After posting a request on smcars.net and hunting the internet I developed this tutorial to do exactly what I wanted to do, assign a car paint material and onerlay decals without uvw unwrapping the model.

I cannot take any credit for the actual tutorials used, but I did combine them and fiddle arounfd to achieve the desired result.

All credit for the actual tutorials goes to:

Car paint Basics by Daniel Buck
www.3dtotal.com/team/tutorials/ daniel_basic/daniel_basicp_01.asp

Decal Mapping by ray_ from Knight of the 3d-Palace
WWW.3d-Palace_com - [Tutorial - Max] Decal Mapping.htm

And a Russian tutorial that I translated into English via bablefish
[http://babelfish.altavista.com/]
but I cannot remember the site, I am sure there is a link somewhere on smccars.net

Tutorials3d for the Lamborghini tutorial this car is based on [[www.tutorials3d.com]
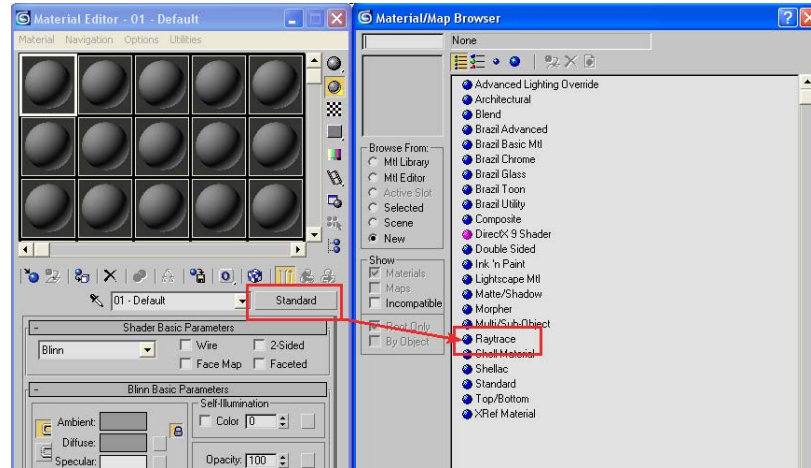
Special thanks to :

DrunBoPing
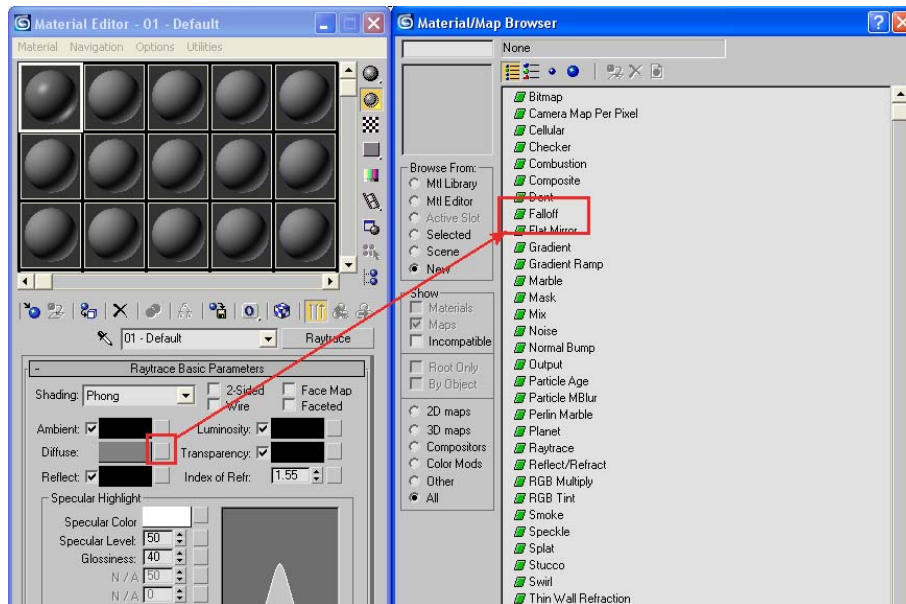
NightEye

Both from smcars.net forums

Step 1.
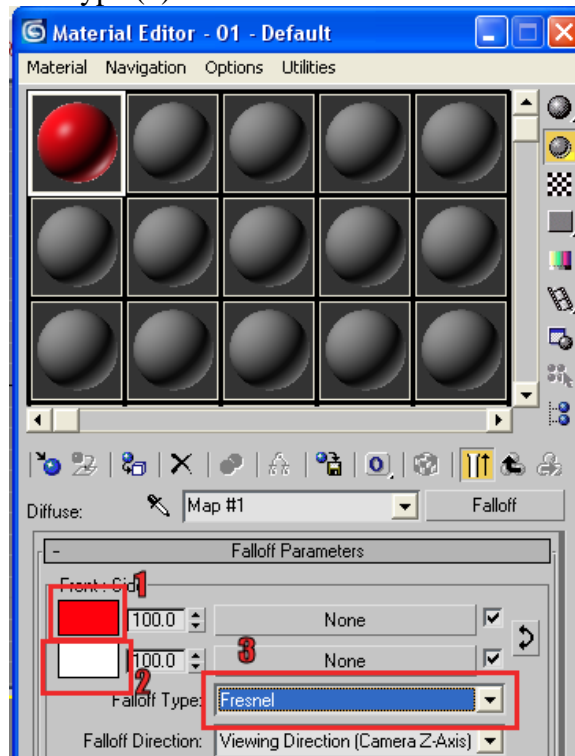Open material editor and select a material slot.

Click standard button and select raytrace .

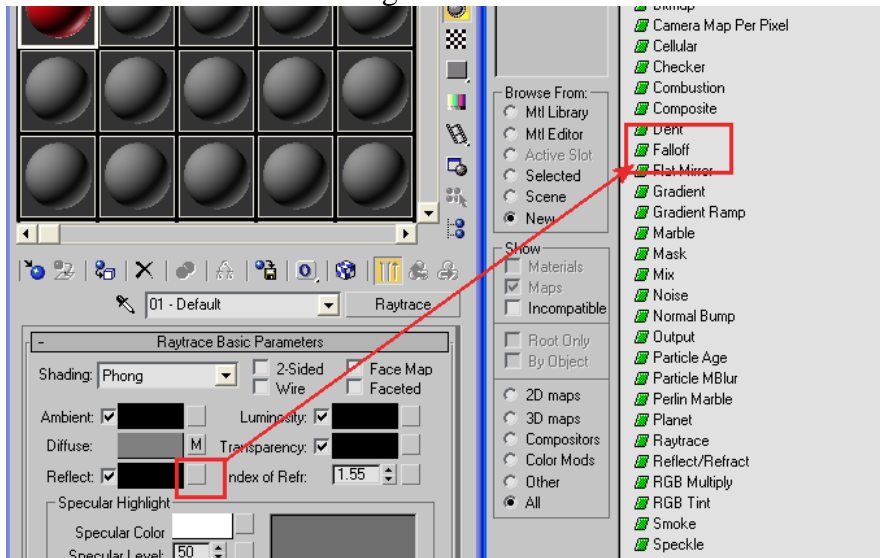Click the small box next to diffuse and select falloff.

In the top falloff box (1.) choose your paint colour. Leave the lower colour box (2) white and change Falloff type (3) to Fresnel
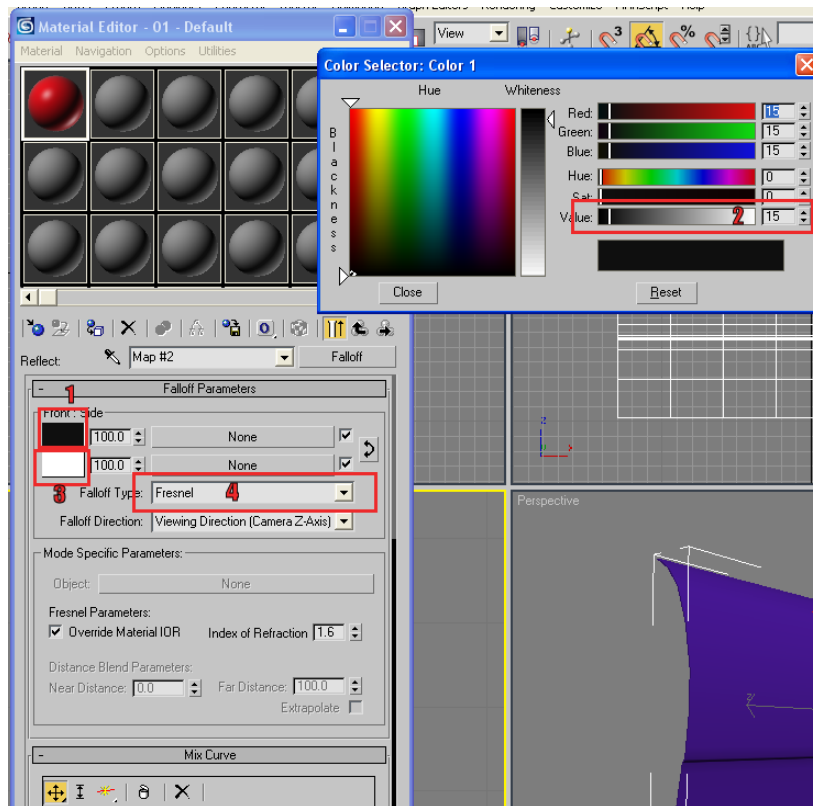

The click the up level button

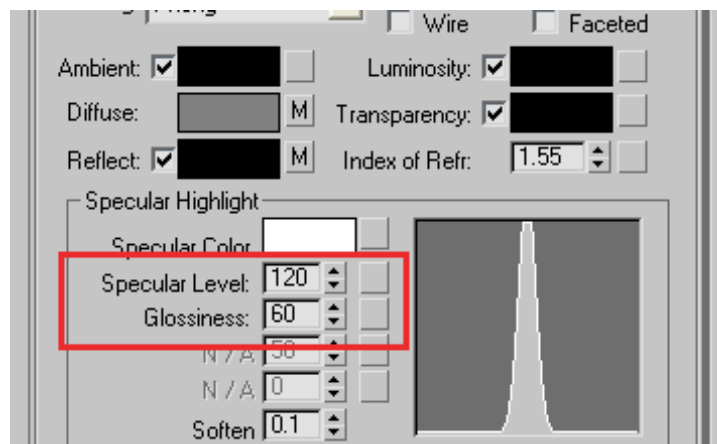Next click on the Reflect button and again select Falloff

This time change the top colour (1) to a very dark grey, Value of about 15.(2)
Leave the bottom colour white (3) and change the falloff type (4) to Fresnel

Click the up one level button

Set Specular colour to 120 and glossiness to 60.

Step one complete, assign this to an object and render……………

First render…

Step 2

Set the decals required up in any paint package, here the bridgestone logo will be used with a mask of the logo as well. MAKE sure both png files are EXACTLY the same size.
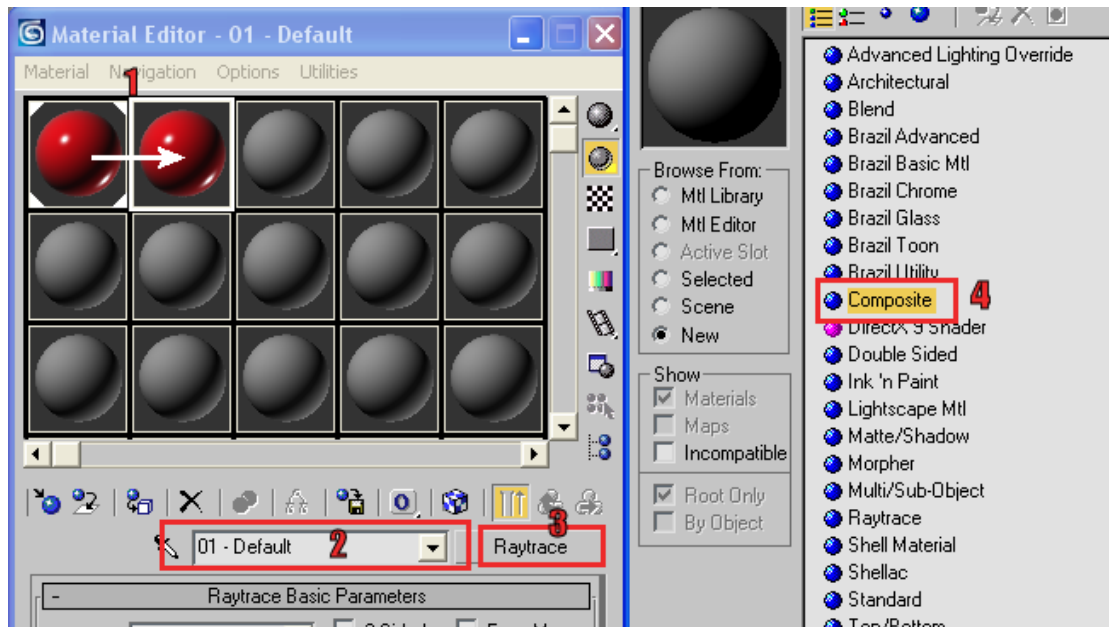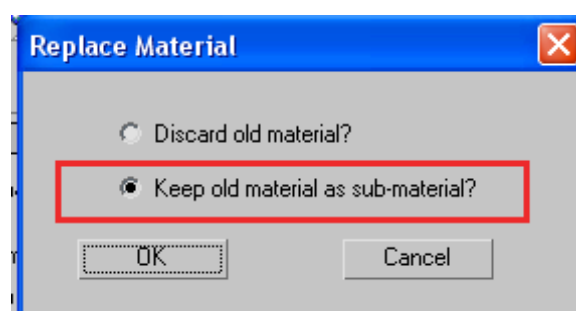
Decalmap.png

Decalmask.png

Back to the material Editor in Studio Max.

Click and drag the first material into another slot (1), then rename this new material (2), click the raytrace button (3) and select composite (4)
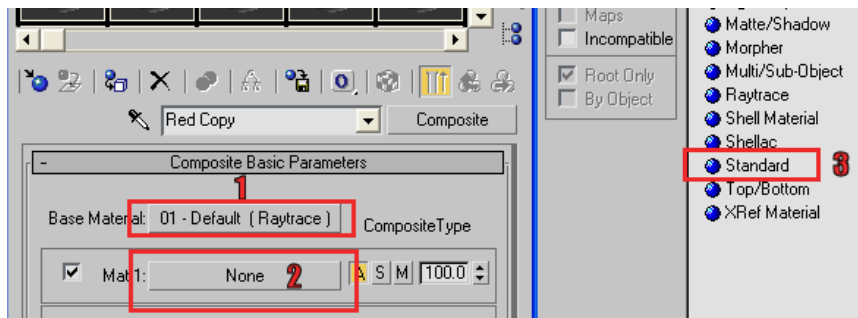

IMPORTANT. On the next dialogue box select keep old material as sub material and then click OK.
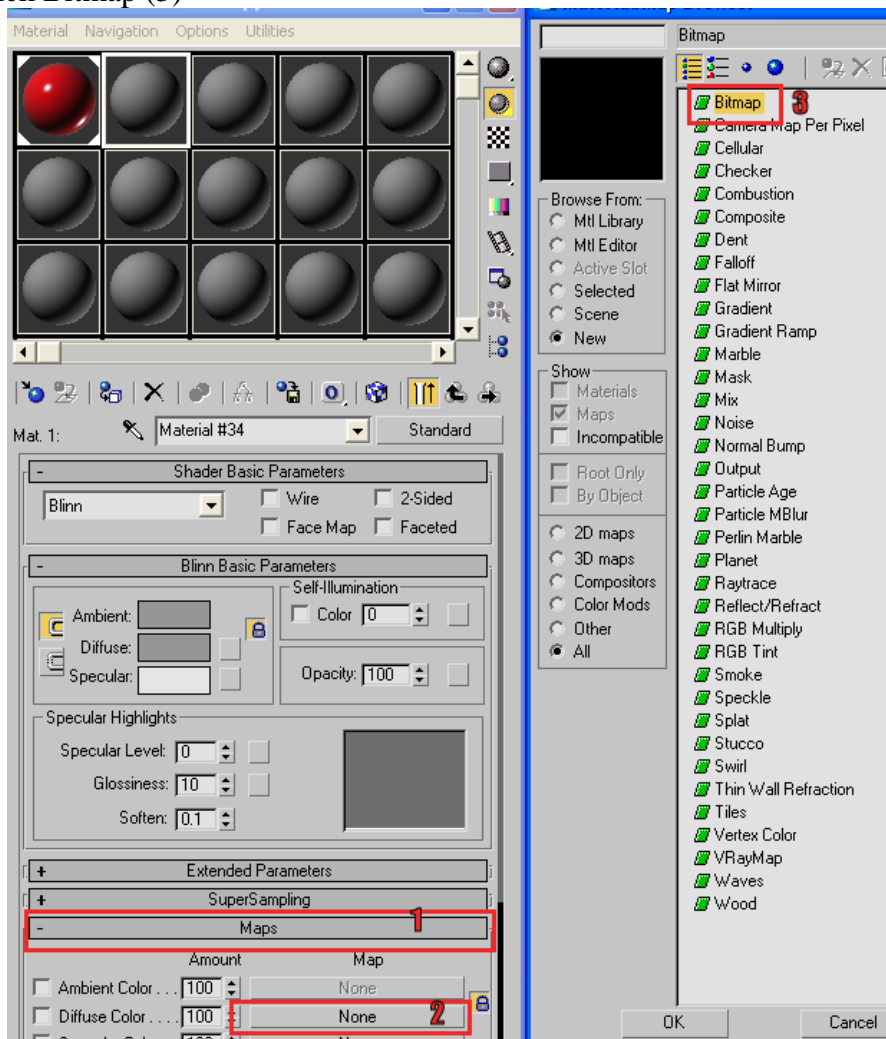

If all has gone ok the Base Material (1) should be the first car paint setup above.

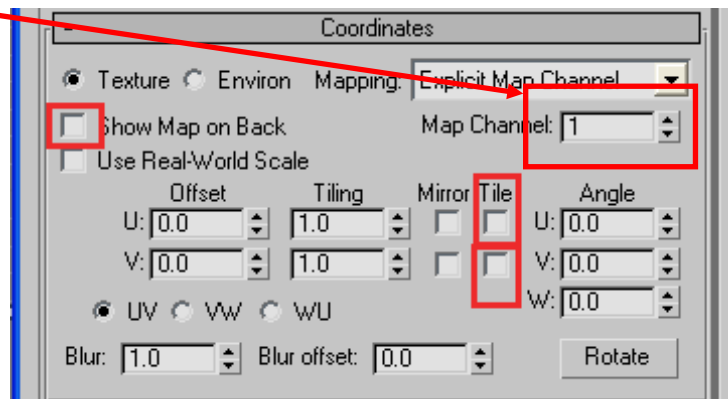Click the None button (2) next to Mat1: and then select Standard (3)

Select the maps rollout (1) and click the None button (2) next to diffuse colour,
Then click Bitmap (3)
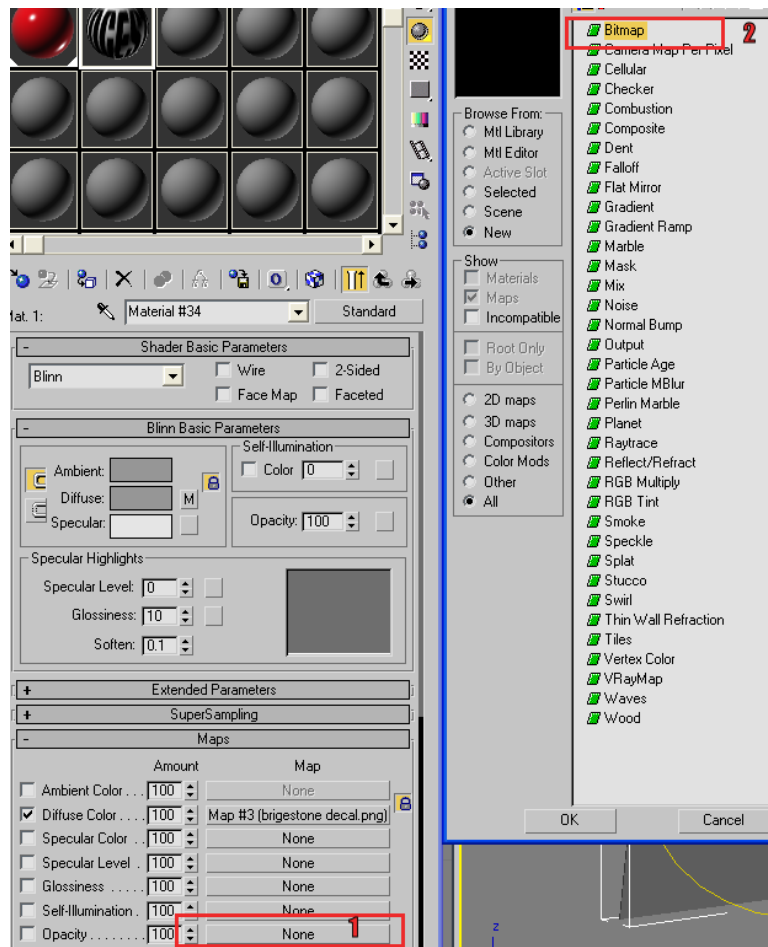

Select the decalmap.png

Remove the ticks from the three boxes highlighted below. Remove the ticks from the tile boxes first to un-ghost the show map on back option. Make a note of the channel map.
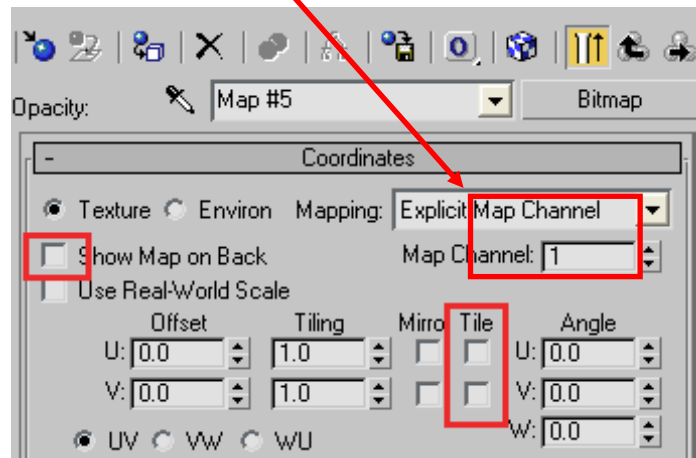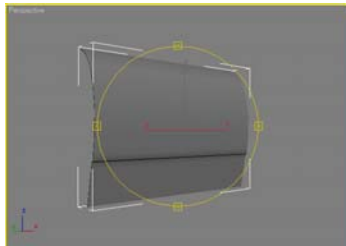

Click the up one level button

Select the None button (1) next to Opacity, select Bitmap(2) and the locate your decalmask.png file
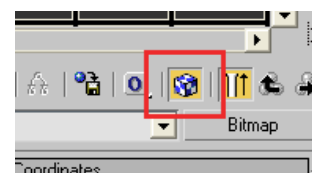
Again uncheck the three boxes indicated, starting with the tile options.
Again a note of the channel map, ensuring it is the same as for your decal map
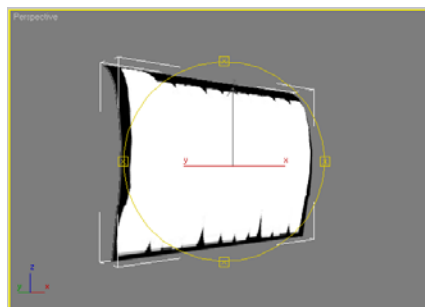

Drag the new material to your object. If it appears plain grey as below….

Click the blue and white chequered box in the material editor (Show map in view port)

And your decal should appear as follows.
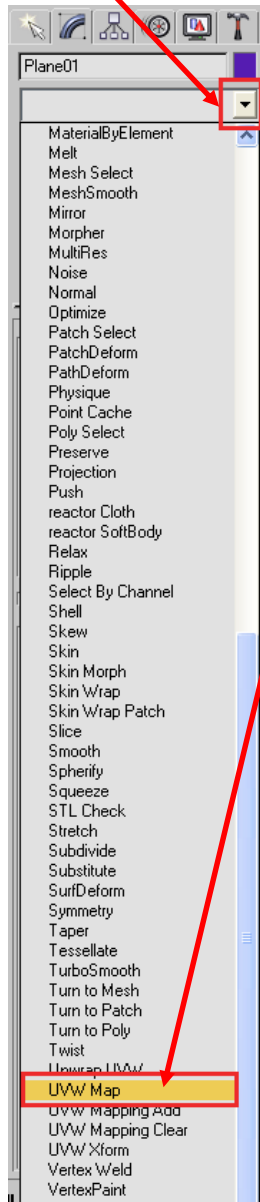

And render your scene..

Second render

WOW. Big logo, in step three we will resize it.

Step Three

To resize your decal you need to apply a UVWmap to your object, click the modifier rollout button and select UVW map indicated
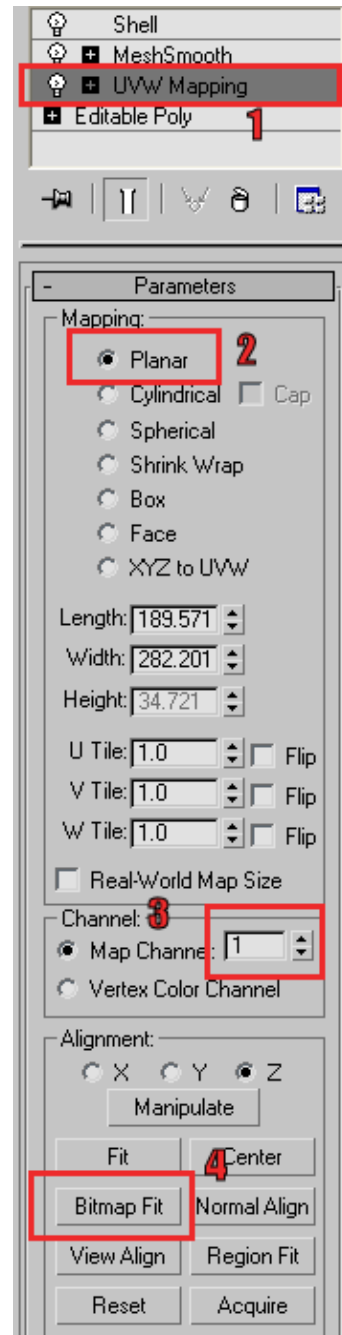
The UVWmapping modifier will now appear in the stack (1)
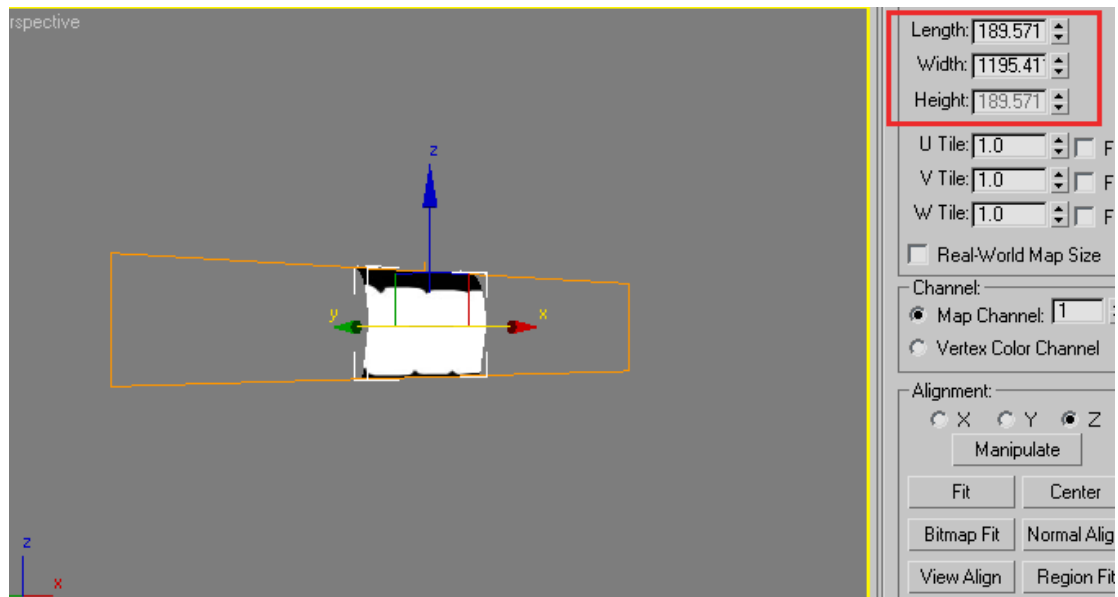
Ensure planar is Selected (2)

Change the map channel To the same as selected For the decal and mask bitmaps   (3)

Click Bitmap fit button (4)

In the select image box select the Decalmap.png file that was used as the diffuse bitmap.

The orange outline is the bitmap (decalmap.png) outline, it can be resized using the parameter boxes highlighted below.

It can also be moved, resized and rotated like any other object in max, but to do this you have to manipulate the UWVmap gizmo.

Click the box next to the lightbulb and select gizmo
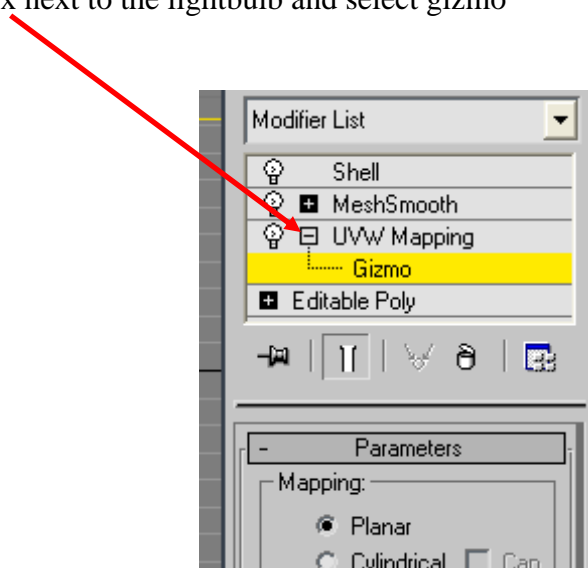
You can now manipulate the position and size of your decal

Once you are happy with the size and position, render your scene…..

Render 3.

Render 4.

The following renders were done to demonstrate more than one decal. Each decal has been assigned a map and mask in composite basic materials parameters, and also its own map channel. A uvwmap was also added to the modifier stack for each decal and a map channel assigned to match the bitmap channel.

The ground is a plane with a white car paint (a detailed in step 1 above) assigned, the back ground is a diffuse bitmap on a plane. (this is just to give the car something to reflect.)

Render 5.

Render 6.