



Bill of Material (BOM) Creation for Teams Competing Internationally

Each team that participates in the *FIRST* Robotics Competition (FRC) is required to fill out the Cost Accounting Worksheet (CAW), which is needed for Robot Inspection to assess if the robot is eligible for participation.

For any team participating outside of their home country, this document can also serve as the base for the Bill of Material (BOM). The BOM will help a team determine the value for their robot for the Commercial Invoice (**essential** for export documentation).

Unlike the CAW, the BOM will need to include the Kit of Parts (KOP) items that were used to build the robot. All teams shipping their robots internationally must have (1) copy of the BOM. A team may be required to provide a copy of the BOM with their export documents, which needs to be sent to *FIRST* Robotics Competition Logistics (frclogistics@firstinspires.org) five (5) days in advance of their anticipated robot shipment.

On the BOM, list all the items for each subsystem which would constitute the robot. If the item that is being listed came from the Kit of Parts, list Kit of Parts as the source. For the unit price of a Kit of Parts item, refer to the Kit of Parts webpage here: www.firstinspires.org/robotics/frc/kit-of-parts.

When an item has been acquired through the use of a Supplier Voucher, which was provided in the Kit of Parts, a team will need to provide the exact cost of the item purchased from that supplier for the BOM. This will also be the same method for determining the value of a Commercial-Off-The-Shelf (COTS) item.

When an item is given to a team as a donation (i.e. free of charge, NOT discounted), the Fair Market Value needs to be assessed. The simplest way of getting this information is to ask the donor what the cost, Fair Market Value, or Retail Value of the item would be. If a donor is not able to be contacted, the team can pursue the Fair Market Value amount through the internet.

The primary place to look for the Fair Market Value is the supplier's / donor's website. If the Fair Market Value (a.k.a. List Price, Retail Value) is not found on their website, then a team should look at a secondary website.

A secondary website would be a local distributor (or a distributor closest in geographical proximity) to see what the Fair Market Value would be. If a team is able to comparatively look at a sample of more than one distributor price, the highest price would be selected for the Fair Market Value.

The last choice to establish Fair Market Value would be to look at an outside source's Fair Market Value. A team could look at an electronic commerce (e-commerce) website, such as www.amazon.com, www.ebay.com, or www.overstock.com for the **SAME** manufacturer, make, and model of the given part number.

Each team needs to keep their receipts, records of transactions, or results from value determination. These do not need to accompany the export documentation; however, the value assessment could come into question by *FIRST* or any other auditing party. There may also be home country regulations that require certain recordkeeping practices for any exporter.

Once all the items have been accounted for, for each subsystem, the subtotals should be added to accurately portray the value of the team's robot, which is declared on the export invoice. The export invoice should not have a list of all the items that make up the robot like the BOM; the export invoice should only state "Educational Robot" for the description of the robot being shipped and the total value from your BOM worksheet.

***NOTE: The Kit-of-Parts items, their quantity, and their value are subject to change on an annual basis.**

****NOTE: For any questions regarding this process, please contact FRCLogistics@firstinspires.org**