



Best Practices				
General Engineering Instructions	Title: <b>SPECIAL, CUSTOM TOOLING SEARCH SYSTEM DOCUMENTATION</b>			
	ID: <b>BPI-BP-GEI-0002</b>			
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**Purpose:** Train BPI employees how to update and maintain the Special, Custom Tooling Search System. Provide proper ways to make small changes to the system.


**Materials Needed:** N/A

**References:** [SPECIAL CUSTOM TOOLING INVENTORY.xlsx \(SPECIAL CUSTOM TOOLING INVENTORY EXCEL\)](#)


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# 1. ADD TOOLING

## 1.1. ADD TOOLING CHECKLIST

1. ☐ UPDATE SPECIAL CUSTOM TOOLING INVENTORY
2. ☐ RUN POWERSHELL COMMAND

### 1.1.1. CONCLUSION

When everything is checked off, new tooling will be added to and be viewable in Special, Custom Tooling Search.html.

## 1.2. UPDATE SPECIAL CUSTOM TOOLING INVENTORY

### 1.2.1. OPEN THE SPECIAL CUSTOM TOOLING INVENTORY

Open the Special, Custom Tooling Inventory Excel titled SPECIAL CUSTOM TOOLING INVENTORY.xlsx, located at <E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/SPECIAL CUSTOM TOOLING INVENTORY.xlsx>.

### 1.2.2. ADD TABLE ROW

Add a new row to the table and populate each column with the information specific to the Best Practice.

### 1.2.3. SORT PART NUMBER COLUMN

Left-click the drop down in the PART NUMBER column header, then select Sort A to Z.

### 1.2.4. SAVE THE SPECIAL CUSTOM TOOLING INVENTORY

Save the Special, Custom Tooling Inventory, *Ctrl + S*.


## 1.3. RUN POWERSHELL COMMAND

### 1.3.1. OPEN TERMINAL

In File Explorer, navigate to the SPECIAL CUSTOM TOOLING INVENTORY folder, <E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/>, right-click -> Open in Terminal to open PowerShell in the correct directory.

### 1.3.2. RUN THE COMMAND

On the Terminal Command Line, type the following command:

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./updateSCTS

### 1.3.3. CONFIRM RESULT

While the command is running it should print updates upon completing certain steps, like accessing files. The command would print, Successfully updated Special, Custom Tooling Search.html, if the script encountered no issues and finished updating the Special, Custom Tooling Search.html. Meaning users can view the tooling additions after reloading their page.

If the script returned an error, it failed to update BPsearch.html and is providing the user with some idea of the issue.

## 2. EDIT TOOLING

### 2.1. EDIT TOOLING CHECKLIST

1. ☐ EDIT SPECIAL CUSTOM TOOLING INVENTORY
2. ☐ RUN POWERSHELL COMMAND

#### 2.1.1. CONCLUSION

When everything is checked off, new tooling will be added to and be viewable in Special, Custom Tooling Search.html.

### 2.2. EDIT SPECIAL CUSTOM TOOLING INVENTORY

#### 2.2.1. OPEN THE SPECIAL CUSTOM TOOLING INVENTORY


Open the Special, Custom Tooling Inventory Excel titled SPECIAL CUSTOM TOOLING INVENTORY.xlsx, located at <E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/SPECIAL CUSTOM TOOLING INVENTORY.xlsx>.

#### 2.2.2. EDIT TABLE ROW

Locate the row for the tool, use the Part Number column, and edit any column whose information specific to the tooling was changed. Multiple tools can be edited during this step, by editing each of their rows.

#### 2.2.3. SAVE THE SPECIAL CUSTOM TOOLING INVENTORY

Save the Special, Custom Tooling Inventory, *Ctrl + S*.

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## 2.3. RUN POWERSHELL COMMAND

### 2.3.1. OPEN TERMINAL

In File Explorer, navigate to the SPECIAL CUSTOM TOOLING INVENTORY folder, [E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/](#), right-click -> Open in Terminal to open PowerShell in the correct directory.

### 2.3.2. RUN THE COMMAND

On the Terminal Command Line, type the following command:

```
./updateSCTS
```

### 2.3.3. CONFIRM RESULT

While the command is running it should print updates upon completing certain steps, like accessing files. The command would print, Successfully updated Special, Custom Tooling Search.html, if the script encountered no issues and finished updating the Special, Custom Tooling Search.html. Meaning users can view the tooling additions after reloading their page.

If the script returned an error, it failed to update BPsearch.html and is providing the user with some idea of the issue.

## 3. SPECIAL CUSTOM TOOLING INVENTORY


### 3.1. COLUMNS

After making any changes to the columns, save the SPECIAL CUSTOM TOOLING INVENTORY document and run the PowerShell command, as described in section 2. EDIT TOOLING, to have the changes reflected on the Special, Custom Tooling Search.html.

#### 3.1.1. ADD A COLUMN

In the excel, columns can be added, and these changes will be reflected in the html.

Whenever adding a column to the left of other columns, check if the html column sizing needs to be adjusted. Refer to section 3.1.4. RESIZE A COLUMN. If the added column is the rightmost column, this does not need to be checked.

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### 3.1.2. REMOVE A COLUMN

In the excel, columns can be removed, and these changes will be reflected in the html.

Whenever removing a column to the left of other columns, check if the html column sizing needs to be adjusted. Refer to section 3.1.4. RESIZE A COLUMN. If the removed column was the rightmost column, this does not need to be checked.

### 3.1.3. RENAME A COLUMN

In the excel, columns can be renamed, and these names will be reflected in the html.

When renaming the Part Numbers column, in a text editor, open the PowerShell script file updateSCTS.ps1, located at <E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/updateSCTS.ps1>. Then change the variable PNheader near the top of the file, in the EDITABLE section.

When renaming a column in the headerBList variable, ensure that the name of column is corrected in that variable as well. Open updateSCTS.ps1 to view what columns are in it.

### 3.1.4. RESIZE A COLUMN


In the html, the columns are automatically sized upon the generation of the search results. But the size of a column can be hard coded to a fixed, minimum, or maximum number of pixels or percentage of the table.

To adjust these sizes, in a text editor, open the stylesheet.css for the html, located at <F:/Calculators/Searching/stylesheet.css>. At the bottom of the file are the structures that format the different columns of the table. Example:

```
thead th:nth-child( int X ) {
    width: float Y %;
}
```

Where **X** is the column that is being targeted, 1-indexing, **width** is the property being adjusted, alternatively the property could be set to **min-width** or **max-width** to allow the column to be flexible with limits, and **Y** is the percentage of the table the targeted column will take up, alternatively **Y** could have the px suffix for number of pixels.

Whenever a column is added, removed, or moved the structures that format the columns may need to be adjusted, specifically **X**, since columns could change order and the number they are represented by.

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## 4. POWERSHELL SCRIPT

### 4.1. EDITABLE VARIABLES

The Editable Variables may need to be changed whenever file name or path changes are made, or if certain column names in the excel file are changed. To edit them, in a text editor, open the PowerShell script file updateSCTS.ps1, located at <E:/General Tooling/SPECIAL CUSTOM TOOLING INVENTORY/updateSCTS.ps1>. Then change the desired variable, located near the top of the file, in the EDITABLE section.

#### 4.1.1. htmlName

htmlName needs to be updated if the name of the html file is changed.

htmlName must reflect the name of the .html file. BPIReporting also uses the name of the file to display it, the name will need to be changed in its code as well.

#### 4.1.2. excelName

excelName needs to be updated if the name of the excel file is changed.

excelName must reflect the name of the .xlsx file.

#### 4.1.3. PNheader

PNheader needs to be updated if the name of the Part Number column header is changed.

PNheader must reflect the name of the column header for the Part Number column in the excel file.

#### 4.1.4. defaultCriteria


defaultCriteria sets what column the html page selects as the search criteria when the page is loaded.

#### 4.1.5. headerBList

headerBList needs to be updated if the names of any column names in this array are changed.

headerBList is the black list, of header column names, for the selectable search criteria. Any column name in this array will not appear in the selection dropdown on the html page. Column names can be added or removed from this array to toggle if they will appear.



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#### 4.1.6. PATHS

The paths need to be updated if the location of either the html or excel files are changed.

htmlPath must reflect the location of the .html file.

excelPath must reflect the location of the .xlsx file.

### 4.2. SCRIPT PERMISSIONS

#### 4.2.1. PROPERTIES

The scripting permissions allow any user on the computer, where the permissions were given, to run trusted script files in PowerShell.

#### 4.2.2. ENABLING PERMISSIONS

Logged in to any account on the user's computer, open the Windows Start Menu search Windows PowerShell, right click the application and select Run as administrator. On the command line run the following command:

Set-ExecutionPolicy -ExecutionPolicy RemoteSigned

#### 4.2.3. DISABLING PERMISSIONS

Logged in to any account on the user's computer, open the Windows Start Menu search Windows PowerShell, right click the application and select Run as administrator. On the command line run the following command:

Set-ExecutionPolicy -ExecutionPolicy Default