

Technique for Using Report Filters

It is often desirable to be able to control what information is listed in a repeat region. For example, it may be necessary to remove some of the information from a Bill of Materials (BOM) such that all components are not listed. A filter can be used to remove unwanted information from tables that are generated using a repeat region. Filters can be created either **By Item** or **By Rule**. This document will outline both procedures.

Procedure

Procedure for Using By Item

For this example, the BOM in Figure 1 will be used. This table was generated using a simple repeat region. Note: Filter **By Item** is only available for simple repeat regions and can not be used in 2D repeat regions

INDEX #	PART_NAME	TYPE	QUANTITY
1	CASTER	PART	1
2	CONNECTOR	PART	1
3	PIN	PART	1
4	WHEEL	PART	1

Figure 1

To remove the component PIN click **Table > Repeat Region > Filters**, click in the repeat region > **By Item > Exclude** > when prompted to "Select records in the current repeat region to exclude", click on the record showing the component PIN in the table, as seen in Figure 2 > **Ok > Done**

INDEX #	PART_NAME	TYPE	QUANTITY
1	CASTER	PART	1
2	CONNECTOR	PART	1
3	PIN	PART	1
4	WHEEL	PART	1

Figure 2

When **Done** is selected, the table will look like that in Figure 3.

INDEX #	PART_NAME	TYPE	QUANTITY
1	CASTER	PART	1
2	CONNECTOR	PART	1
3	WHEEL	PART	1

Figure 3

Items can be resumed by clicking either **Restore** or **Restore All**. When either is selected, all the items that have been filtered out of the table will be displayed and highlighted as seen Figure 4.

INDEX #	PART_NAME	TYPE	QUANTITY
1	CASTER	PART	1
2	CONNECTOR	PART	1
3	PIN	PART	1
4	WHEEL	PART	1

Figure 4

If **Restore** is selected, the prompt "Select excluded records (shown in green) to restore" will be displayed. Click on the record which is to be restored > **Ok** > **Done**. If **Restore All** is used click **Confirm** > **Done** and all filtered items will reappear in the repeat region.

Procedure for Using By Rule

To create a filter using a rule, click **Table > Repeat Region > Filters > click in the repeat region > By Rule > Add**.

At the prompt 'Enter next filter:', begin entering the rule by which items in the table will be removed. For example if every bulk item was to be removed and the parameter &asm.mbr.type was in the table, enter the following filter:

```
&asm.mbr.type != "BULK ITEM"
```

Conversely, if every item except for bulk items was to be removed from the table, enter the following filter:

```
&asm.mbr.type == "BULK ITEM"
```



Multiple filters can be entered for a repeat region. When finished entering filters, click **Done > Done/Return**.

Rows can be filtered in a 2d repeat region with the filter `&fam.inst.name` and a column can be filtered in a 2d repeat region with the filter `&fam.inst.param.name`.

Using the **By Rule** command in the Filter menu, it is possible to use filters in the following forms:

Any parameter that is valid in a repeat region (`asm.mbr.name`, etc.)

Any of the operators (`<`, `>`, `<=`, `=>`, `==`, and `!=`)

Any integer, floating point, or string value

A line can contain up to 80 characters. When creating a filter with multiple acceptable values, you can only use the operators `"=="` and `"!="`. If filters with the operator `"=="` are added to more than one line in a repeat region, all entries are blanked and the table appears to be empty. For `"=="` operators with more than one value, the values are linked by `"or."` For example, for the filter `&asm.mbr.name==part_1,part_2,part_3`, the repeat region would exclude all objects other than those parts having the name `"part_1," "part_2,"` or `"part_3."` For `"!="` operators with more than one value, the values are linked by `"and."` For example, for the filter `&asm.mbr.name!=part_a,part_b,part_c`, the repeat region would exclude those parts having the name `"part_a," "part_b,"` and `"part_c."`