Basic Gradient Texturing

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Basic Forms Of Texturing

No Texture

Gradient Color Texture

Bump Map

Bump Map And Gradient
Benefits To Texturing

• Allows a simple object to appear “real”.
• Can be relatively easily created.
• Makes or Breaks a good model.
About Gradient Textures

- Think of them in terms of a paint program i.e. Photoshop, Aura, Painter etc.
- They can effectively layer with each other to create some very realistic textures.
- Can be adjusted on all of the surface editor buttons.
Creating A Rusted Object
Step 1:
-Trough the surface editor, select the surface you wish to apply the texture.
-Change the objects color, you can use what ever color you want, for this effect, however, I entered in R. 155, G. 91, B. 49.
Step 2:

- Now click on the texture editor for the bump channel.

- Again you can use any bump map you wish for future projects, but for the rust effect I used a Procedural Texture and selected “Dented” as the type.

- I then set the value to 23%, octaves to 25, and we will adjust the scale later, but for now you can leave it as is or you can hit automatic sizing.
Step 3:
- Go into the texture editor for reflection.
- Choose the gradient for the layer type, and bump as the input parameter.
- Select the upper most line on the gradient bar, enter in 23% for the value.
- Now create a new key by clicking below the first one on the gradient bar. Move the new slider all the way down to the bottom and set its value to 0%.
- Click on the copy button and choose “all layers” to copy this layer.
Step 4:

- Now go into the texture editor for specularity, and choose Paste. Select “replace all layers” from the drop down box to paste the gradient you made for the Reflection texture.

- Select the top most key at parameter 0 in the gradient bar, and set it’s value to 80%.

- Set the bottom key’s value to 2% at parameter 1.
Step 5:

-Do the same pasting process for Glossiness except enter 30% for the top value key at parameter 0 and enter in 0% for the bottom value key at parameter 1.

-Do the same pasting process for Diffuse except enter 58% for the top value key at parameter 0 and enter in 100% for the bottom value key at parameter 1.

-Make sure you are able to see the texture window to see what effects your texturing will produce for you when you render.
Step 6:

- Now go into the color channel and paste in the layers like you have before. Type 3 into the “End Field” box at the bottom of the window.

- Delete the lower most key, so you only have one key at the top of the gradient.

- Set the color for the one and only key to R. 129, B. 135, G. 150. Make sure it’s alpha is set to 100%

- Create a new key below the top one and set it’s parameter to .33, leave the rest of the settings as is.

- Create another key below the new one, and set it’s parameter to .82, it’s alpha to 100%, and it’s color to R. 151, B. 97, G. 64.

Step 6 cont:

- Create a new key below that one, set it’s parameter to 2.66, it’s alpha to 0%, and it’s color to R. 106, G. 53, B. 40.

- Create another new key just below that one and set it’s parameter to 2.91, it’s alpha to 42%, and it’s color to R. 209, G. 136, B. 101.
Step 7:

- Now create 3 keys in the approximate location as indicated by the image.

- Select the first of the three keys. Set it’s parameter to 1.75 and it’s alpha to 32%.

- Next select the middle of the three and set it’s color to R. 0, G. 0, B. 0. Set it’s alpha to 12%, and it’s parameter to 2.

- Finally select the bottom third key and set it’s alpha to 17%, and it’s parameter to 2.25.
Step 7:

- Lastly select the add layer button and select "Procedural" from the drop down menu.

- Set it’s procedural type to Turbulence.

- Set it’s color to R. 141, B. 71, G. 71.

- Change the opacity to 20%.
Step 8:

- Go back to the color and bump channels and go to their texture editors.

- Adjust the X, Y, and Z values under the position tab for both procedural layers.

- Looking at the window with your texture in it, adjust the three different X, Y, and Z values until you have something you like.
Step 9:
-Render!
Gradient color textures and a bump map work great together.

This was achieved by doing the following:

- Applying a procedural bump map. I used “dented”.
- Applying a color gradient for the color channel.
- Adjust the values until you are happy!
This one was created in a similar fashion as the one above...except I applied textures to more than just the color and bump channels. Similar to the way the rust effect was created.
-Now that you have basic knowledge about textures, you can apply them to something with more realistic.

-This was created with a bump map of some shingles, an alpha bump map, and a simple gradient color texture.
Helpful Links

-Daniel Hirsmuller-Counts:
http://www.ecst.csuchico.edu/~ranger/samples/CSCI140/tutorialsF04/danielhc.pdf

-Jeff Bohlin:
http://www.ecst.csuchico.edu/~ranger/samples/CSCI140/tutorialsF04/Bohlin_tutorial/Tutorial.htm

-Patrick Nelson:
Summary

- Gradient texturing when used with other forms and techniques of texturing can create some very realistic looking objects.
- Low render times, depending on models.
- Effective for blending colors and other channels together.
Thank You

Happy Halloween!