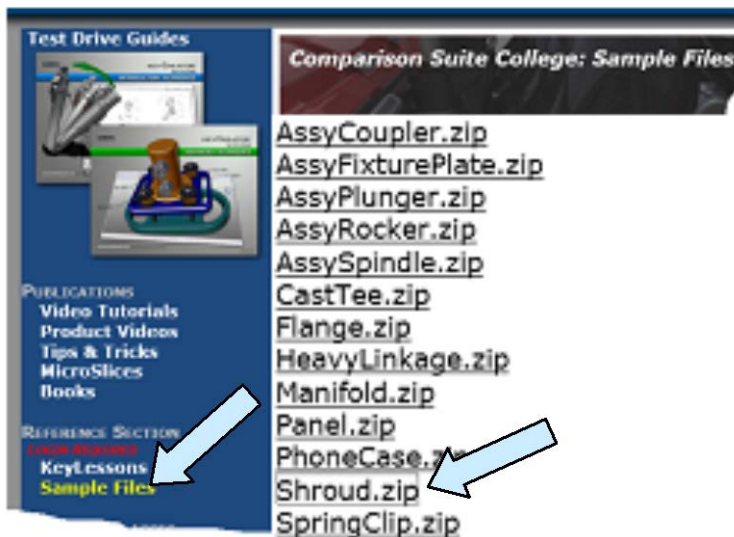# KEY**C**REATOR 3D Direct Modeling Software

KeyCreator Lesson KC8508

Working with a Complex Shroud

In this exercise we'll use two sample files provided in the Comparison Suite College for our work.

We'll use the same tools covered in earlier lessons but in this case the parts are more complex with a larger number of discrepant faces.

Start by clicking on the Sample Files Option on the left side of the main Comparison Suite College Screen.

Then, click on the Shroud.zip file in the list of available files.

Note: Each of these zip files contains a set of two files. One file has "Master" in the name and one file has "Copy" in the name.

The Shroud.zip file will appear in your Downloads folder on your computer. Right Mouse Click on the zip file and extract the two files within it.

You will have:

ShroudMaster.ckd
ShroudCopy.ckd

Click on the TOGGLE DIFFERENCE RESULTS Icon to display the window if it is not up.

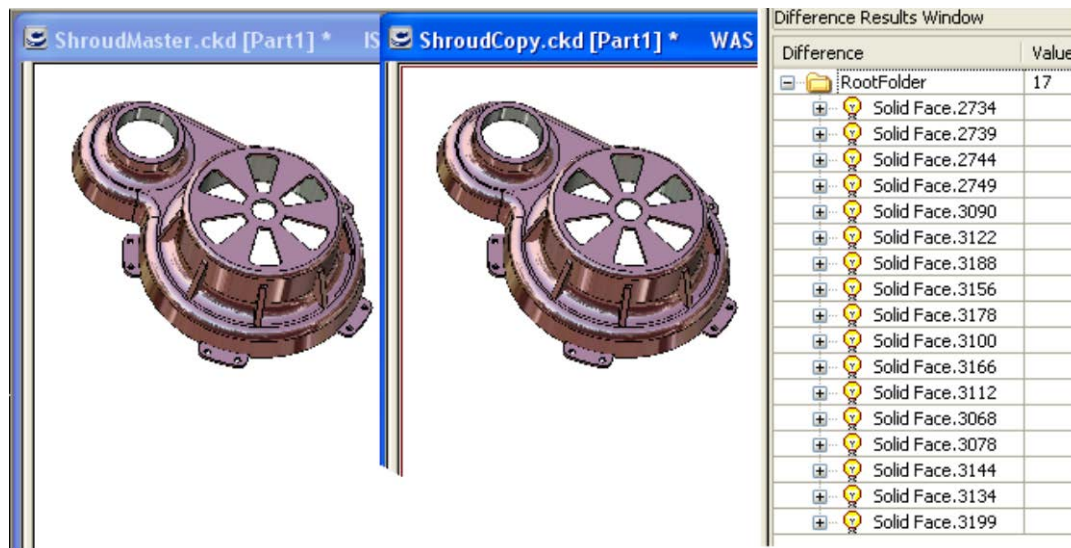**KUBOTEK Freedom and Precision www.kubotekusa.com**

KEYCREATOR 3D Direct Modeling Software

Next, click on the VALIDATE PARTS Icon.

Open the ShroudMaster file as the IS file and the ShroudCopy file as the WAS File.

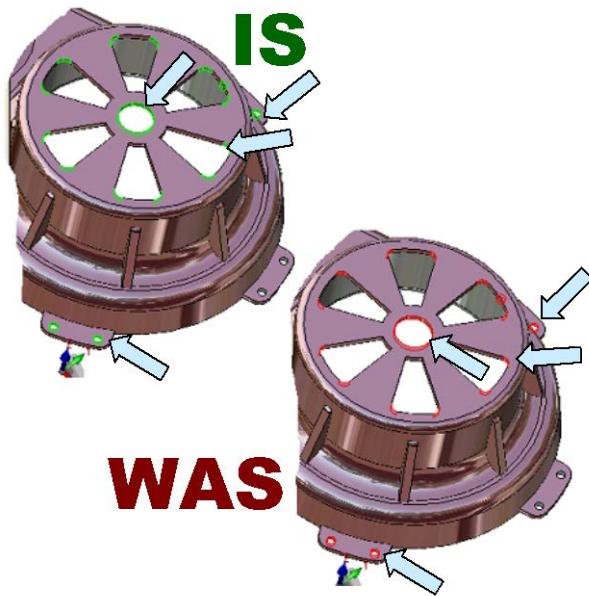Your screen should look like this:

Notice that in a more complex part like this shroud with many discrepant face pairs, the Difference Results Window has a lot of information. (That's why we used the simple parts in the first lessons to quickly show you the basic tools used in comparing files.)

If you click on the RootFolder row in the Difference Results Window, all of the discrepant faces will highlight in both the IS and WAS files.
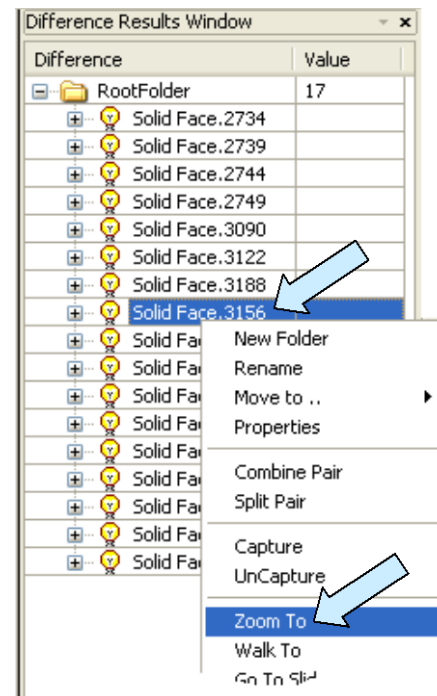
With a complex part like this shroud, looking at all of the highlighted faces at once provides you with a good general analysis of the part discrepancies.

Obviously, the outer corner blends in all six vent openings are discrepant.

We also see a problem with the one center hole and the two holes on the front tab and two holes on the back tab.
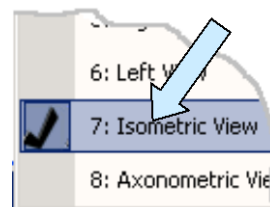

One way to investigate each discrepant pair is to Right Mouse Click on a Solid Face in the Difference Results Window and then click on the Zoom To Option in the menu that appears.

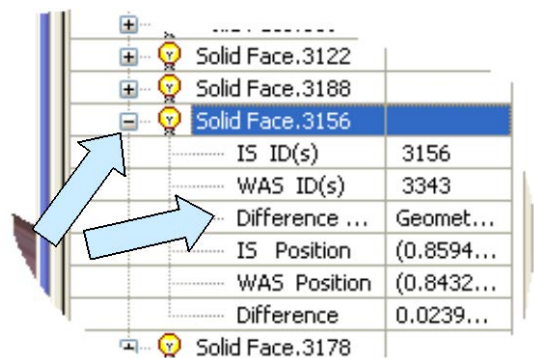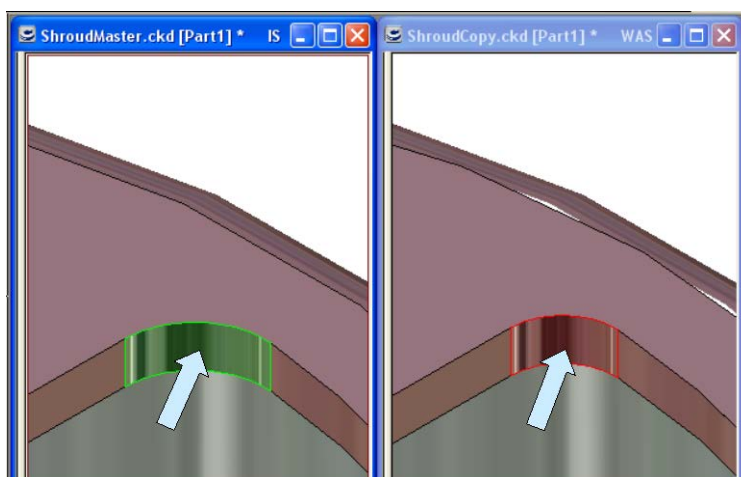Both the IS and WAS Windows will now show a magnified view of the discrepant faces.

You can dynamically rotate the view in the active window to better see the face or select a standard view like the Isometric View. (View7.)

6: Left View

7: Isometric View

8: Axonometric Vie

Then, click on the SYNCHRONIZE VIEWS Icon.

Both windows now match.

ShroudMaster.ckd [Part1] *   IS

ShroudCopy.ckd [Part1] *   WAS

	Solid Face.3122
	Solid Face.3188
	Solid Face.3156

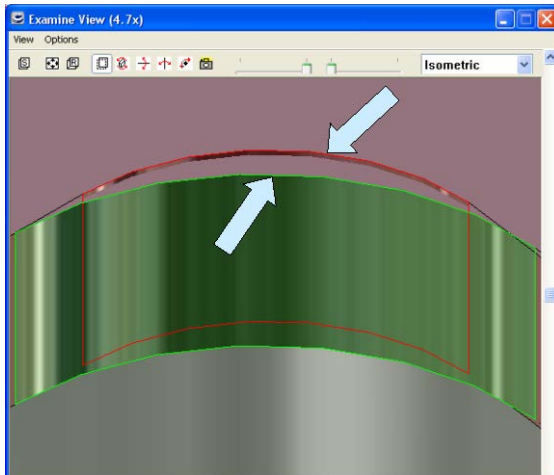| IS ID(s) | 3156 |
WAS ID(s)	3343
Difference ...	Geomet...
IS Position	(0.8594...
WAS Position	(0.8432...
Difference	0.0239...

Solid Face.3178

You can also expand the entry for the selected face pair in the Difference Results Window to see the detail data.

Another approach is to click on the EXAMINE VIEW Icon.

By manipulating the models in the Examine View window, you can zoom in and clearly see the difference in corner blend radius.
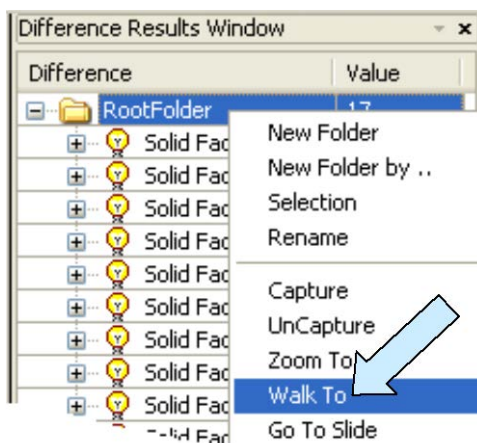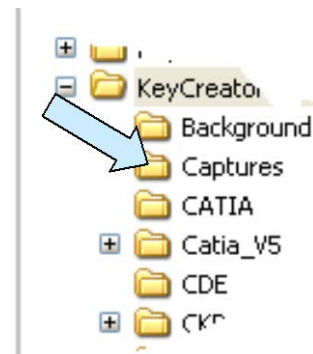
Practicing a Walk Through

Let's walk through this complex file to look at the various discrepant conditions. We'll selectively capture only a few of the images since all twelve corner radius deviations are the same and the four tab hole deviations are the same.

First, we should open Windows Explorer and clear out old captured data from our Captures Folder that is located within the main KeyCreator Folder.

If you want to keep any of the old data there, just copy it to a project folder. Remember that the Capture folder is set up as a "Scratch Space" to be used during a current session.

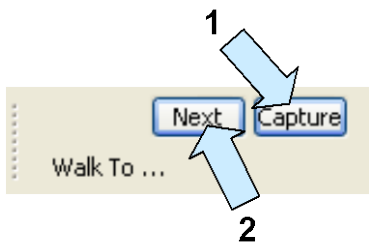**If you don't have a Captures folder, you should take a moment to do KeyLesson KC8506.**

Close the Examine View if you still have it open.

Now, Right Mouse Click on the Root Folder row in the Difference Results Window and then click on the Walk To Option in the menu that appears.
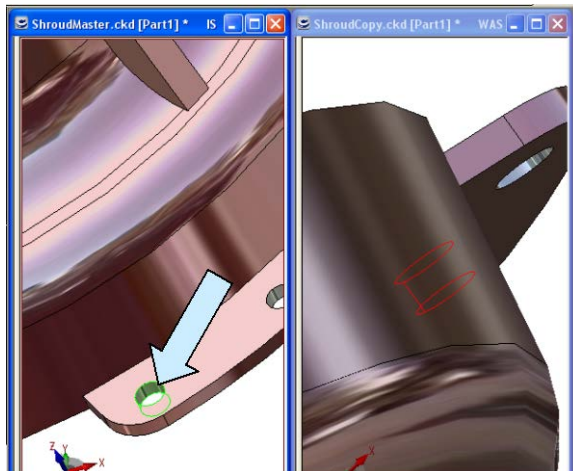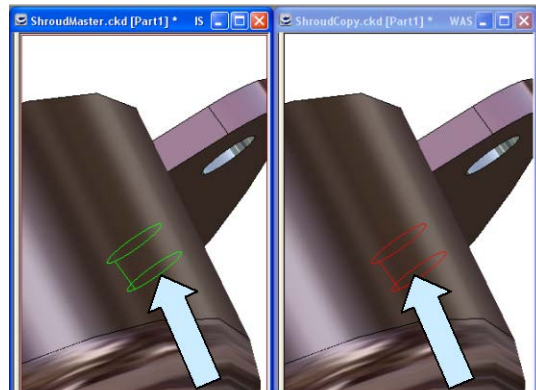
The IS and WAS Windows start out with the entire part with all discrepant faces highlighted.

1

2

You can reorient the parts or just click on the CAPTURE Button to get a set of pictures.

Then, click on the NEXT Button.

The windows refresh and the first pair of discrepant faces highlight.

You can rotate the model in the active window to get a clearer view of the highlighted face.

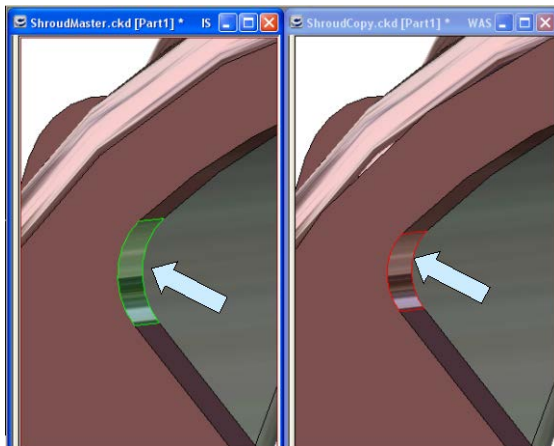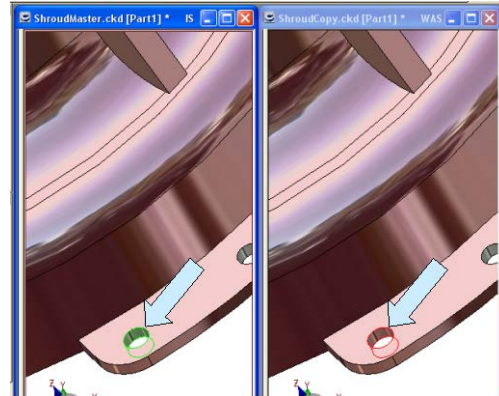Then, click on the SYNCHRONIZE VIEWS Icon to update the inactive window.

The two windows will now have matching views.

Click on the CAPTURE Button to save the images. Then, click on the NEXT Button to continue.

You don't have to capture every step.

For instance, one capture of the discrepant corner blends radii would be sufficient.
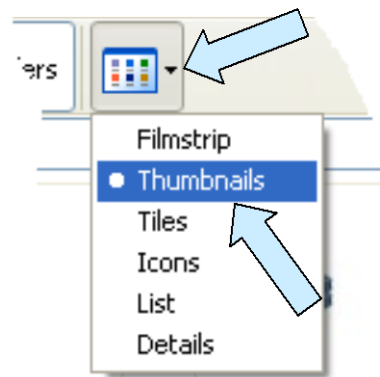

Viewing the Captured Images

Open Windows Explorer: (Hint: You can hold down the Windows Logo Key on your Keyboard and hit the "E" key at the same time.)

Navigate to the main KeyCreator folder and then to the "Captures" Folder.

Click on the VIEWS Icon and then select Thumbnails.

Double Click on the TestIs File Thumbnail and you will launch the Windows Picture and Fax Viewer.

You can use the controls at the bottom of the viewer to index through all of the jpeg images in the Capture Folder.

You can also take advantage of the magnification tools to zoom in on an image. In addition, you can copy any image to another program (Like a PowerPoint slide.) or print it for future reference.