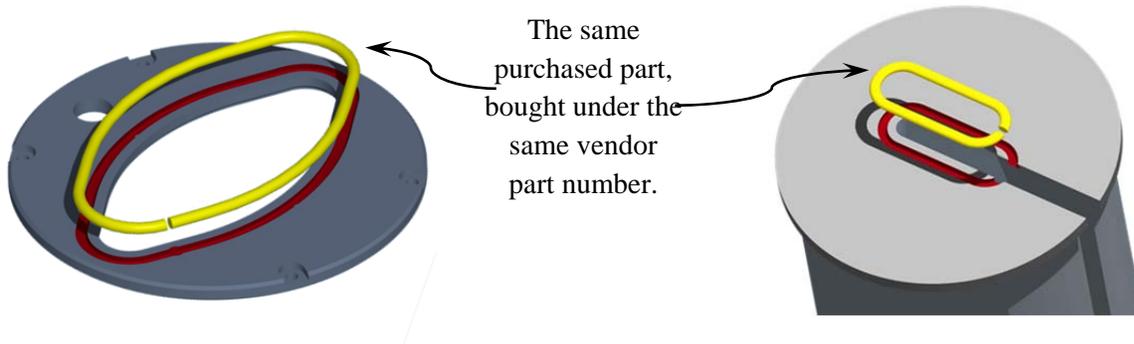


Problematical Purchased Parts

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.



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.



You must click *here*

2	IMABOGUSPRNAME		A SPRING IN THE SHAPE I NEED	ASTM 432 PUTTY	1
1	4103450201-110133		SUB-COMPONENT WIDGET-HOLDER	6065-T6 ALUM.	1
ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC.	QTY
PARTS LIST / BILL OF MATERIALS					
<small>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES</small> DECIMALS: .1 ± .01, .05 ± .005, .001 ± .0005 ANGULAR: ± 0.5° SURFACE ROUGHNESS: 125 REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX. SURFACE TEXTURE IN ACCORDANCE WITH LATEST ASME B46.1-2002 DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH LATEST ASME Y14.5M-1994		DRAWN BY: J. B. DRAFTIN CHECKED BY: J. B. CHECKIN DESIGNED BY: J. DESIGNER RESPONSIBLE ENGINEER: T. S. KNOTMYFALT GROUP LEADER: I. M. INPOWER APPROVED BY:		<small>THIS DRAWING IS THE PROPERTY OF</small> Argonne NATIONAL LABORATORY ADVANCED PHOTON SOURCE WBS DESCRIPTION: EXTREME EXPERIMENTAL FACILITIES AREA 51 ROSWELL SCIENCE BUILDING ACME FINAL-TEST FULL ASSEMBLY TITLE: TEST WIDGET SUB-ASSEMBLY	
MODEL NAME: FEARCAR	RELEASE LEVEL: RELEASED	MODEL VER: 0+	SIZE: C	DRAWING NUMBER: TEST-ASSEMBLY	SKY DES REV
ELECTRONIC FILE NAME: A1234567	MATERIAL: SEE PARTS LIST	SCALE: 1:200	FORM NO: 0775	DO NOT SCALE DRAWING	SHEET 1 OF 1

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

2	IMABOGUSPRTNAME		A SPRING IN THE SHAPE
1	asm.mbr.drawing_number		SUB-COMPONENT WIDGET
ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR
PARTS LIST / BILL			
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		DRAWN BY: I B DRAFTIN	DATE

- 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



2	RFL-10MEW-635B		A SPRING IN THE SHAPE
1	4103450201-110133		SUB-COMPONENT WIDGET-
ITEM	DRAWING / PART NUMBER	REV	NOMENCLATURE OR
PARTS LIST / BILL			
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		DRAWN BY: I B DRAFTIN	DATE

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.