

	2004 FIRST Robotics Competition	
January 23, 2004	Team Update	04

→ **Special Notices** ←

Documents and Updates

FIRST will provide important information to teams via the FIRST web site at:

http://www.usfirst.org/robotics/doc_updt.htm

Please check the team updates portion of the web site on a regular basis to insure that your team does not miss critical information about the 2004 FIRST Robotics Competition.

Our schedule to publish Team Updates is:

- Tuesday by 5PM and Friday by 10AM. We work hard to meet these commitments. Unexpected circumstances may, on occasions, delay their publication.
- Additional updates may be released if required.

Question & Answer System

The Question & Answer System can be found at:

<http://www.usfirst.org/robotics/2004/qa.htm>

1. Please ask one question at a time.
2. Questions are limited to 240 characters.

The Manual

Information that has been documented in Team Updates 01, 02, 03, and 04 will be incorporated into the appropriate manual sections very soon. After this process has taken place, you will be able to:

- Access .pdf files with “track changes” turned on so that teams can see all changes applied;
- Access .pdf files with all “track changes” **accepted** (incorporated) that would allow teams to access an up-to-date manual.

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Section 1. Introduction

No changes.

Section 2. Communication

No changes.

Section 3. The Arena

❖ **Supplier for the White Gaffer's Tape for the field markings.**

Got to:

<http://www.tapemonster.com>

- Order Shurtape PC-628 2" x 60 yds White Gaffers Tape for the lines that run from the driver stations to the Ball Tees. It is ~ \$10 per roll.
- Order Shurtape PC-628 3" x 60 yds Black Gaffers Tape for the line that runs the full length of the field to cover the carpet seam. It is ~ \$16.50 per roll.

❖ **Supplier for plastics / HDPE.**

<http://www.plasticsupply.com/>

Plastic Supply Inc., located in Manchester, NH, is available to help you with all of your plastic material needs for the 2004 FIRST Robotics Competition.

Identify yourself as a FIRST team and give them your team number.

[800-752-7759 or 603-669-2727; Fax 603- 668-1691; Email:

plasticsupply@conversent.net]

❖ **Modification to the Playing Field - Lip in Ball Chute opening.**

A question was asked in the Question & Answer System. The question and answer are repeated here for those that may have missed it.

Q: Is there a seamless transition between the playing field and the ball chute? The kickoff video looks like there was a 1/2-inch steel bar or some structural support there.

A: There was an angled piece of 1-1/2" x 1-1/2" aluminum angle in the opening with the outside of the angle facing up (~1-1/8"). In the final configuration, there will be a vertical piece of 1/4" thick aluminum with the same vertical dimension as before. The ball dynamics are the same in either configuration. Drawings will reflect this change.

Section 4. The Game

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- ❖ Modify G28 as below. The new/modified text is **bolded** and *italicized* and/or ~~lined out~~.

This was a new rule from Team Update #03. It has been modified as follows:

<G28> If any part of a robot is in a Ball Corral (breaks the vertical plane of the diamond plate of the Wall), a referee will throw a 10-point penalty flag. The robot operator and the human player have a shared responsibility to avoid contact. If a team member touches the offending robot, that team's robot will be disabled. If a robot pushes another robot to break the plane, the pushing robot will be assessed the penalty. If a human player touches a robot that has been pushed into the Ball Corral, the pushing robot *and the pushed robot* will be disabled.

Section 5. The Robot

- ❖ Correction to a Question & Answer submission regarding Fisher-Price motors.

The question submitted was:

The 2002 and 2003 Fisher-Price motors appear to me to be identical to the Fisher-Price motor in this year's kit. May we use the 2002 or 2003 motor as a spare?

We originally answered as Yes. Thanks to the discerning intelligence of many team members, they have set us straight. We admit it. We goofed! **They are not the same and, therefore, CANNOT be used.**

Section 6. The Kit

- ❖ Additional Information on the 34" ball.

SportFun has agreed that teams can order the 34" yellow ball as follows:

- One box (6 balls) at a cost of \$43.50 (\$7.25 per ball);
- Two boxes (12 balls) at a cost of \$78 (\$6.50 per ball).

They can be ordered from SportFun (they are in California) by calling Marcy at SportFun at 888-386-8998, x116 or e-mail Marcy at mwatters@sportfun.com.

- ❖ Additional source for a battery charger.

The equivalent is a 6A, 12V, automatic type, NAPA charger, item # NBC85315. The approximate price in 2003 was \$52.

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❖ **Additional source for a Maxi-style fuse panel.**

Terminal Supply Co, Troy, MI, has some that are equivalent to ours, but a different brand. Their part number is JEF-531-D, Maxi Fuse Block. They sell for ~ \$16.80. They can be reached at 800-989-9632, x153, ask for Carrie. Their fax is 800-989-7289. Their web address is:
<http://www.TerminalSupplyCo.com>

❖ **Clarification on robot batteries that teams can use this year.**

The only batteries that can be used on your robot during competition (Friday and Saturday) this year are the Exide models EX18-12 or ES18-12. Additional ES18-12 units can be purchased through your local Exide supplier. The EX18-12 is not available through retail outlets.

You may use other equivalent batteries for practice on Thursday.

Section 7. The Tournament

No changes.

Section 8. The Awards

❖ **Change the deadline for the Woodie Flowers Award.**

Since the submissions will be done on line this year and the review committee feels it is important for teams to experience the final days before robot shipping with the nominated mentor, FIRST is changing the submission date to February 27, 2004.