

## KnowledgeBase Article 2099

### Rework

There are three (3) methods within Guardian to provide labor records for rework operations:

1. Add a Rework Routing Operation Sequence to the Work Order
2. Split the Work Order for Rework Operations
3. Create a Rework Work Order

All of the above methods are effective, allow for traceability and tracking of costs. The determining factor is a matter of best practices, production processes and control, and whether the work order is open or closed.

#### Open Work Order:

**Adding a Routing Sequence** to the Work Order keeps all parts on the work order together. Those parts requiring rework will have additional sequences for processing, such as weld and grind sequences and then all parts will proceed together to the next operation.

Often referred to as a rework loop, this method adds a loop of operations for some parts while other parts remain in limbo until the looped parts have completed the loop. Then, all parts continue through production.

**Split Work Orders** are used to literally split off a select number of parts from one work order to a new work order for the purpose of performing additional operations to the part not found on the original work order. The Split Work Order modifies the quantities from the point of the split, forward. The split work order has a series of rework operations and then adds the remaining operations from the original work order from the point of the split, forward.

Split Work Orders allow for traceability back through the original work order as well as the ability to record labor on additional operations. The split Work Order also allows the select parts to be processed separately from the originals as they proceed through production.

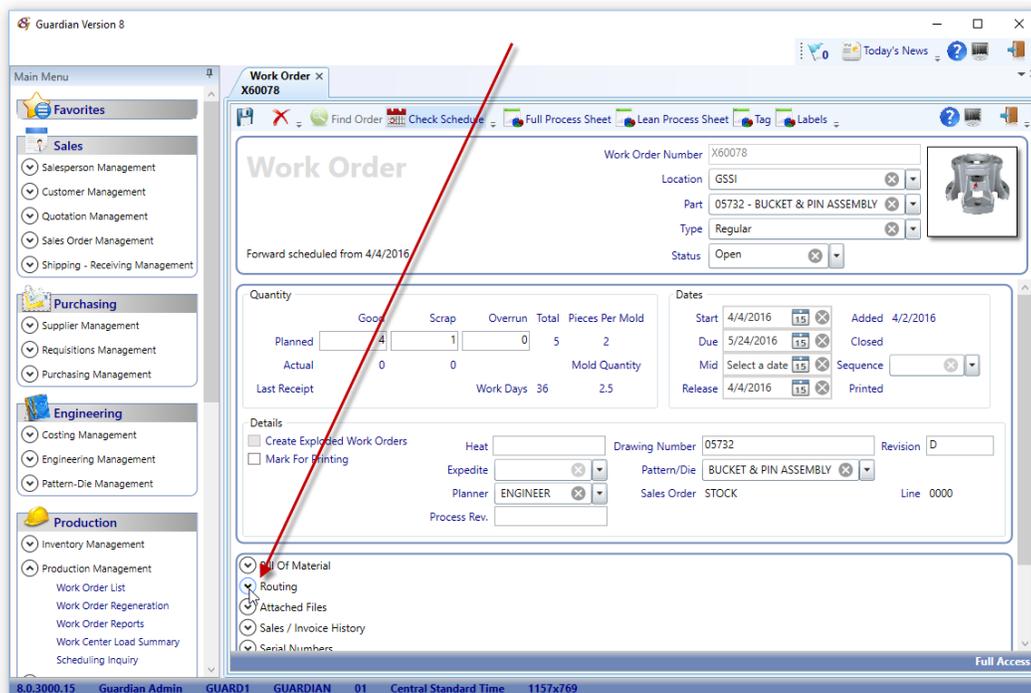
#### Closed Work Order:

**Rework Work Orders** provide a means of recording any costs associated with reworking a returned or scrapped part. A Rework Work Order differs from a Rework Operation or Rework Loop in that it is generated for a part or parts that have been completed on a now closed work order. Labor may be recorded on a rework work order, however, it is not required.

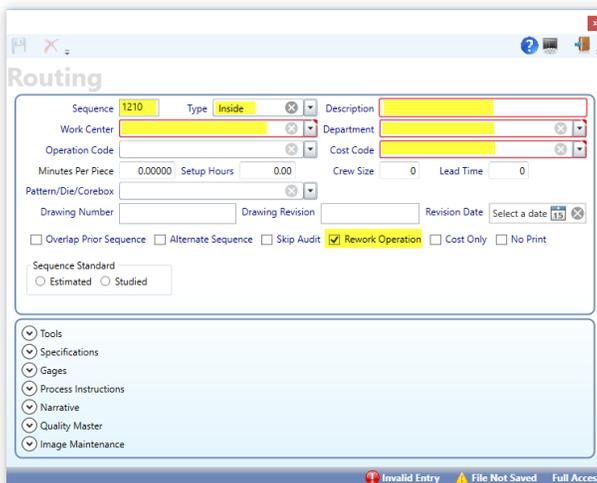
## Add a Rework Operation to a Work Order

To add Rework Operations to an **OPEN** Work Order:

1. Open the Work Order
2. Expand the Routing



3. Click the Add button to add an Inside or Outside operation...select Add Operation
4. Enter the required information to add a routing
5. Make sure the Sequence number is after the sequence you discovered rework is required
6. Mark the Sequence as Rework Operation by marking the checkbox
7. Add as many sequences as required
8. Click the Save button when finished with each sequence

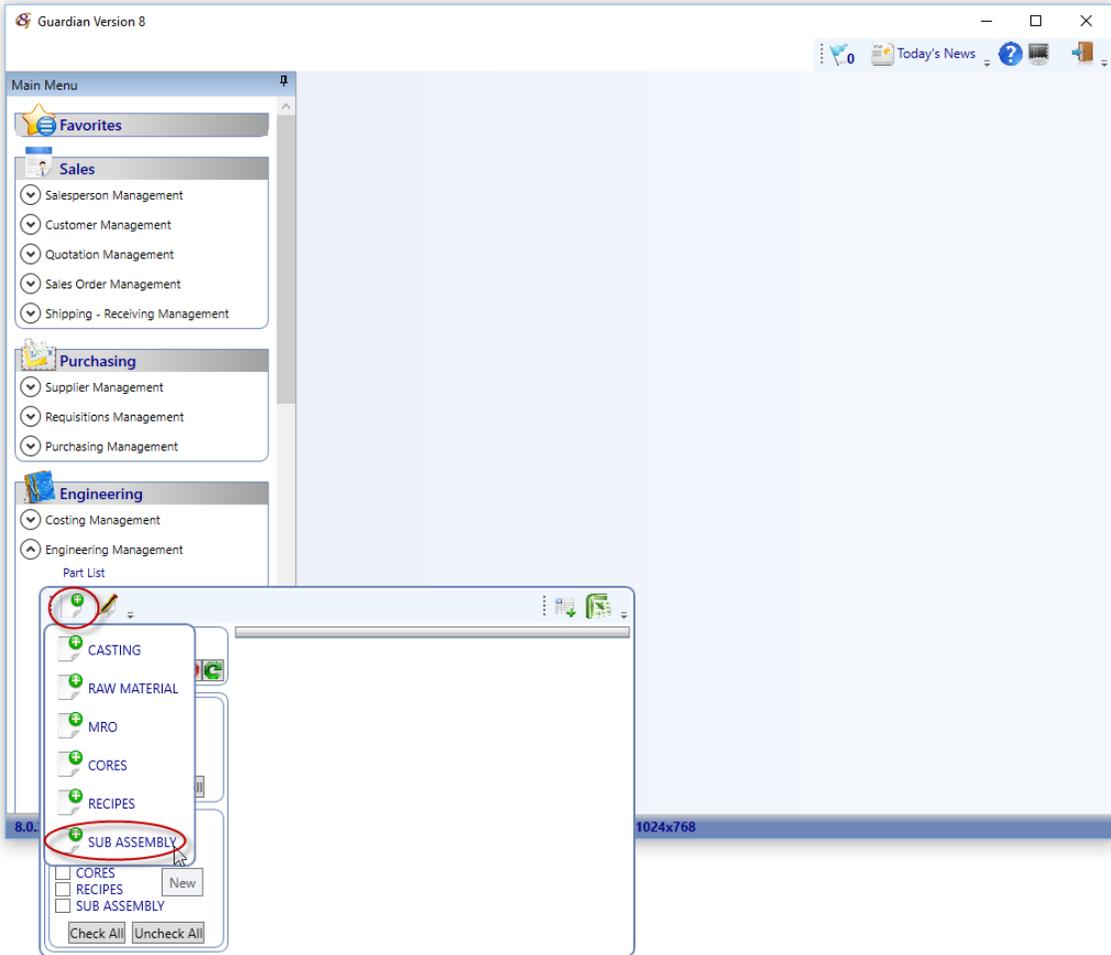


## Split Work Order for Rework Operations

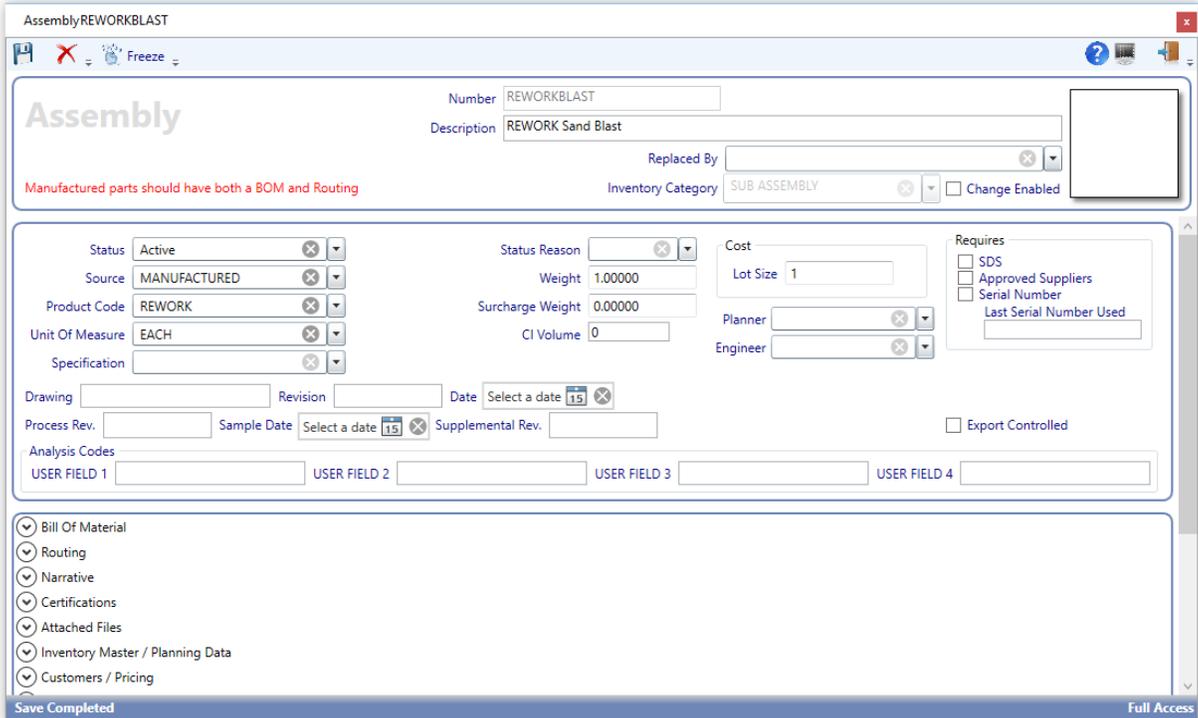
To Split an **OPEN** Work Order for Rework Operations, you must first create a Rework Assembly. A Rework Assembly allows the creation of a routing without the requirement of bills of material.

I. Create the Rework Assembly:

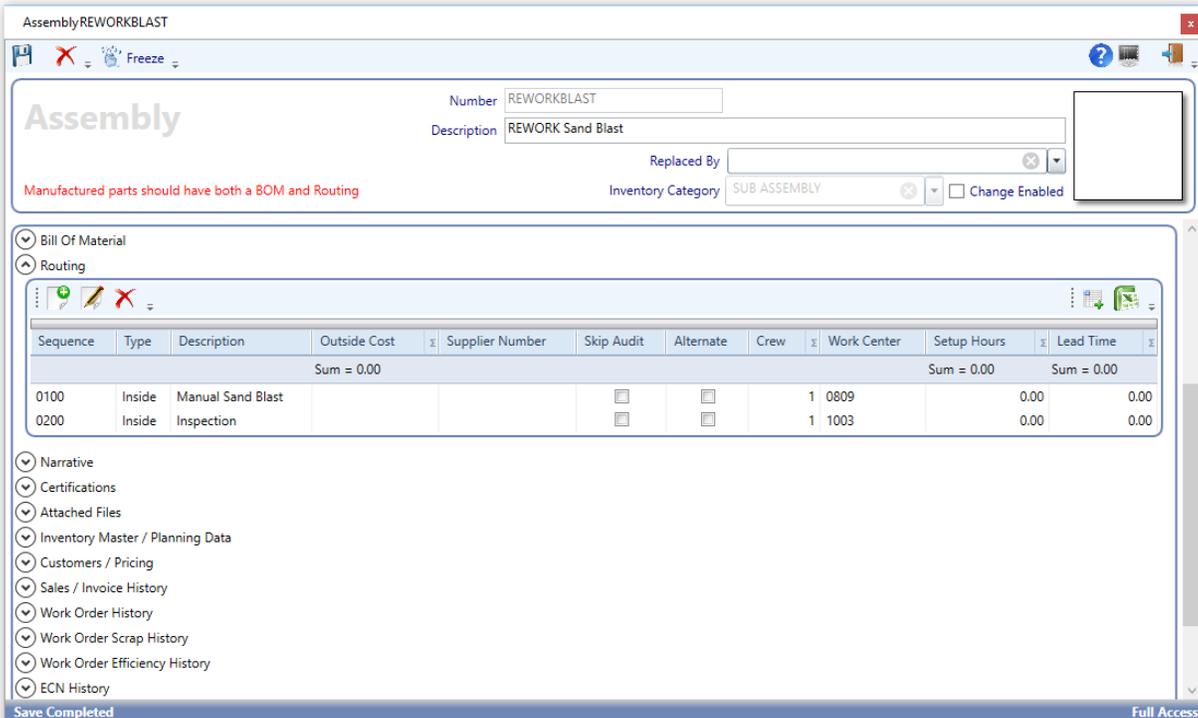
1. Navigate to Engineering > Engineering Management > Part List > Add button > Sub Assembly



- 2. Create a new Assembly for the Rework
- 3. Click Save



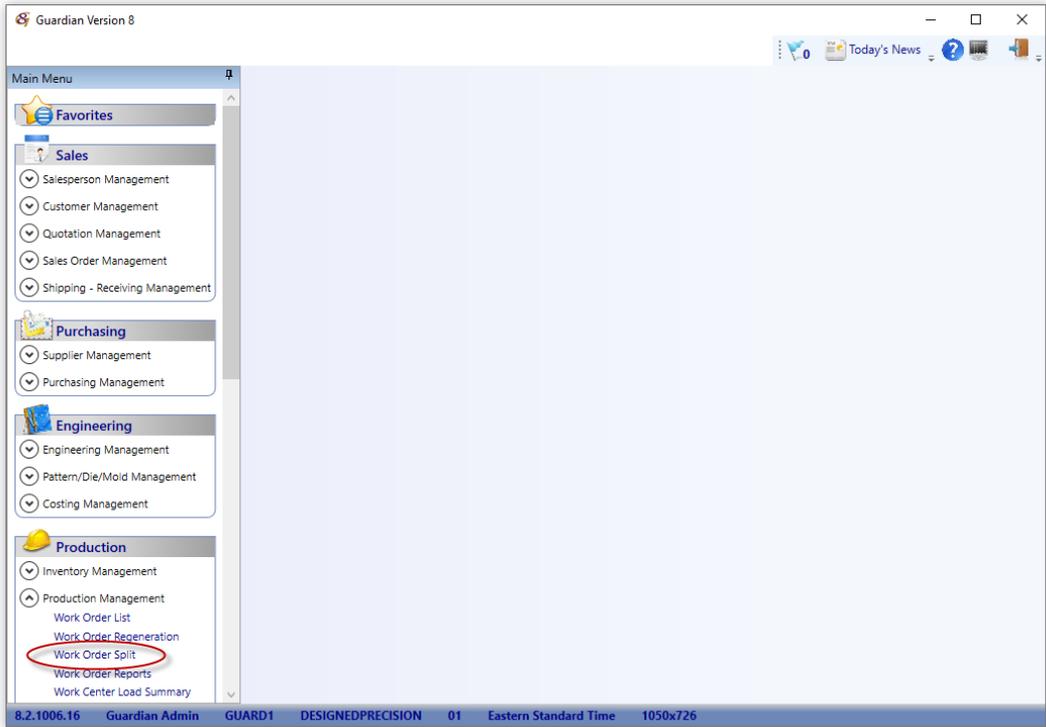
- 4. Add the appropriate Routing operations by expanding Routing



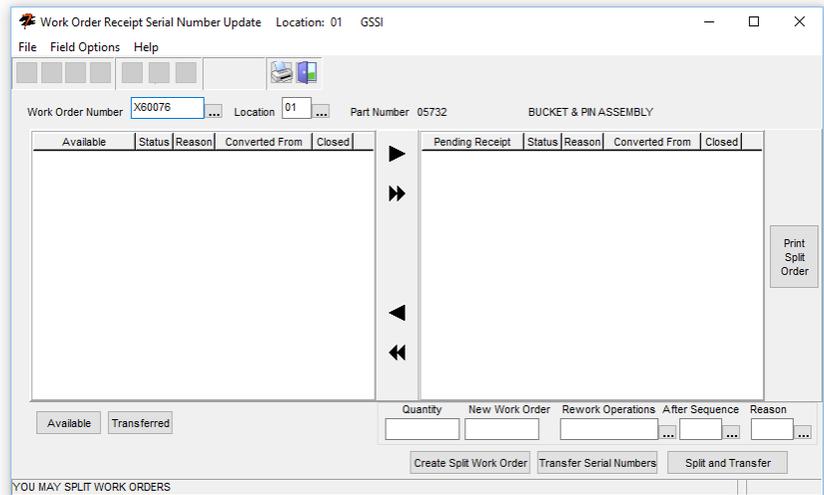
- 5. Routing operations may be added for both inside and outside operations
- 6. Add only those operations required for the rework...do not add sequences required after the rework...these sequences will be inherited from the original work order
- 7. Close the Assembly when complete

II. Split the Work Order:

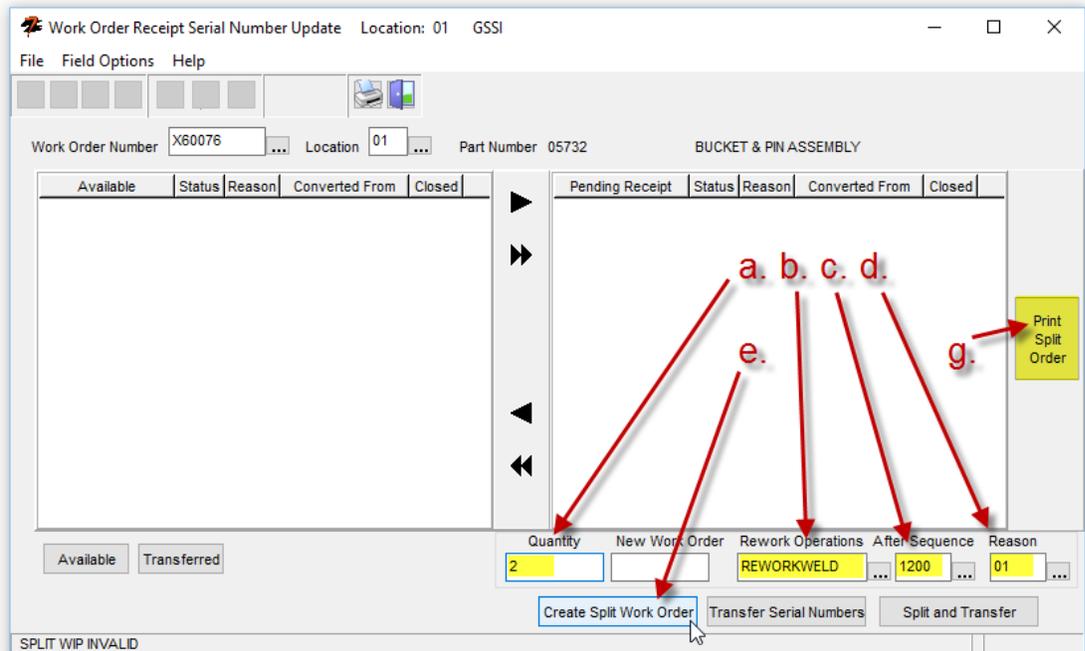
- 1. Navigate to Production > Production Management > Work Order Split



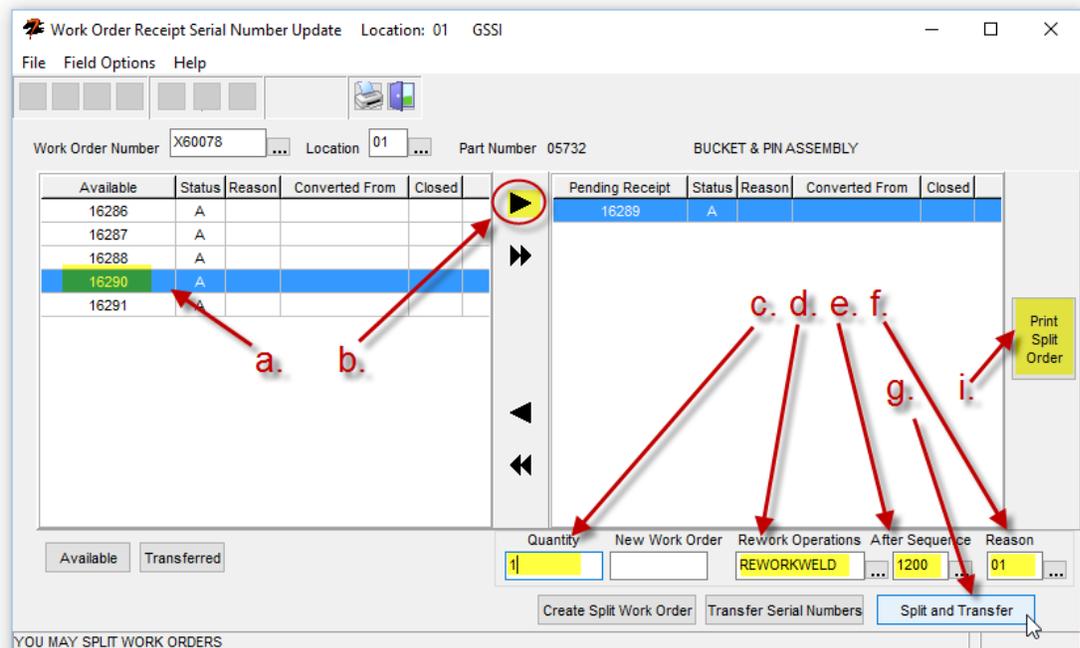
- 2. The Work Order Receipt Serial Number Update screen will appear.



3. The Work Order Receipt Serial Number Update screen provides the ability to:
  - a. Create the split
  - b. Define the operations to be added to the split for rework
  - c. Define the sequence starting point of the split
  - d. Provide a reason code for the split
  - e. When serial numbers are required, the serial numbers must be transferred to the new split work order via this screen
  - f. The Split Reason Table may be edited in Production Management > ...Split Reason Table
4. Without Serial Numbers:
  - a. Enter the Quantity to be split off
  - b. Enter or select the Rework Assembly created above
  - c. Enter or select the Routing Sequence after which the split is to occur
  - d. Enter or select the Split Reason Code
  - e. Click Create Split Work Order
  - f. Guardian will create the split Work Order modifying the quantity of the subsequent sequences on the original Work Order to reflect the quantity split off to the new Work Order
  - g. Print the new Work Order by clicking the Print Work Order button
  - h. The new Work Order will be assigned the same number as the original with subsequent 01, 02, 03, etc. appended to the end of the number (dependent upon how many splits have already been made to this Work Order. (ie. 16288, 16289, etc.)



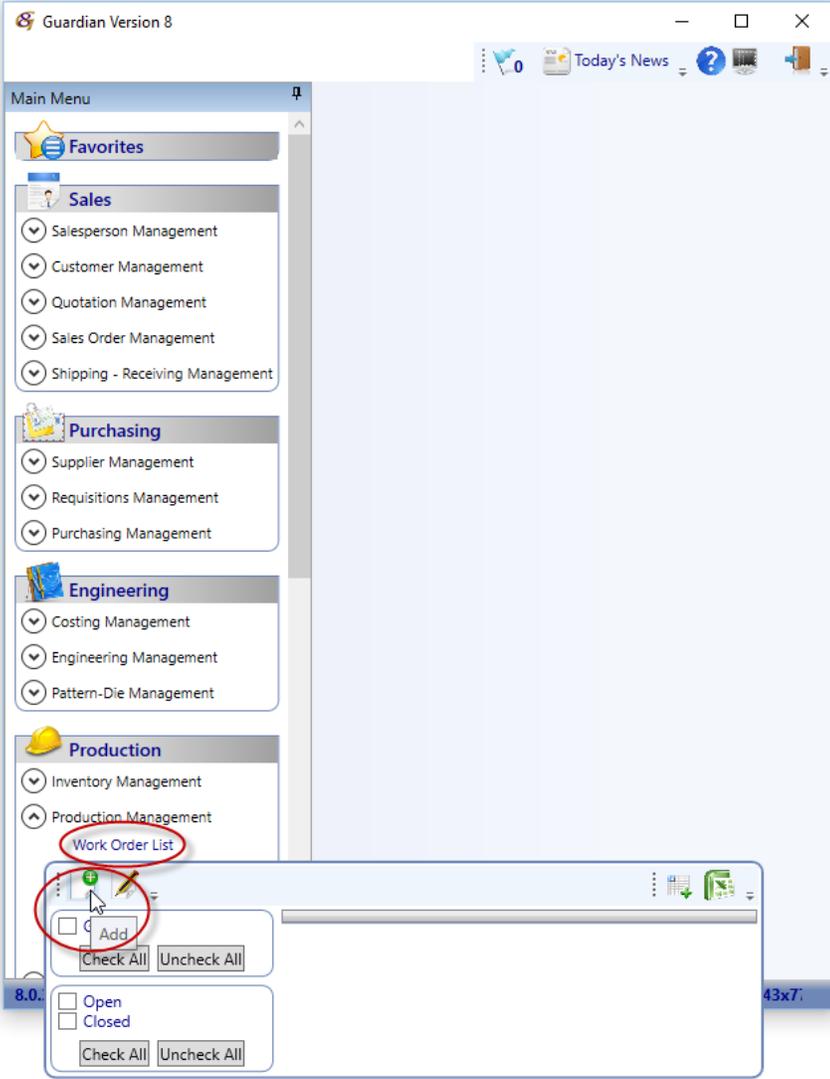
5. With Serial Numbers Required:
  - a. Select the Serial Number (or numbers) to be split for Rework
  - b. Click the Arrow to transfer or drag and drop them from the left to the right window
  - c. Enter the Quantity to be split off
  - d. Enter or select the Rework Assembly created above
  - e. Enter or select the Routing Sequence after which the split is to occur
  - f. Enter or select the Split Reason Code
  - g. Click Split and Transfer
  - h. Guardian will create the split Work Order...
    - i. ...modifying the quantity of the subsequent sequences on the original Work Order to reflect the quantity split off to the new Work Order
    - ii. ...removing the selected Serial Numbers from the original Work Order and adding them to the new Split Work Order
  - i. Print the new Work Order by clicking the Print Work Order button
  - j. The new Work Order will be assigned the same number as the original with subsequent 01, 02, 03, etc. appended to the end of the number (dependent upon how many splits have already been made to this Work Order...ie. X6007601, X6007602, etc.)



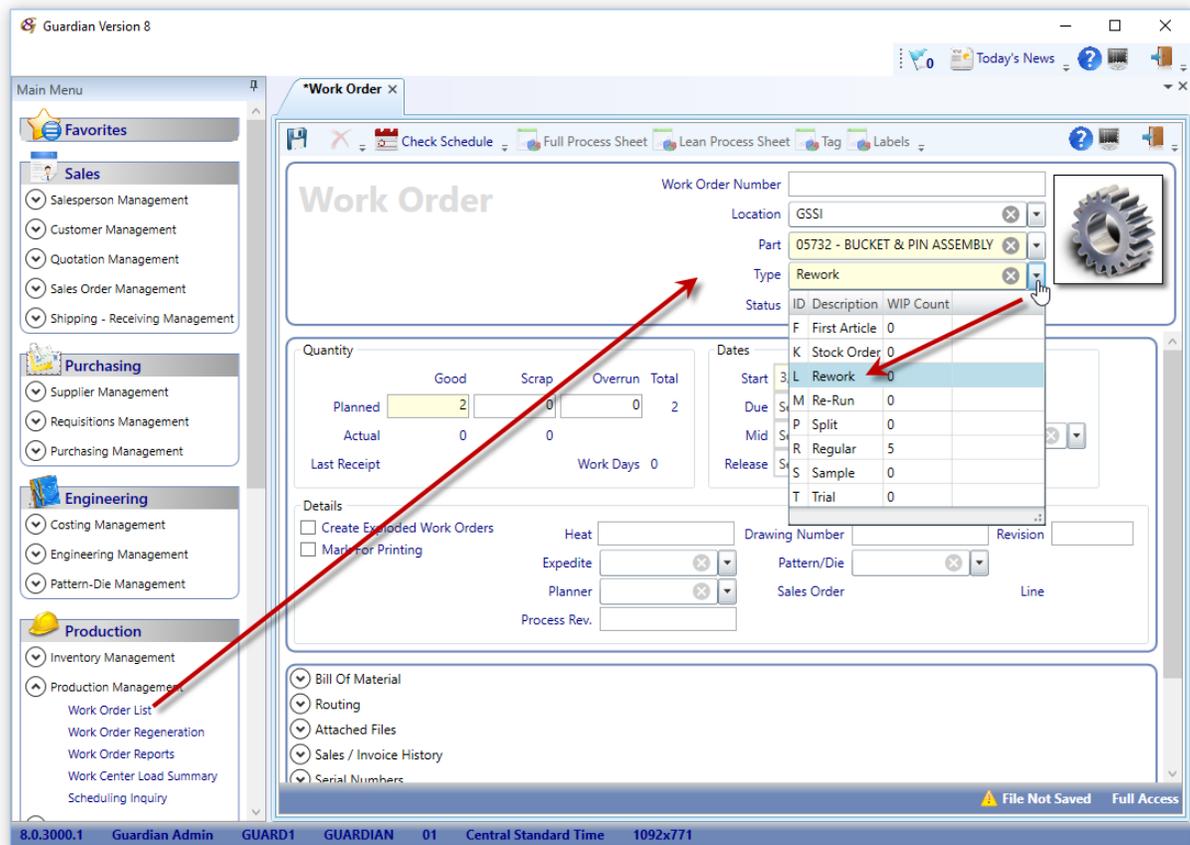
## Rework Work Orders

Create a Rework Work Order in Guardian:

- 1. Navigate to Production > Work Order List and click the Add button



## 2. Enter or select the Part Number



6. Change the Type to Rework
7. Enter the Quantity
8. Schedule as usual
9. Click the Save button 

Once you save the Work Order, you may then create routing sequences as necessary. At least one (1) routing sequence is required to record labor, however, all rework labor can be recorded to the same single sequence.

Once the rework is complete, the Work Order must be closed and received as any other Work Order. Shipping functions remain the same as for any other parts.