## The Magpie Magic Adjustable Chopped Ball

Each of our chopped balls is made from a hardwood core and has a hole drilled completely thru its center. A strong axially magnetized neodymium cylindrical magnet is inserted into this hole. One end of the cylindrical magnet is positive and the other end is negative. This causes one side of the ball to be repelled from another axially magnetized magnet, and the other side of the ball to be attracted.

The cylindrical magnet in each ball is 1/2 the diameter of the ball in length. The strength of the magnetic attraction the ball will have can therefore be adjusted by pushing the magnet deeper into the ball, thus widening or narrowing the distance between the two attracting magnetic fields and increasing or decreasing its strength. Pushing on the magnet will cause it to move thru the wood core of the ball. The magnet is fitted tightly into each ball to prevent it from moving on its own, but there is enough tolerance to allow you to move it with some effort.

Because the magnet in the cup may be either positive or negative side up, start by dropping the magnetic ball into the magnetic cup. The ball will orient itself so it is attracted to the magnet in the cup.

IF THE MAGNETIC PULL IS TOO WEAK: Lift the ball straight out of the cup keeping the ball oriented and insert a nail or brad into the upper end of the ball, thru the knit jacket. The nail should enter the cored out hole in the ball and contact the magnet. Place the ball on a hard flat surface and push the nail until the magnet starts to move. You most likely will have to use a small hammer for this, but use only very gentle and light taps with the hammer.

IF THE MAGNETIC PULL IS TOO STRONG: Lift the ball straight out of the cup, rotate the bottom of the ball upward and insert a nail or brad into the upper end of the ball, thru the knit jacket. The nail should enter the cored out hole in the ball and contact the magnet. Place the ball on a hard flat surface and push the nail until the magnet starts to move. You most likely will have to use a small hammer for this, but use only very gentle and light taps with the hammer.

Move the magnet in tiny increments, remove the nail and test after each move until you have achieved your preferred attraction strength. Moving the magnet just  $1/16^{th}$  of an inch or one millimeter will make a difference.

When you have achieved your desired attraction strength simply pinch the knit jacket a little around the hole that was created by the nail to tighten up the thread.

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