My first step when analyzing the files was to breakdown the conformation role into chunks. I decided that there were three chunks, general order details, option pricing and discount. I decided to start with general order details. My first goal in order details was to determine what fields on the conformation form related to each field in tractor status. While looking at tractor status, I noticed that data was organized in a way that was difficult for me to easily read. Thus, I decided to import the 2015 serial number into my conformation model file under the data tab. Using the serial number as the primary key, I used an index function to fill out the fields build\_month, Dealer\_Request\_Date, Sold\_to, Series, PO\_Date, Rep, Commit? and Customer\_PO in my table. My formula I used to accomplish this resembled was an index indirect function. =IF(INDEX(INDIRECT("Tractor\_Status.xls!"&*field\_name*),MATCH(*related\_serial\_number*,Tractor\_Status.xls!Serial,0),0)

I also created named ranges for these field to ease referencing them. I felt that this would allow me to more easily reference the data for later parts of the model and would allow for smaller formulas on the conformation model.

Next, I proceeded to fill out the related fields on the conformation model. I utilized

simple index functions form most of these fields. For the “Bill To” and “Ship To” fields I used an index function that would link the abbreviation of the customer’s name to the appropriate address lines in the Dealers sheet. The formula for the first line was: =INDEX(Dealer,MATCH(INDEX(Sold\_to,MATCH(Serial\_Con,Serial,0)),Dealer\_lookup,0))

Since billing and shipping were the same I copied the same formula to that section. I also concatenated AR in front of series number on the conformation model.

The final part of general order information was description and base price. For this, I utilized and index function to lookup the correct description provided in the Tables sheet. The same concept was used for base price.

The next chunk was option pricing. My first step for this chunk was to look at the Price Rules sheet. On this sheet the necessary criteria for each option was listed. I decided to use if functions to create a range called controls. If the option was included in the order a 1 would appear, if not a 0. For the criteria, I primarily utilized and, or, index and indirect functions.

To get the correct option to show up on the conformation model, I utilized an index function with an offset. The formula I arrived at was:

=INDEX(OFFSET(Options\_in\_Confirmation\_Model,MATCH(E31,Options\_in\_Confirmation\_Model,0),0),MATCH(1,OFFSET(Controls,MATCH(E31,Options\_in\_Confirmation\_Model,0),0),0))

To fill out the pricing, I just utilized an index function utilizing the option description as the row reference. After that I just needed to sum up the price and apply the initial 20% discount and the the option pricing was done.

With discount completed, I moved on to the discount. For this part I needed to create drop down lists that would provide the correct discount structure depending on what country the dealer was from; the corresponding discount; and a dynamic list of discounts that would show each dates discount. For the discount level I created a dynamic range that would alter based on the country a dealer was from and decided to use data validation instead of form controls. I utilized the same concept to alter a second list for years to help determine discounts. When both lists were completed, I used an index function that would find the appropriate discount. To provide the list of each year’s discount, I combined the concepts I used for option descriptions’ dynamic range with the previous concepts I used to find the discount. After this step was completed, I applied the discount and arrive at the total due.

My final step was to test the conformation model and to make everything look nice. During my testing, the only problem was that my option description functions with multiple text criteria were not working properly. I fixed this by using an or function within the if function. Besides that, there were no issues. Finally, I made all cells that would equal 0 or provide an error show up as blank. This way it would look nicer to the customer.