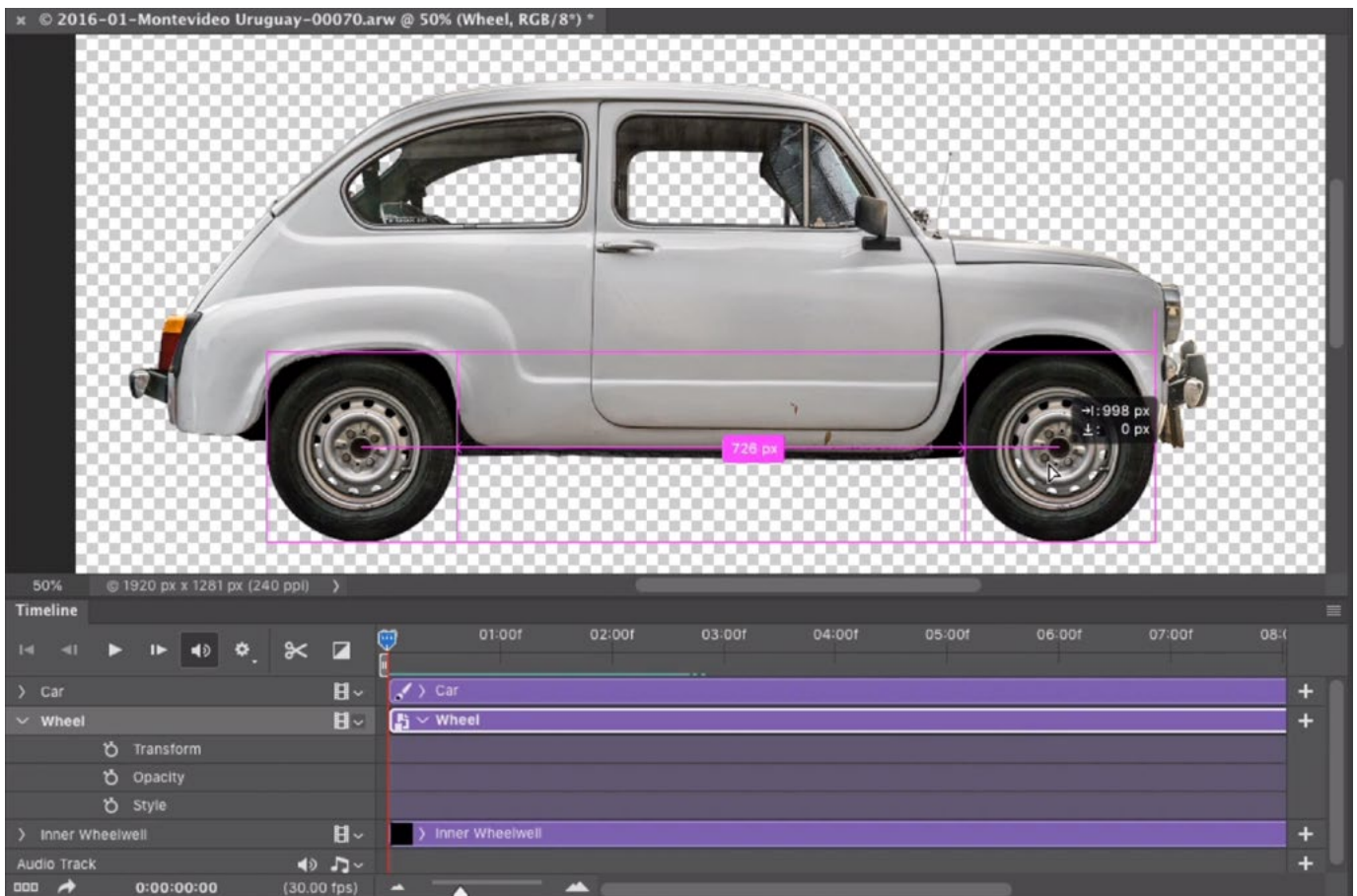
## **Copy the Back Wheel to Use as the Front Wheel (31:55)**

The back wheel is animating nicely. We need to somehow copy this back wheel to use as the front wheel, but we need to be careful. It's easy to create problems when making changes to layers when you have an active Timeline. For example, if we were to duplicate the wheel when the playhead is in the middle of the Timeline, that duplicate will only appear once the animation reaches that part in time. We need two wheels to be present from the start!

In order to make the wheel duplication task foolproof, we're going to wrap the wheel layer (and the animation along with it) inside a Smart Object. Yes, the layer is already a Smart Object, so this means we're going to have a Smart Object inside of a Smart Object! The reason for this is that we applied an animation to the Smart Object and now we want that animation to be wrapped inside of another Smart Object.

We'll make sure the wheel layer is active, we'll click on the Layer menu and choose Smart Objects > Convert to Smart Object. You will see the Wheel layer in the Timeline change to include the Smart Object icon. The little diamond markers (that log the rotation) disappear because they are now embedded inside the Smart Object.

Now we can copy the back wheel and use the copy as the front wheel. You can copy a layer by holding down the Option key (Alt on Win) and then clicking and dragging on the active layer. This will drag out a copy, and you will see that new layer appear within the Layers Panel. Note that the Move Tool must be active when doing this. With the Move Tool active, we'll hold down the Option key (Alt on Win) and click and drag out a copy of the wheel, positioning the copy within the front wheel well. We can now click the Play button within the Timeline and both of the wheels will animate.



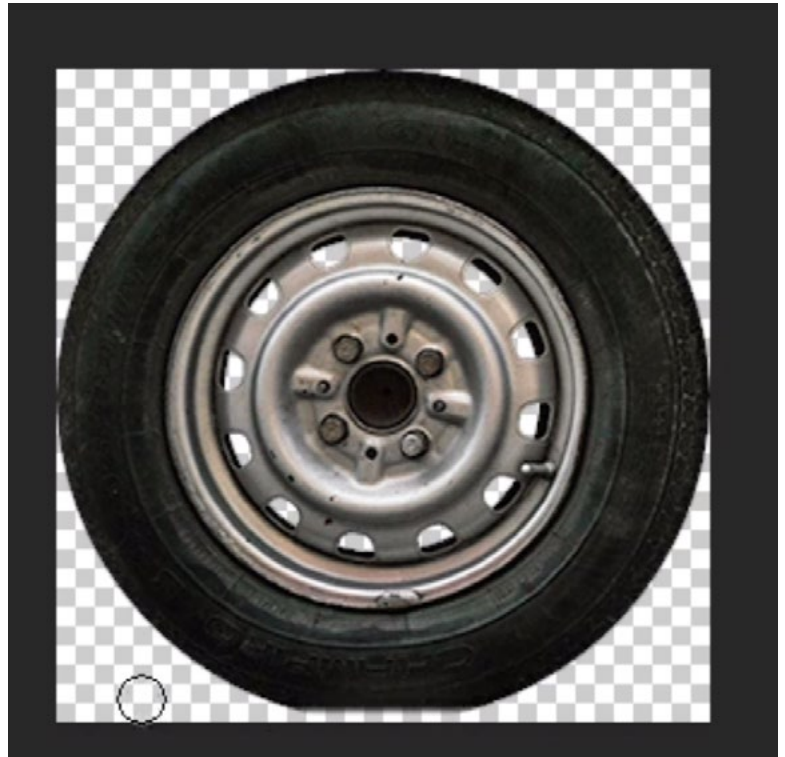
The Wheel layer was converted into a Smart Object so that the animation could be embedded inside that Smart Object. Here, we are duplicating the back wheel to use as the front wheel.

## Flatten the Wheel Bottoms (35:37)

When a car moves down the road, the very bottom of the wheel is a bit flat, and we don't have that in this animation. We need to hide the very bottoms of the wheels to make them look as if they flatten very slightly as they move down the road. We'll do this by editing the Smart Object to add a layer mask that hides the very bottom of the layer, making the bottom of the wheel look flat.

Whenever you duplicate a Smart Object, it thinks of it as two instances of the exact same thing. This means that we can make a change to one of the Smart Objects and that change will happen to the other as well. Therefore, we can flatten one of the wheel layers and the other will flatten as well.

In the Layers Panel, we'll double-click on the thumbnail for the Wheel copy layer. This will open the Smart Object in a separate Photoshop document. We'll add a layer mask to the wheel layer by clicking on the Layer Mask icon at the bottom of the Layers Panel. The mask will be completely white by default. When we add black to the mask, we will be hiding parts of the layer. We'll activate the Brush Tool and use a semi-hard brush to paint with black over the very bottom part of the wheel, creating a small flat area.



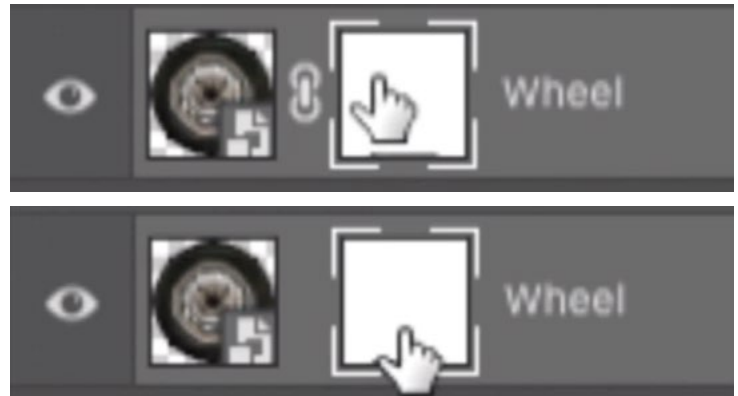
**We double-clicked on the wheel Smart Object layer and it opened in a separate document. Here, we added a layer mask and are painting with black on the mask to flatten the bottom of the wheel.**



This looks good, but we need to make sure that the layer can animate independently of that layer mask. If the mask were to rotate as well, then the flat part of the wheel will go round and round. We need it to stay at the bottom, where the wheel meets the road. In the Layers Panel, you'll see a little link icon between the layer thumbnail and the mask thumbnail.

When the layer and the mask are linked, the mask will move along with the layer. We will click the link icon to unlink the two. This will allow the wheel to rotate while the mask stays in place.

We can now save and close this Smart Object document so that we can return to the original car document. Here, you can see that both Smart Objects were changed and that both tires now have a flat area on the bottom.



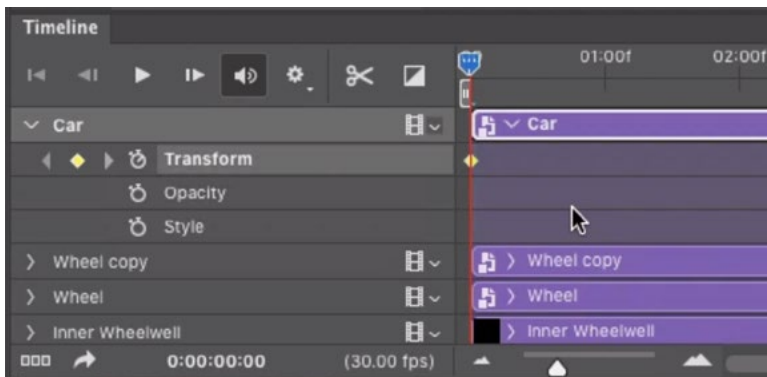
**We clicked on the link icon to unlink the layer from the layer mask.**



**After making a change to one of the Smart Object wheel layers, you can see that the other instance of that Smart Object (the other wheel) received the change as well.**

## Animate the Car Body (38:05)

Now we're going to animate the body of the car. We'd like to make it look as if it were undulating up and down a bit as it moves down the road. We'll activate the Car layer and we'll expand the Car layer in the Timeline by clicking on the little arrow to the left of the layer name. This will expand the list of elements we can keep track of. One of these things is the Position of the layer. We not only need the animation to keep track of the position, but we also need it to keep track of transformations (rotation, scale, movement, etc.). To be able to do this, we need to convert the layer into a Smart Object. We'll click on the Layer menu and choose Smart Objects > Convert to Smart Object. Now, you can see that "Transform" is included in the list of things the animation can keep track of.



**The Playhead was positioned to the beginning of the Timeline and we clicked the watch icon, telling the animation to keep track of transformations to the layer.**

We'll make sure that the Playhead is at the very beginning of the Timeline and we'll click the little watch icon to the left of the word "Transform." This will tell the animation to keep track of transformations to this layer, starting with the current position in the Timeline. A little diamond marker will appear in the Timeline.

Now we want to make the car move a bit. We'll move the Playhead to about the 1-second mark, where the car will "hit a bump in the road." We'll click on the Edit menu and choose Free Transform. The transform handles will appear around the car and there will be a little crosshair in the middle of the layer. If you don't see the little crosshair, the setting to turn it on can be found on the left side of the Options Bar. (It is a little check box.) This little crosshair represents the pivot point, and we're going to position this point on the center of the back wheel.

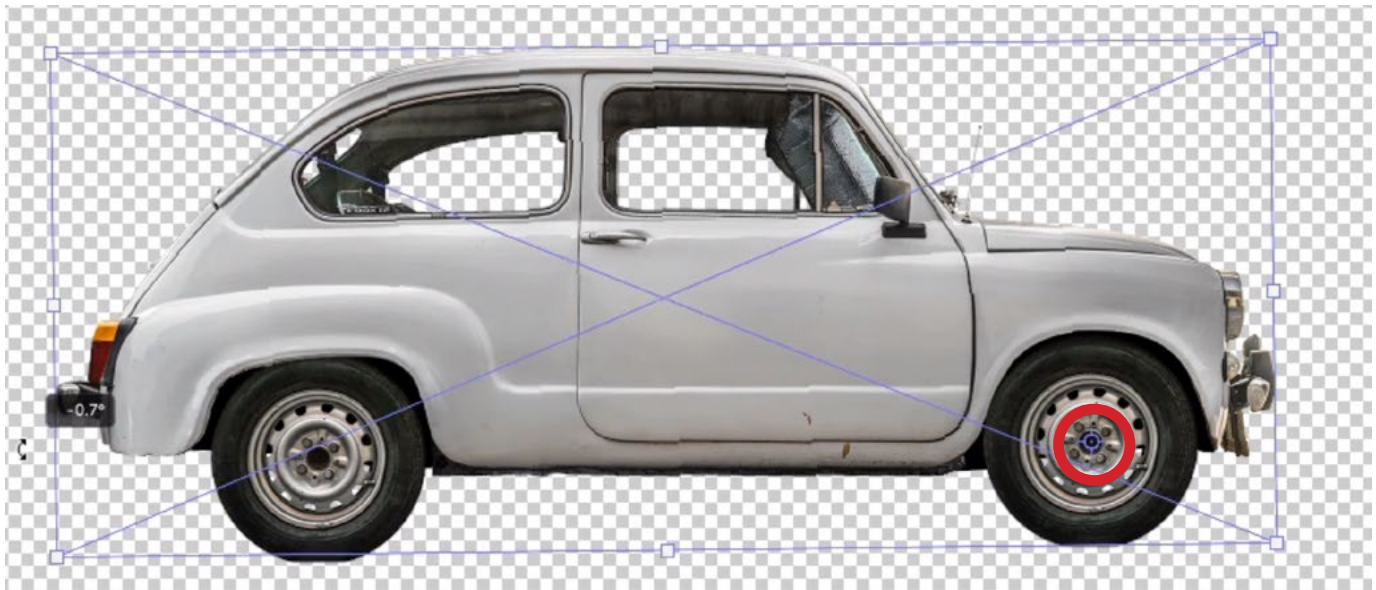
Then, we'll rotate the front of the car downward a bit by clicking and dragging down outside the right edge of the transform box. We'll press Return/Enter to lock in the transformation. A second little diamond will appear in the Timeline, indicating that it is keeping track of the transformation that just occurred.



**The Free Transform crosshair (circled) was positioned on the back wheel and the front of the car is being rotated down a bit.**

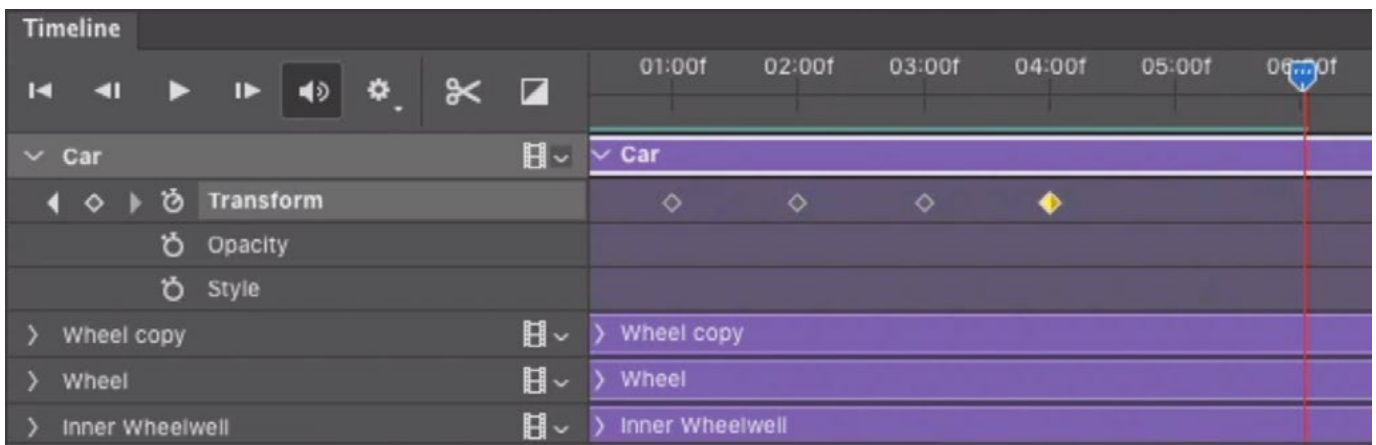
After about another second, we want the car to return to its neutral position. We'll position the Playhead at that 2-second mark. The first diamond (at the 0 mark) records the car in this position, so we'll right-click on the diamond and choose "Copy" from the pop-up menu. We'll then right-click on the diamond a second time and choose "Paste." The pasted marker will be placed where the Playhead is positioned, at the 2-second mark.

Now we'll make the back of the car undulate a bit. We'll position the Playhead at around the 3-second mark for this. We'll click on the Edit menu and choose Free Transform. This time, we'll position the cross-hair pivot point to the center of the front wheel. Then, we'll rotate the car slightly so that the back of the car is lowered a bit. We'll click the Return/Enter key to lock in the transformation.



The Free Transform crosshair (circled) was positioned on the front wheel and the back of the car is being rotated down a bit.

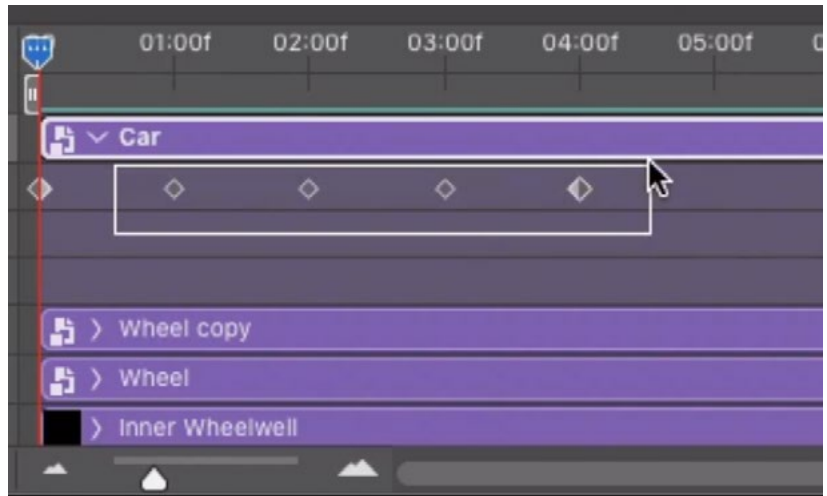
One second later, we want the car to be back to its original position. We'll move the Playhead to the 4-second mark. We'll again right-click on the original diamond (at the 0 mark) and choose "Copy" from the pop-up menu. Then, we'll simply right-click on the diamond again and choose "Paste." The new marker will appear where the Playhead is, at the 4-second mark.



There are now four markers representing transformations to the car. The first marker is where the front of the car moves down. The second marker is where it returns to neutral. The third marker is where the back of the car moves down. The fourth marker is where it returns to neutral again.



When we hit the Play button, we can see the car undulate up and down. We just need to copy the current diamond markers so that the motion repeats through the end of the animation. We're going to select all of the markers except the first diamond. (The first marker and last marker are the same, so we don't want to repeat that position twice in a row.) We can select multiple markers by drag-



**We're dragging out a rectangle to select multiple diamond markers.**

ging out a rectangle around all we want selected. With the four markers active/selected, we'll right-click on one and choose "Copy" from the pop-up menu. Then we'll position the playhead at one second beyond the last diamond (5 seconds), right-click on one of the diamonds again and then choose Paste. The four diamond markers will be pasted into the Timeline. We will repeat this process until the animation reaches the end of the Timeline.

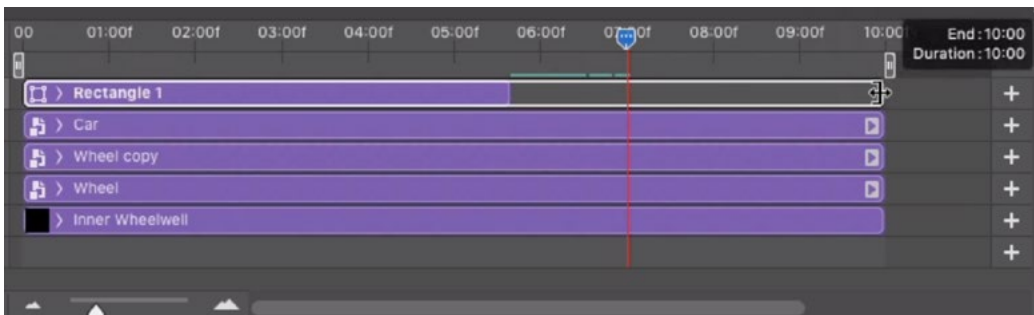
## Add a Backdrop (42:28)

The car is moving along nicely now, so it's time to add a background. The first element of the background will be the road. We'll activate the Rectangular Shape Tool and make sure that it's set to create a Shape Layer and not a pixel layer. This setting can be found on the left side of the Options Bar. We'll make sure that the Foreground color is set to black, because that will be the color of the road. The Foreground and Background color swatches can be found at the bottom of the Toolbar on the left side of the interface. Then, we'll use the tool to drag out a long rectangle along the bottom of the document, so that it meets the car tires.



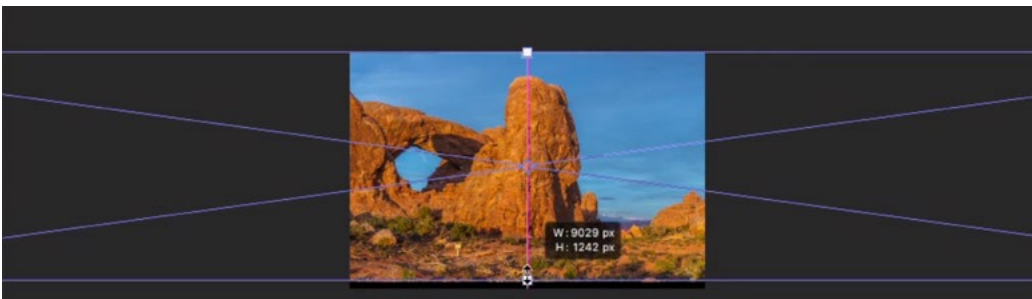
The Rectangular Shape Tool is being used to create a road on the bottom of the frame.

The new Shape Layer will appear in both the Layers Panel and in the Timeline. If it does not extend across the entirety of the Timeline, we can simply drag the edges of the bar until it does take up the entire Timeline.



The Rectangle Shape Layer did not extend to the end of the Timeline, so we are dragging the right edge to the end of the Timeline.

Next, we'll insert a scene into the background. I have a long panorama image that we're going to use as the background so that the car can drive across the long scene. We'll drag the pano image into the Photoshop document and size the image so that it's as tall as the document. Then, we'll drag this layer so that it's below all of the layers that make up the car, just above the Background layer.

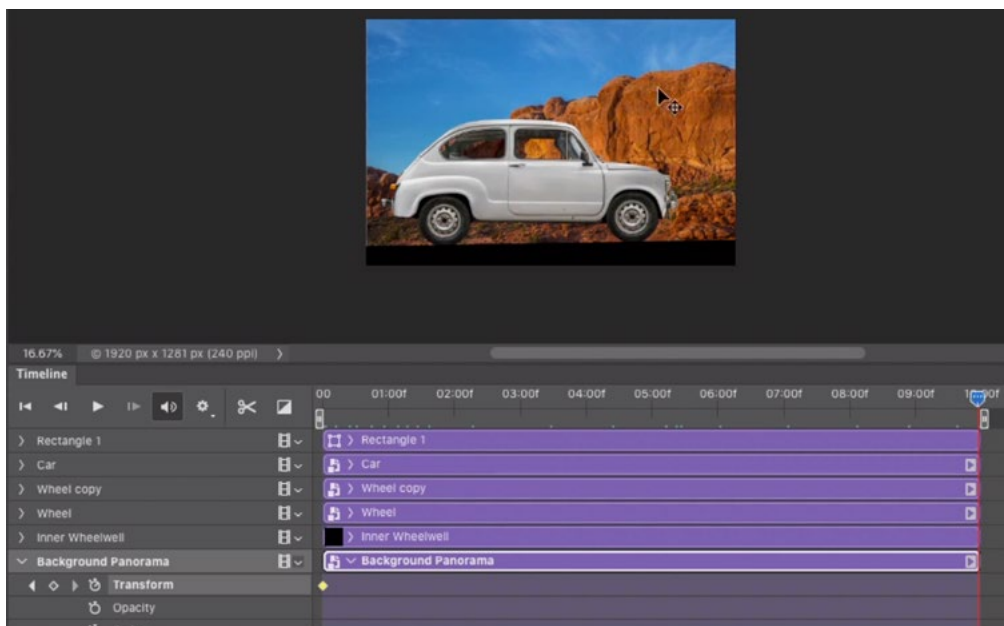


The panorama layer is being sized so that it's as tall as the document frame.

We'll now use the Move Tool to position the left edge of the panorama with the left edge of the document window. This is where the car will start its journey. In the Timeline, we'll drag the edges of the panorama bar so that it extends across the entire animation. Then, we'll click on the little triangle to the left of the layer name to expand the layer. In the video example, the pano image was moved into the document as a Smart Object, which means that we have the ability to track any transformations made to the layer. If, instead, you moved the image into the document as a regular layer, you could convert the layer into a Smart Object by clicking on the Layer menu and choosing Smart Objects > Convert to Smart Object. We'll make sure that the Playhead is all the way on the left side of the Timeline (at the 0 mark) and we'll click on the little watch icon to the left of the word "Transform." This will tell the animation to keep track of any transformations made to the layer.

Next, we will move the Playhead to the very end of the animation. We'll use the Move Tool to reposition the pano layer so that the right side of the panorama aligns with the right side of the document frame.

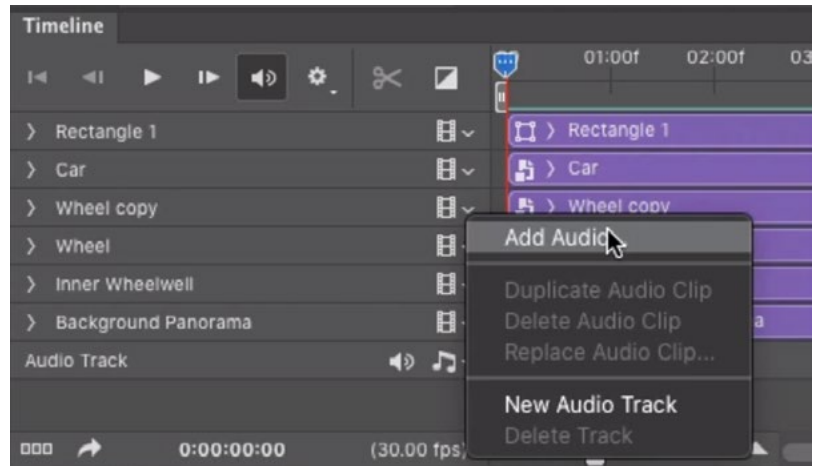
We can now move the Playhead to the beginning of the Timeline and hit the Play button to view the animation. If it goes very slowly the first time you play the animation, it just means that it's taking some time to render all of the frames. It can take especially long if any of the images included in the file are very large.



**At the start of the Timeline, we positioned the left edge of the panorama to align with the left edge of the frame. At the end of the Timeline, we positioned the right edge of the panorama to align with the right edge of the frame. The animation will move the pano across the frame.**

## Add Audio (49:12)

In the Timeline Panel, below all of the layer names, you will find an “Audio Track” option. If you’d like the animation to include audio, you could click on the little down-pointing arrow to the right of the audio icon and choose “Add Audio” from the pop-up menu. This will open a Finder window and prompt you to navigate to the desired audio file on your hard drive. In the video example, we used a track that was downloaded from a creative commons website.



**We are clicking on the little down-pointing arrow to the right of the audio icon to access this menu.**

The track will appear as a green bar in the Timeline. If you want to cut or split the track so that it can begin in a certain location, move the Playhead to the location where you’d like to split the clip, click on the little menu in the top right corner of the panel and choose “Split at Playhead.” Then, you can click on one of the pieces to make it active and tap the Delete key to remove it.

## Saving and Exporting (52:32)

To export the animation so that you can view it outside of Photoshop or give it to someone else, click on the File menu and choose “Render Video.”

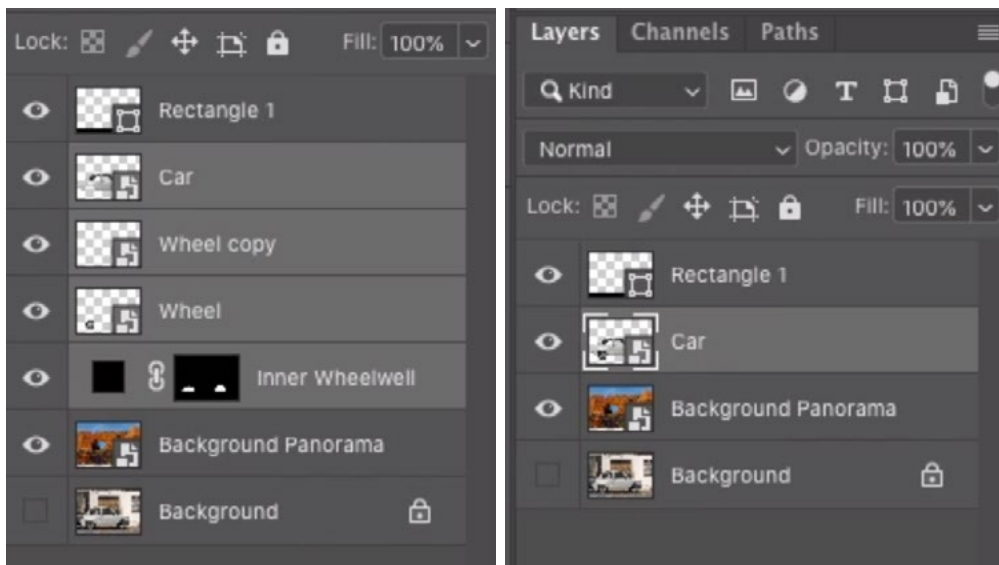
NOTE: In the video, it is mentioned that you can save the file in the GIF format in order to get a looping animation. Upon exploring this option further, I discovered that this option doesn’t actually work, so we’re sorry for that error!



## Convert Car into Smart Object for Simpler Future Use (53:28)

One last thing we could do is simplify the document so that the animated car can easily be used on other backgrounds, without the complexity of all the layers. We'll select all of the layers that make up the car (the body layer, the wheel layers and the wheel well layers). Then, we'll click on the Layer menu and choose Smart Objects > Convert to Smart Object. This will combine all of those layers into one tidy package as a Smart Object. All of the animation for the car will also be contained in this Smart Object, so it will simplify the Timeline as well.

We could now move this Smart Object layer into another document and it will retain the entire animation in that new document.



**We selected all of the layers that make up the car (left) and converted them into a single Smart Object (right).**