



Southern Maine Gearbots Senior League – Kit Sorting 2017-18

As a coach of the Senior League Program of Southern Maine Gearbots, you have been provided with a kit containing the core materials needed to complete the season's Robotic Track Meet Challenges.

This year kit collection will occur via kit sorting, inventory, and turn-in days following the District Meet. Coaches will be responsible for breaking down models and organizing kits. Coaches should remove any personal Lego components used in the models as Southern Maine Gearbots cannot be responsible for the return of personal property left in team kits.

Kit Sorting, Inventory, & Turn-in Dates

- **Saco Community Center**, April 14, 9am-2pm, 75 Franklin St, Saco, ME
- **St. Brigid School, Portland**, April 28, 9am-2pm, 695 Stevens Ave, Portland, ME

Kit Inventory

Each year kits are provided to coaches sorted and organized. It is your responsibility to maintain your kit and return it sorted and organized at the completion of the season. Included in this kit are the following:

1. 1 – 45544 EV3 Core Set
2. 1 – 45560 EV3 Expansion Set
3. 1 – Sr League Assorted Components (Treads, Motor, & Light Sensor)
4. SM Gearbots Sr League Coaches' Guide Program Binder with Robot Track Meet Association rules (feel free to replace with the 2018 rules if you printed them)
5. Laptop computer, charger, and power cord/power strip

Kit Inventory, Sorting, and Organizing

Prior to turn in you will need to inventory, sort, and organize your kits. Use the following guide to help you in this process. It will help to have a table or carpet to spread out on. It will also help to have a few small food storage containers to hold elements during sorting.

Sorting the EV3 Core and Expansion Sets

Our sorting guide is based on years of sorting sets. Plan to spend about three hours in a single block of time and working without interruptions. A detail oriented helper will reduce this time, perhaps even cutting it in half.

What you need

Gather the following together before you start. This will help you move along without interruption. Copies of the EV3 Core Set and EV3 Expansion Set (EV3 45544 & 45560 Insert Cards) and the Extra Elements (Assorted Component Inventory sheet) may be downloaded from <http://www.smgearbots.org/coach-resources/>.

- Pen/Scratch paper
- **EV3 45544 & 45560 Insert Cards** (PDF) (for element placement in Sets)
- **45544 EV3 Core Inventory sheet** (PDF) (for element names/counts)
- **45560 EV3 Expansion Set Inventory sheet** (PDF) (for element names/counts)
- **Assorted Component Inventory sheet** (PDF)

Step-by-step Sorting Guide

Step One: Break Down Robots

- Separate all elements. Little fingers are a big help with this!
- Remove top trays from both tubs, place to the side but DON'T empty them!
- Empty bottom tubs.

Step Two: Sort by Type

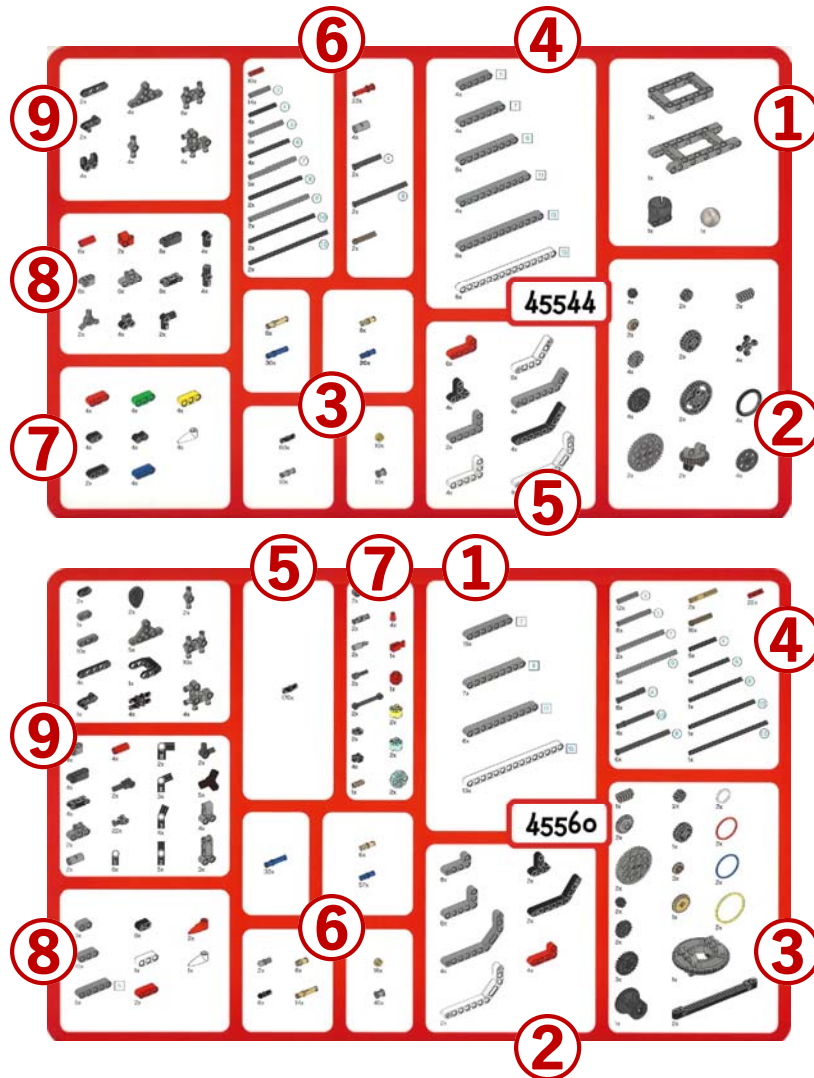
- Sort wheels, panels, tracks, gears, beams, axles, pins, and other elements into separate piles by type.
- Place pins/axles/other elements onto the tub lids to keep them contained.
- Sort piles by size/shape/type.

Step Three: Inventory and Organize Tub Bottom

- Using the Insert Cards PDFs, sort the EV3 Core and Expansion Set tub bottoms.
- The EV3 Core Set should go in the tub that has the Robot on it.
- The EV3 Expansion set should go in the tub that has the pile of elements on it.
- Using scrap paper OR the EV3 Inventory sheets, keep track of missing elements by name and number. This will allow us to add back missing elements for next season.
- The EV3 Core Set has two items that are not shown on the Insert Card. These are the EV3 Backplate and the AC Charger. These should both go in the EV3 Core Set tub bottom.

Step Four: Inventory and Organize Tub Top

- Using the Insert Card PDFs, organize the top trays to match the elements shown.
- The best approach to sort is in the following order:



- Sort the pins early, using the empty tray slots to count out sets of 10 pins at a time.
- Pay close attention to the number of holes and shape of the elements.

Step Five: Inventory the Assorted Components & Complete the Missing Element Inventory

- Confirm the Assorted Components (Motor, Treads, & Light Sensor) if you had those for your team.
- Put the missing element inventory in the top of each tub and put the correct matching lid on each set tub.

Step Six: Drop off kit on Drop-off Day

- Bring your team's sorted and inventoried kit to the drop off day as noted above. Your kit will be checked in.

Thank you for your help with this and with making this season a success!