

# Create a Bill of Materials: In Depth

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## Overview

Work orders are internal documents that specify the finished goods that need to be produced as well as the components required to produce them. You must first create one or assembly type items before creating work orders. Typically, an assembly item will have a bill of material.

\* A Kit and an Assembly are not interchangeable. Please see [Kits vs Assemblies](#) for details. \*

## Create a Bill of Materials

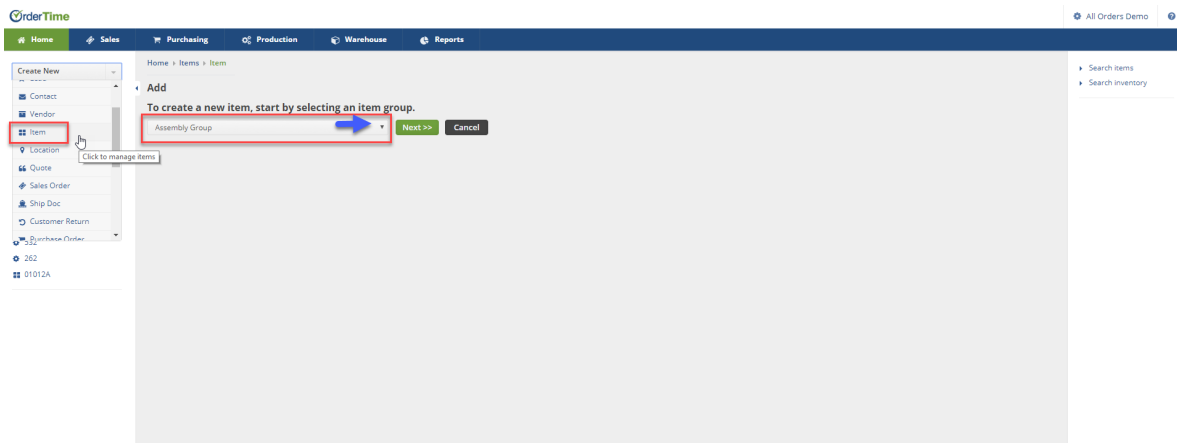
The Bill of Materials or BOM is like a recipe, it tells the system which components are required to make the finished good. When a work order is created, the system knows how much of each component is required and display the quantity available for each component on the work order. A BOM will also have one or more [production steps](#). Production steps allow you to split the BOM into multiple processes.



Please see the article, [Nested Bill of Materials Vs Steps](#), to understand the differences between the two concepts.

Follow the steps below to generate a Bill of Materials (BOM).

1. Click on the side menu then, click the **Create New** drop down menu and select **Item**.
2. Under the drop down list, select **Assembly Group**. Click the **Next>>** button to continue.



3. On the *Item* screen, enter a name for the Assembly Group. Under the Unit of Measure (UOM),

select desired unit of measure.

OrderTime  
Home Sales Purchasing Production Warehouse Reports  
Home Items Item  
Create New  
Open Full List  
Recent Records  
Y810  
3958  
Product Service  
CONFIG ITEM  
531  
10057257  
532  
262  
01012A  
Item  
Next Seq. No. Save Reset  
General  
Group Assembly Group  
Name Y820  
UOM Set YD-EA-EA-EA-1  
Description  
Other  
Active   
Proxy  
Sub of  
Income Account Sales [Income]  
COGS Account Cost of Goods Sold  
Asset Account Inventory Asset [Other Current Asset]  
Tax Code  
Class  
Bin  
Track lots or serial numbers   
Warranty  
Make lead time

4. Complete each tab (General, Purchasing, Notes and Custom) as needed. Tabs use information that will be added to your item characteristics.

5. Click **Save** to move to the next screen.

## Adding Steps and Components to your Bill of Materials

- The next screen will display a section for adding your **Steps** to the Bill of Material and Adding Components.
- You will also be able to review or change price, review total cost, change dollar margin, percentage margin, and total percentage markup.

OrderTime  
Home Sales Purchasing Production Warehouse Reports  
Home Items Bills of Material Bill of Materials  
Y810 EDIT This is a phantom bill of materials  
Description Pricing  
This is a new item that we make  
PRICE TOTAL COST MARGIN \$ MARGIN % MARKUP %  
638.57 477 161.57 25.5000 33.8700  
Step  
Add  
STEP DESCRIPTION LOCATION TIME UOM PARTCOST NONPARTCOST TOTALCOST ACTIVE ACTIONS  
Picking Defaults Step HQ 1 HR 462.000 15.000 477.000     
Component  
Add  
ITEM DESCRIPTION LINE INSTRUCTIONS QTY PER UOM STD. COST STD. COST EXT. ONE TIME COSTED ACTIVE ACTIONS  
01001B Caliper repair kit, GT-5 Line 2 Line 3 Put this component on the front end of the assembly. 1.000 YD 120.000 120.000       
01001C Caliper rebuild kit, per ea Rear 2.000 YD 135.000 270.000       
01005B Bot, GT-5, 7'116-20X 1-5/8' long 4.000 YD 18.000 72.000       
Product Service Product Service 0.250 HR 60.000 15.000       
Instructions  
Save Date Stamp Delete Cancel

## Adding Steps

1. To add a step to your Bill of Materials click the **+Add** button under **Steps** section.
2. The Steps pop-up dialog box will be displayed. Complete the following information:
  - Enter the **steps** required for the assembly process (i.e. Picking, QC, Assembly, etc.).

- Enter **Time** needed to complete this task.
- Select **Unit of Measure (UOM)** to be used (i.e. Hour, Week, Month).
- Select if steps are **Active**.
- Click **Save**.

The screenshot shows the 'Bill of Materials' screen for item Y810. A 'Steps' dialog box is open, allowing the user to add a new step. The dialog box contains fields for Step, Description, Time, UOM, and Active. A 'Save' button is highlighted in red. The background shows a table of components with columns for Item, Description, Quantity, UOM, and Cost.


## Adding Components

1. To add components to your Bill of Materials, click the **+Add** button under the **Components** section.
2. The Components pop-up dialog box will be displayed. Complete the following information:
  - Enter an **Item**.
  - Type in a **Line Instruction**.
  - Enter the **Quantity Per (Qty Per)**.
  - Select if this is a **One Time** process.
  - Select if **Active**.
  - Click **Save**.

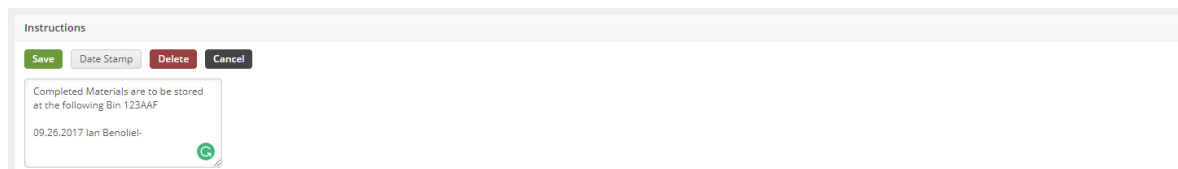
The screenshot shows the 'Bill of Materials' screen for item Y810. A 'Add/Edit Component' dialog box is open, allowing the user to add a new component. The dialog box contains fields for Item, Line Instructions, Qty Per, One Time, and Active. A 'Save' button is highlighted in red. The background shows a table of components with columns for Item, Description, Quantity, UOM, and Cost.

## Adding Instructions

In the **Instruction** section, you will have the ability to type in additional instructions for the employees working on the Production process.

 Instruction can streamline your lines of communications between the employees working on the work order.


- A Date Stamp is available to mark a Date when the instruction was entered.
- Click **Save** when done.

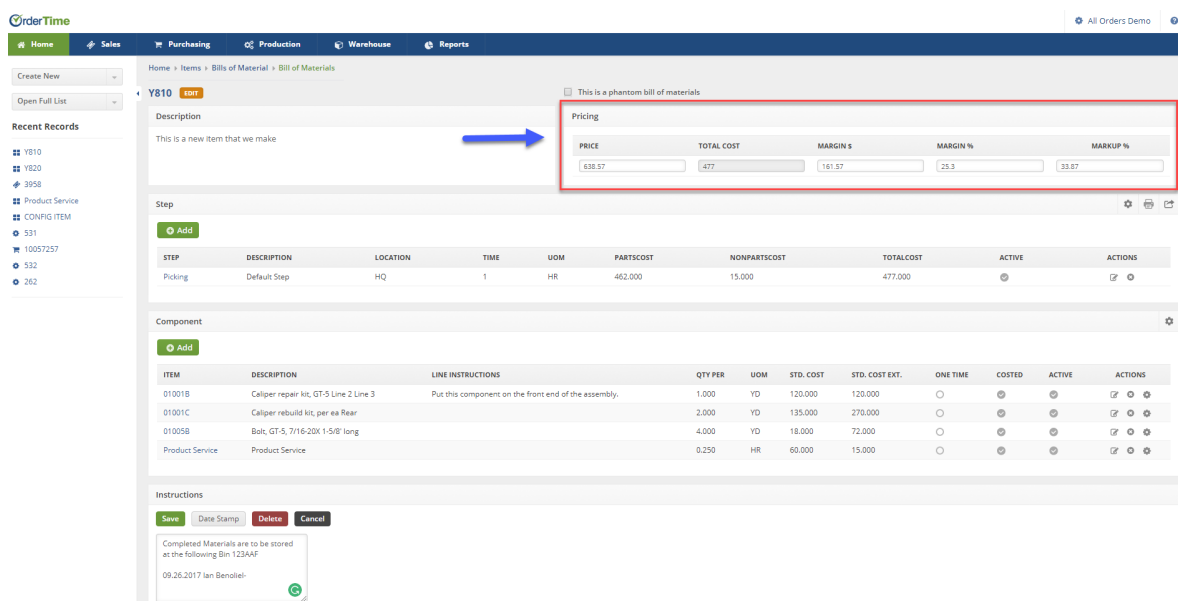


## Adding/Reviewing Pricing

Once you have selected steps and added components to your Bill of Materials, you can review the Pricing associated with it.

- Price will auto default.
- Total Cost will indicate your current accounting cost to create a product.
- The MARGINS% will indicate your profit margins.
- The MARKUP% will indicate your product mark up.

 You can enter a new value in the Price field and the system will calculate your margin and markup. If you want to set your pricing based on your desired margin, enter a value in the Margin % field and the system will compute the price.



OrderTime

Home Sales Purchasing Production Warehouse Reports

Home > Items > Bills of Material > Bill of Materials

Create New

Open Full List

Recent Records

- Y810
- Y820
- 3958
- Product Service
- CONFIG ITEM
- S31
- 10057257
- S32
- 262

Y810 **EDIT** This is a phantom bill of materials

Description

This is a new item that we make

Pricing

| PRICE  | TOTAL COST | MARGIN \$ | MARGIN % | MARKUP % |
|--------|------------|-----------|----------|----------|
| 638.97 | 477        | 161.97    | 23.3     | 33.87    |

Step

**Add**

| STEP    | DESCRIPTION  | LOCATION | TIME | UOM | PARTCOST | NONPARTCOST | TOTALCOST | ACTIVE | ACTIONS |
|---------|--------------|----------|------|-----|----------|-------------|-----------|--------|---------|
| Picking | Default Step | HQ       | 1    | HR  | 462,000  | 15,000      | 477,000   | ⊙      | 🔍 ⚙️    |

Component

**Add**

| ITEM            | DESCRIPTION                            | LINE INSTRUCTIONS                                    | QTY PER | UOM | STD. COST | STD. COST EXT. | ONE TIME | COSTED | ACTIVE | ACTIONS |
|-----------------|--|--|---------|-----|-----------|----------------|----------|--------|--------|---------|
| 01001B          | Caliper repair kit, GT-5 Line 2 Line 3 | Put this component on the front end of the assembly. | 1,000   | YD  | 120,000   | 120,000        | ⊙        | ⊙      | ⊙      | 🔍 ⚙️    |
| 01001C          | Caliper rebuild kit, per ea Rear       |  | 2,000   | YD  | 135,000   | 270,000        | ⊙        | ⊙      | ⊙      | 🔍 ⚙️    |
| 01005B          | Bolt, GT-5, 7/16-20X 1-5/8" long       |  | 4,000   | YD  | 18,000    | 72,000         | ⊙        | ⊙      | ⊙      | 🔍 ⚙️    |
| Product Service | Product Service                        |  | 0.250   | HR  | 60,000    | 15,000         | ⊙        | ⊙      | ⊙      | 🔍 ⚙️    |

Instructions

**Save** **Date Stamp** **Delete** **Cancel**

Completed Materials are to be stored at the following Bin 123AAF

09.26.2017 Ian Benoliel-

At this point, you have already created a Work Order with the Bill of Materials.

