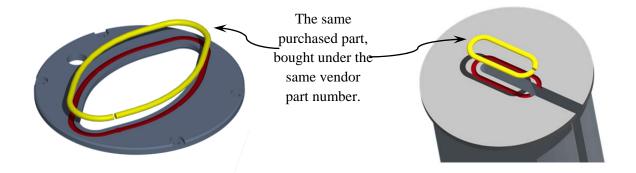# Problematical Purchased Parts

Problem: You have a bought part that requires adjustment in your particular assembly. It's still a purchased part and maybe the slight adjustment to it can be described on the assembly drawing itself or maybe it's the nature of the purchased part itself that defies modeling it in one set form. For example, Kapton Tape meant to be wound around something or perhaps a flexible RF contact spring that is bought as a length off a roll and is meant to be tucked into a groove of whatever contour you've modeled. If you're incredibly lucky, you're the first to need that part and you can give your model the appropriate Part Number as its file name. If not, the part already exists but you can't use it in the shape in which it's been modeled.

The same purchased part, bought under the same vendor part number.

Workaround: Make your version of the purchased part. Give it a name that makes sense, and make use of the DRAWING_NUMBER variable.

Reasoning: That variable exists for a reason. It provides an adjustable piece of metadata that is not as exclusive as the model name itself. There are many advantages to using DRAWING_NUMBER. A drawing's BOM need not be scrapped and replaced with a non-updating table with dummy text. It need not be added to with a fake row to accommodate a purchased part just to be able to show the proper part number. Also, as your BOM can remain true to the drawing, any balloons necessary are also real and tied to the assembly. And finally, no matter how many uses we make of that purchased part, it can still show up in any drawing's BOM showing the proper vendor part number as many models can have the same value set in their DRAWING_NUMBERS.

Procedure:

1. Model your purchased part using a name that makes sense to you (the jury's still out as to a naming convention…)

2. Under Menu choice *Tools*, click on *Parameters…*
   a. This sends you to the Parameters Window

3. Somewhere in there is a variable by the name Drawing_Number. Normally with the use of WBS and LDN numbers, this is going to end up a copy of the model's file name, but in this case, you change it to the vendor's part number.
   a. And because this is just text, symbols and spaces are acceptable

4. When you make the Assembly Drawing replete with the usual format, the BOM will still show your part's bogus file name. You must change what the Repeat Region reads off the component parts. Click twice on the FIRST CELL of your Repeat Region.

   a. If you click on any other row, you get a Text Style window, but what you're looking for is a little Report Symbol window
   b. See note below if you still have trouble accessing it

5. This is one of those rare instances when you only click once on your choice. Click on *asm…*

6. Click once on *mbr…*

7. Click once on *User Defined*

8. This results in a text widget in your info area, awaiting your input. Type in *Drawing_Number* and hit <enter>

a. Case doesn't matter, but don't misspell it and you need the underscore

9. You'll see a weirdness in the first cell, so hit the Update Drawing icon

   a. Or you can go the long way with *View – Update – All Sheets*
   b. This results in the following, an acceptable way to get that part number into your BOM

For all official prints, Drawing_Number is always filled in correctly, and now your BOM will populate properly with a vendor part number that makes sense. And it'll be real and associative. If you find it difficult to get to the Report Symbol window (or if you ever have the need to change the listing back to the original), click on top menu choice *Table – Repeat Region…* - and in the side menu, choose Switch Syms and then Done. Your BOM rows may disappear, but don't panic. This makes it easier to get to that Report Symbol window. After you've made whatever change, switch the symbols back and your BOM will show up again.