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Rapid Roll Questions and Answers

Q) What type of materials would you recommend for building a practice field for the Rapid Roll, or is there a kit available?
A) There are no field kits available this year but here are some suggestions for building your own field. (Please refer to the picture of the field found in the Game Description document on the Rapid Roll home page)
Perimeter Wall
The rapid roll course is 4'x8' with a 4' opening for the robot to enter/exit the field of play. The walls are about 12" high. These dimensions work well with std side lumber. For a practice field we recommend using 2"x4" to build the perimeter. This does not give you the same wall height, but is a good inexpensive substitute. If you would like to replicate the 12" high wall then 2"x12" could be used instead. It would require 3 4' pieces and one 8' piece. If you choose, you can buy the same field perimeter from www.vexlabs.com. It would require you to buy a full 12'x12' field which is more than you need this year. But next year you would be able to use it for both CREATE Junior as well as the Middle School/High School game.
Floor
The competition field uses foam tiles that can be purchased at either www.vexlabs.com (although they only sell large field sets which is much more than you need), or http://www.softtiles.com/ (this company sells in smaller lots), or at any local hobby store that sells foam interlocking tiles similar to those found on either of the previously listed websites. The foam tiles we use are gray and 2'x2'. 12 tiles are required to build the foam floor for the field and enter/exit opening.
Scoring Trough
The trough is 14.5" high and approximately 7" wide interior with 1 1/4" lip. A 14.5" trash can is an acceptable substitute.
Corner Goal
The corner goal is made up of a 1/2" diameter wooden dowel held in place with white duct tape. The dowel is 36" long.
Starting platform
The starting platform is a 15"x15" piece of 3/4" MDF, or plywood.
Ramp
The ramp is a 23"x38" 3/4" piece of plywood that is tapered on the low end at about a 45 degree angle (i.e. the 3/4" lip on the bottom of the ramp as been cut at a 45 degree angle to ease entry onto the ramp). The height of the ramp is 9 3/4". The top edge of the ramp is 6" from the front lip of the trough and 3" away horizontally.
Balls
Tennis Balls - Any regulation tennis balls
Racquetball - Any Regulation racquetball
Softball - Any regulation womens softball (10.5" diameter)

Q) Do you know of any "retiring" teams or former teams that would have extra parts & pieces that they would be willing to donate or sell?
A) Unfortunately, as this is a brand new program this year, there are no retiring teams. However, often on eBay you can find some great deals on used equipment.

Q) Are you aware of any individuals or companies in the Des Moines, IA area that may be interested in sponsoring a team or willing to coach/mentor, specifically in the technical area of robot design & building?
A) We don't know of any specific companies in the Des Moines area that might assist in sponsorship or mentoring. We would recommend seeking out any manufacturing company in your area. John Deere might be a great source. To assist we have loaded our promotional video on our website at: http://www.create-found.org/AboutUs.php it is at the bottom left of the page. The video should take about a minute to download. It is not video of exactly what your 4th/5th grade teams are doing, rather it is representative of our high school division. Still we believe it is a very accurate picture of the enthusiasm generated within teams regardless of age. It should help in telling the story and encourage companies in sponsoring.

Q) I have the protobot kit. May I purchase and use additional VEX components for Rapid Roll?
A) Yes. But do not exceed the limits referenced in the Rapid Role Manual under Section 4, <R5> of The Robot

Q) At the competition will tether cables and safety glasses be provided?
A) safety glasses are not provided but there are a few that can be checked out and immediately returned, it's recommended you bring your own. Tether cables are not provided, you are to bring your own.

Q) How many Junior teams do you expect to participate in Rapid Roll?
A) We won't know the final number until all registrations are in. We expect a minimum of 8-10 teams.

Q) Can you recommend any books or online resources for more specifics about how to connect the electrical parts for RC control?
A) IFI (Innovation First) has all of it's manuals on line and can be found at: http://www.vexrobotics.com/vex-robotics-downloads.shtml

Q) Is there a way to find a veteran team that would be willing to mentor a rookie team?
A) There are no veteran CREATE Junior teams as this is our first year. However, we suggest bringing your robot, in whatever condition it is in, to the practice session and we will have members of some area high school VEX Robotics teams to assist. By making these connections perhaps a more permanent alliance/mentor program can be started.

Q) Can you give me some examples of scripted questions previously used in the second 5 minutes of the Elevation judging? This will help me ask the right questions of my teams.
A) We don't send out questions early. The idea is not necessarily to know everything at this age, but rather to learn from the experience.

Q) Is there anything special with the Vex tether cable that would prevent me from using a standard 2 wire phone cable? Like the kind that goes between a phone and a receiver? Not the 4 wire cable that goes into the wall?
A) A standard 2 wire phone cable will work just fine. That is what we buy.

Q) We have a question about hardware. We are having a terrible time with the collars, can we purchase a wider collar to help hold the pieces together?
and
Q) In our construction of the TUMBLER, we have encountered a "perplexity". We can't figure out how to join the wheel SHAFT with the motor drive AXLE through the use of the COLLAR. Diagram 3 on p.34 of the Tumbler manual shows the proposed configuration. However, we can't see how the collar can join the two with only one set screw to hold the shaft and axle together. Also, the motor drive axle projection seems to short to allow the collar to be attached to it with the set screw.
A) There is an extra piece in the picture that needs to be removed. It is the small metal piece protruding out from the round green piece (clutch). Once this metal is removed you will find the axle simply slides into the clutch. The locking collar is used to hold keep the axle seated in the clutch.

Thank you for your questions. If you have further questions email them to Support@CREATE-Found.org