

Code currently sorts Bill of Materials on drawings by “Part number”. Works well. (code shown below)

ITEM NO.	PART NUMBER	REV	TITLE	QTY.
1	171828		EYE BRACKET (RH)	1
2	172869		LOWER TRACK RAIL	1
3	172870		LOWER TRACK RAIL	1
4	172873		TRACK SPACER	4
5	172886		VALVE TRACK ASSY. (LH MANIFOLD)	1
6	172893		UPPER LEFT TRACK RAIL	1
7	172894		MANIFOLD (RH)	1
8	A0524		FLOW CONTROL 1/4" x 1/8" NPT	1
9	E0606		90 DEGREE FIBER OPTIC CABLE	1
10	H0007		1/4" LW	4
11	H0027		BHCS #10-32 x 3/8" SS 18-8	1
12	H0028		BHCS #10-32 x 1/2" SS 18-8	6
13	H0782		1/4"-20 x 2-1/4" HXCS	4

However, team want to start to sort the Bill of Material so that Sub-Assemblies are Listed first and then parts.

ITEM NO.	PART NUMBER	REV	TITLE	QTY.
1	171828		EYE BRACKET (RH)	1
2	172869		LOWER TRACK RAIL	1
3	172870		LOWER TRACK RAIL	1
4	172873		TRACK SPACER	4
5	172886		VALVE TRACK ASSY. (LH MANIFOLD)	1
6	172893		UPPER LEFT TRACK RAIL	1
7	172894		MANIFOLD (RH)	1
8	A0524		FLOW CONTROL 1/4" x 1/8" NPT	1
9	E0606		90 DEGREE FIBER OPTIC CABLE	1
10	H0007		1/4" LW	4
11	H0027		BHCS #10-32 x 3/8" SS 18-8	1
12	H0028		BHCS #10-32 x 1/2" SS 18-8	6
13	H0782		1/4"-20 x 2-1/4" HXCS	4

SolidWorks allows you to do it like this:

Sort

Order

☐ Follow assembly order

☐ Follow sub-assembly order

Sort by

PART NUMBER

☒ Ascending

☐ Descending

Then by

☒ Ascending

☐ Descending

Then by

☒ Ascending

☐ Descending

Group items

☒ Assemblies

☒ Parts

☐ Other

In order:

Assemblies

Parts

Up

Down

Method

☒ Literal

☐ Numeric

Sort save

☐ Save current sort settings

Item numbers

☐ Do not change item numbers

OK

Cancel

This would be the desired result.

	A	B	C	D	E
1	ITEM NO.	PART NUMBER	REV	TITLE	QTY.
2	1	172886		VALVE TRACK ASSY. (LH MANIFOLD)	1
3	2	171828		EYE BRACKET (RH)	1
4	3	172869		LOWER TRACK RAIL	1
5	4	172870		LOWER TRACK RAIL	1
6	5	172873		TRACK SPACER	4
7	6	172893		UPPER LEFT TRACK RAIL	1
8	7	172894		MANIFOLD (RH)	1
9	8	A0524		FLOW CONTROL 1/4" x 1/8" NPT	1
10	9	E0606		90 DEGREE FIBER OPTIC CABLE	1
11	10	H0007		1/4" LW	4
12	11	H0027		BHCS #10-32 x 3/8" SS 18-8	1
13	12	H0028		BHCS #10-32 x 1/2" SS 18-8	6
14	13	H0782		1/4"-20 x 2-1/4" HXCS	4

I have not successfully been able to add that feature in the code. It would be great is code could be modified to create this result.

I added this to the code, but it didn’t change the results.

```
swSortData.Ascending(0) = True ' Sort in ascending order

' Group rows by assemblies and parts
bWantGrp = True
If bWantGrp Then
    sortArray(0) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_Assemblies
    sortArray(1) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_Parts
    sortArray(2) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_None ' No further grouping
    swSortData.ItemGroups = sortArray
End If

' Allow re-numbering of items after sorting
```

---- Here is the code----

Dim swApp As SldWorks.SldWorks

Dim swModel As SldWorks.ModelDoc2

Dim swDraw As SldWorks.DrawingDoc

Dim swBomTable As SldWorks.BomTableAnnotation

Dim swBomFeat As SldWorks.BomFeature

Dim swSortData As SldWorks.BomTableSortData

Dim swSelMgr As SldWorks.SelectionMgr

Dim swFeat As SldWorks.Feature

Dim vTables As Variant

Dim boolstatus As Boolean

Dim sortArray(2) As Integer

Dim bWantGrp As Boolean

Sub main()

 ' Initialize SolidWorks application and active document

 Set swApp = Application.SldWorks

 Set swModel = swApp.ActiveDoc

 Set swDraw = swModel

 Set swSelMgr = swModel.SelectionManager

 Set swFeat = swModel.FirstFeature

 ' Toggle document property to set Top-level BOMS to 1 configuration

 boolstatus = swModel.Extension.SetUserPreferenceToggle(swUserPreferenceToggle_e.swOneConfigOnlyTopLevelBom, 0, True)

 ' Loop through features to find BOM feature

 Do While Not swFeat Is Nothing

 If swFeat.GetTypeName = "BomFeat" Then

 swFeat.Select False

 Set swBomFeat = swFeat.GetSpecificFeature2

 vTables = swBomFeat.GetTableAnnotations

 Set swBomTable = vTables(0) ' Get the first BOM table annotation

 Exit Do ' Exit once the BOM is found

 End If

 Set swFeat = swFeat.GetNextFeature

 Loop

 ' Get BOM sorting data

 Set swSortData = swBomTable.GetBomTableSortData

 ' Specify the literal sort method

 swSortData.SortMethod = swBomTableSortMethod_Literal

 swSortData.ColumnIndex(0) = 1 ' Sort by the second column (index 1)

 swSortData.Ascending(0) = True ' Sort in ascending order

 ' Group rows by assemblies and parts

 bWantGrp = True

 If bWantGrp Then

 sortArray(0) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_Assemblies

 sortArray(1) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_Parts

 sortArray(2) = swBomTableSortItemGroup_e.swBomTableSortItemGroup_None ' No further grouping

 swSortData.ItemGroups = sortArray

 End If

```
' Allow re-numbering of items after sorting
swSortData.DoNotChangeItemNumber = False
```

```
' Apply the sorting to the BOM
boolstatus = swBomTable.Sort(swSortData)
```

```
' Clear selections
swModel.ClearSelection2 True
```

```
End Sub
```