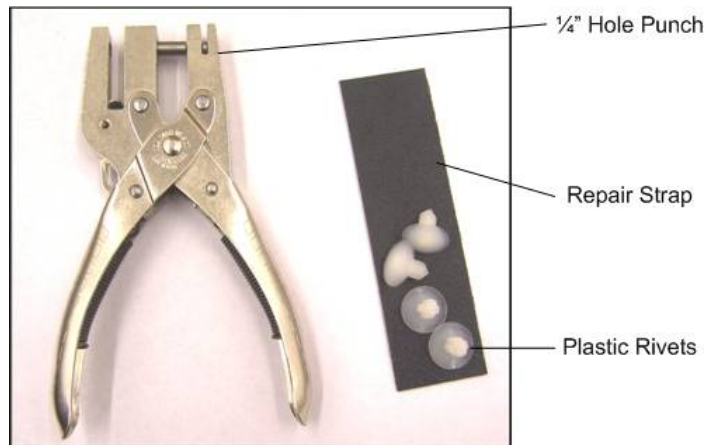


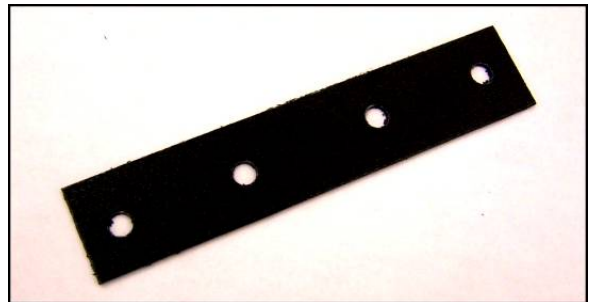
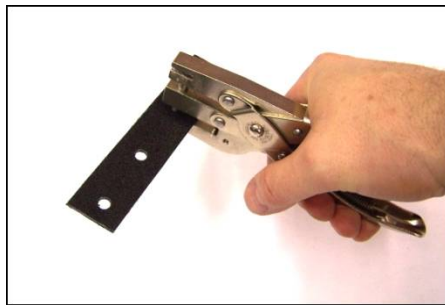
### 1.19 ORBIT BALL REPAIR

The **2009 FRC Orbit Ball Repair Kit** is provided with each field in the (xxx) road case. It consists of parts as shown to the right.

*Note: The actual repair parts shipped with your field may vary slightly from the photos in this procedure.*



1. Using the hole punch, create four holes in the repair strap as shown. Be sure to leave space between the middle two holes to span the broken joint on the ball.

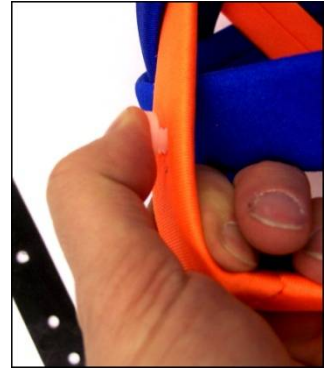


2. Lay the repair strap on the **outside** of, and parallel to the broken ball strap, being sure to align the middle of the repair strap with the break. Using the first hole as a template, punch completely through the ball strap:



## 2009 *FIRST* Robotics Competition (FRC)

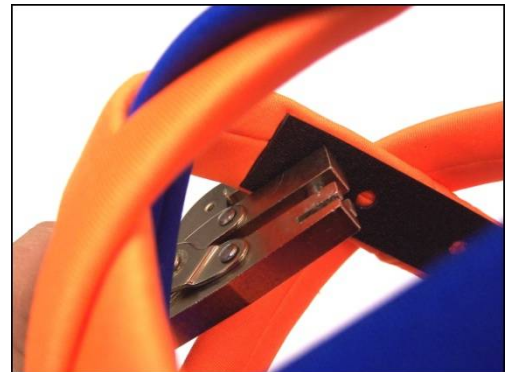
3. Insert a plastic rivet all the way through the new hole in the ball strap:



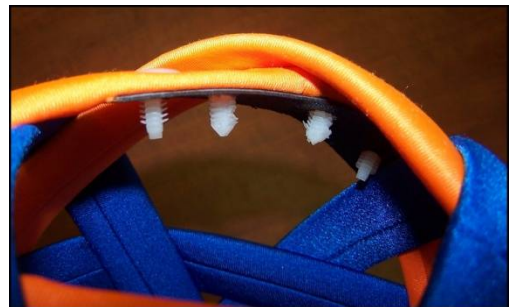
4. Place the repair strap inside the ball, behind the ball strap, aligning the hole with the tip of the plastic rivet. Press on the head of the rivet while squeezing the layers together to fully set the rivet.



5. Now working from the **inside** of the ball, repeat this process with the remaining three rivets. Be careful to keep the repair strap and the broken ends of the ball straps in proper alignment while punching the holes. Do not proceed with punching the next hole until the previous rivet is fully in place and set.



6. Check that all four rivets are fully set and well attached.



## 2009 *FIRST* Robotics Competition (FRC)

7. You now have a repaired orbit ball, ready for play. For best appearance, slide the repaired section under a nearby strap to partially conceal it.



### Revision history:

- 1.1 9/23/2008 First Edits (NAR)