

January 11, 2008

## TEAM UPDATE #2

### GENERAL NOTICES

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**Please note:**

Modifications to rules are highlighted in **yellow**.

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#### Section 0 – Introduction

Section 0 – Introduction, Rev B has been modified to include the following change:

The Chairman's Award winning team in 1997, Team 47 "Delphi International & Pontiac Central High School", changes to "Delphi **Corporation** & Pontiac Central High School"

#### Section 1 - Communication

No changes.

#### Section 2 – Team Organization

No changes.

#### Section 3 – At the Events

No changes.

#### Section 4 – Robot Transportation

**Important Reminder**

Per Section 4.9.1, Teams requesting permission to bring robots home after their last event must submit a request for removal by February 15, 2008.

#### Section 5 - The Awards

No changes.

## Section 6 – The Arena

No changes.

## Section 7 – The Game

Section 7 – The Game, Rev C has been modified to include the following changes:

### Rule <G36>

Disabled ROBOTS and PENALTIES – If a ROBOT becomes incapacitated (e.g. the ROBOT overturns and can not be righted, the battery falls out, etc.), it may be completely disabled by pressing the E-Stop Button in the corresponding Player Station. ROBOTS that are disabled in this manner can not incur further PENALTIES (e.g. can not receive a PENALTY for IMPEDING). Disabled ROBOTS may be pushed out of the path of travel without PENALTY.

### Rule <G38>

Signal To Pass – During the Teleoperated Period, a ROBOT may indicate a desire to pass an IMPEDING ROBOT by approaching the opponent ROBOT and “bumping” the back of the opponent ROBOT (relative to the Direction of Traffic).

- All “bump to pass” signals must be made with or against a STANDARD BUMPER, and inside the BUMPER ZONE, or
- If in POSSESSION of a TRACKBALL, the ROBOT may “bump” the IMPEDING ROBOT with the TRACKBALL outside the BUMPER ZONE, providing the contact is made exclusively with the TRACKBALL.

Signaling a desire to pass by “bumping” must still be executed within the constraints indicated in Rule <G37>. E.g. high-speed intentional ramming or using the TRACKBALL to intentionally damage or topple an opponent are still not acceptable actions, and will be penalized.

### Rule <G40>

IMPEDING Traffic – ROBOTS shall not intentionally IMPEDE the flow of traffic around the TRACK. During the Teleoperated Period, a ROBOT will be considered to be IMPEDING traffic if it is preventing an opposing ROBOT from proceeding around the TRACK. A ROBOT can be found to be IMPEDING traffic if:

- the ROBOT is traveling slowly relative to the approaching ROBOT, and moving to prevent the approaching ROBOT from passing, or
- the ROBOT is stopped on the TRACK and there is no clear lane of passage for the opposing ROBOT, or
- the ROBOT pins an opposing ROBOT against an arena element, border, or another ROBOT

Note that a ROBOT is not IMPEDING traffic if:

- there is a clear “passing lane” around the ROBOT, or
- the IMPEDING ROBOT and the approaching ROBOT are from the same ALLIANCE (i.e. a ROBOT can not impede another ROBOT of the same ALLIANCE), or
- the ROBOT is in the process of HURDLING (except as noted in Rule <G43>).

### **Rule <G42>**

Protection While HURDLING – Neither a ROBOT in the process of HURDLING, nor a TRACKBALL in its POSSESSION, shall be subjected to overt, blatant, or aggressive contact that interferes with the HURDLING attempt. Each incident will be PENALIZED. Bumping to signal to pass (see Rule <G38>) a HURDLING ROBOT is permitted if no passing lane is open (see Rule <G43>). Incidental contact while passing the HURDLING ROBOT or otherwise engaged in normal game play is permitted.

## **Section 8 – The Robot**

The Inspection Checklist, Rev B has been modified to include the following change:

“Robot Class” has been removed from the top of the document

## **Section 9 – The Tournament**

Section 9 – The Tournament, Rev B has been modified to include the following change:

### **Rule <T15>**

During the Elimination Matches, the higher seeded ALLIANCE will have the last opportunity to orient their ROBOTS within the selected locations. During the Qualification Matches, the ALLIANCES will position and orient their ROBOTS simultaneously.

## **Section 10 – The Kit of Parts**

Section 10 – The Kit of Parts, Rev B has been modified to include the following changes:

### **Section 10.1.2**

- Added location to purchase additional *FIRST* IR boards
- Added location to purchase additional Trackball shells and bladders

## Section 10.2

This section of the manual provides additional information about some of the parts included in your KoP. For a complete list of the 2008 KoP contents, please refer to the 2008 KoP Checklist located on the *FIRST* homepage, <http://www.usfirst.org/community/frc/content.aspx?id=452>

### Section 10.2.3

- Specifications for the Denso motor have been removed.
- The motor curve for the FisherPrice motor can be found on [www.usfirst.org/community/frc/content.aspx?id=482](http://www.usfirst.org/community/frc/content.aspx?id=482)
- Specifications for the Taigene motor can be found on [www.usfirst.org/community/frc/content.aspx?id=482](http://www.usfirst.org/community/frc/content.aspx?id=482)
- Specifications for the Keyang motors can be found on [www.usfirst.org/community/frc/content.aspx?id=482](http://www.usfirst.org/community/frc/content.aspx?id=482)

#### Section 10.2.8.1

The 2008 Trackballs require some care in assembly and inflation. Each Trackball consists of two parts: a Bladder and a Cover. The bladder has a 120cm diameter and is made of 2500g PVC.

### ***FIRST Guidelines, Tips and Good Practices***

*FIRST* Guidelines, Tips and Good Practices, Rev B has been modified to include the following changes:

- The reference to the FisherPrice Minibike CIM motor has been removed.
- BaneBots planetary transmission reference has been changed to the AndyMark Toughbox.