Grand Blanc High School Robotics Team

Initial Member Level Deliverables
Claw Bot Chassis Assembly

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Mentor(s) to ask if you have questions about, and may sign off on this challenge: Clinton Bolinger, Robin Barrie OR Cathy Fillwock

Before Beginning This Challenge:
1. Check the board in the conference room to see if a Clawbot Kit is available to check out.
2. See Brandi or Cathy in the Conference Room to check-out a Claw Bot Deliverables Kit (if available):
    1. Check to ensure that you have all of the materials on the checklist (included in the kit).
    2. If any materials are missing, please inform one of the Mentors listed above BEFORE you get started with build.
3. Choose ONE person to work with on this project:
    1. You must work TOGETHER on this challenge.
    2. You should not "divide and conquer" to have one person do all of the assembly work, while the other takes notes.
    3. BOTH students should work on the assembly, BOTH should take notes.

Challenge Instructions:
1. You may build in the Wood Shop, Back Room, or Lunch Room.
2. Follow AND document the assembly process on pages 5, 6, 8 through 11 and 16
    o NOTE: You will **NOT** be:
        Building the Upper Structure OR
        Completing Steps: 4-6, 12-13, and 18-27
3. PLEASE do not write on provided materials
4. The instruction manual can be found here, for your reference:
    http://content.vexrobotics.com/docs/instructions/276-2600-CLAWBOT-INST-0512.pdf
5. At the end of the meeting, you MUST:
    a. If you have not finished the task, return all materials to the designated bin, and write BOTH of the names of the Students who are working on this Deliverable on a piece of paper, and put it in the bin.
    b. Check the kit back in with Brandi/Cathy – WHETHER OR NOT YOU ARE DONE.
        i. If you were not able to finish, please indicate so on the sign-in/sign-out sheet.
        ii. If you were not able to finish, the kit will be reserved for you and your partner for up to two meetings.
        iii. If you do not show up for two consecutive meetings, the kit will be assigned to someone else.
    c. Clean your workspace AND the floor around you:
        i. Wipe off tables
        ii. Push in Chairs
        iii. Sweep the floor
6. After you have completed the task and your Engineering Notebook has been validated, please:
    a. Disassemble the chassis completely,
    b. Return all structural pieces, fasteners, and components to the designated areas in the bin,
    c. Cross-reference the checklist and ensure that all of the items on the list are included. If anything is missing, please inform Brandi when you check the kit back in,
    d. Clean your workspace AND the floor around you:
        i. Wipe off tables
        ii. Push in Chairs
        iii. Sweep the floor

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Engineering Notebook Entry Instructions:

1. You may work together to create your journal entries, but you must BOTH write an entry (not make one and photocopy it for the other person) OR you may choose to work independently on your journal entries.
2. Entries should be developed while you are building, and document some of the assembly process.
3. Answer the following questions:
   - Did you enjoy putting together the ClawBot? Why or why not?
   - What has the ClawBot assembly taught you that will be helpful in prototyping and designing other robots?
   - What improvements would you make to the ClawBot Chassis to make it a better design and Why?

To Complete Your Challenge:

1. Ensure that your Engineering Notebook entry is complete,
2. Bring your assembled ClawBot to one of the Mentors listed above for inspection,
3. Ask the Mentor to approve your Engineering Notebook entry and have your deliverables checklist validated,
4. Work with your partner to disassemble the ClawBot completely,
5. Follow the instructions above to clean up,
6. Follow the instructions above to check the materials back in.