



### R Joint Assembly

**DO NOT PAINT OR POWDERCOAT THE INSIDE DIAMETER OF THE R-JOINT OUTER SHELL.**

**DO NOT WELD ON THE HOUSING WITH THE R-JOINT ASSEMBLED.**

**1.** Push the Ball into the Composite Cage keeping the Ball positioned as seen in **Image 1**. After the ball is snapped in place, turn it to line up the through hole with the ends of the cage.

**THE FOLLOWING ILLUSTRATIONS HAVE A CUTAWAY OF THE OUTER SHELL TO SHOW THE PROCESS IN GREATER DETAIL.**

**2.** Start the Cage/Ball Assembly into the Outer Shell. The Cage is inserted with the slits going into the Shell first. It is inserted into the side of the Outer Shell that has the Spiroloc Groove.

**3.** Use a 1 1/4" Diameter Socket or other driver to push on the Composite Cage. Push the Cage/Ball assembly into the Outer Shell until it bottoms out or stops.

**4.** The Wave Spring may need to be stretched some to fit properly. Test fit the Wavy Spring to make sure it sits in the groove pointed out in **Image 4**. If it doesn't sit in the groove, stretch it by hand until it fits properly. You can stretch the Wave Spring by grabbing each end of it and pulling outward. Do this in small steps to keep from over stretching it. Once it fits properly, insert the Wavy Spring into the Assembly using **Images 4 & 5** as a reference.

**5.** Install the Spirolox Retaining Ring into the Outer Housing. This will keep the Wave Spring and Cage/Ball in place. There is a groove machined in the Outer Shell that the Spirolox Retaining Ring gets installed into. Install the Spirolox by inserting one end of it into the groove and working it in by spinning the housing. Verify the Spirolox is fully seated. You may need to take the 1 1/4" diameter socket or driver used in Step 3 to push on it to fully seat the Spirolox.

**6.** Once the Spirolox is in place, use an 1 1/8" diameter Socket or Driver to push the Ball/Cage back against the Wave Spring/Spirolox Retaining Ring. Flatten the Wavy Spring out as much as possible.

**7.** Insert The Spacers into the Ball.

