

# **Belt Drives Ltd.**

## **Ring Gear Installation Instructions**

Ring gears are a Heat & Shrink fit

*Read all installation instructions before beginning procedure.*

Ring gears that are drilled and pinned are done so in-house. If you are replacing one of these types of ring gears you or your repair facility will need to drill and pin ring gear to your basket using holes in basket or old ring gear as your template for drilling new ring gear holes.

### **1. To remove old ring gears:**

Use a cutoff wheel and cut ring gear over one of the inner diameter arches "rivet reliefs" to a point as close as you can to and without damaging the clutch basket. Then, use a sharp chisel and hammer and "pop" the old ring gear and remove. Or, you can support the entire ring gear only and press the complete diameter of basket only in a downward motion, pressing basket off of the ring gear. If you have a ring gear that has tension/roll pins, you will remove these first and save for reuse.

### **2. To install new ring gear:**

You will need to heat ring gear in an oven to a temperature of 450 degrees for approximately 30 minutes. An experienced mechanic may also use a torch with a rose bud tip or a hand held torch with map gas and heat entire ring gear in a circular motion to heat and expand the ring gear for installation. "No need to get red hot."

3. Once ring gear has been heated use a very good pair of high heat protective gloves and place the ring gear onto the ring gear relief of basket with the beveled edge (SG-2) & ( SG-3) or step (SG-4) facing towards the primary belt. Make sure that ring gear is true and flat to the ring gear relief and stop machined into basket. \* Bevel or step is for primary belt /ring gear clearance.

4. Ring gears with no beveled edge, need to be placed with the rivet relief areas over the top of the clutch dog rivets. Some of these rivet reliefs are cut all of the way through and some are not (SG-1). Be careful in the placement of ring gear.

5. Let ring gear air cool for 30 minutes. This will give the ring gear time to shrink back down onto the basket for a .010 - .013 shrink fit.

### ***Quick Reference***

SG-1 has 66 Teeth & an I.D. of 7.377, and is for 47, 61 and 62 Tooth Baskets.

SG-2 has 66 Teeth & an I.D. of 6.875, and is used for all Chain Drive, Top Fuel, & 68, 72, & 76 Tooth baskets.

SG-3 has 66 Teeth & an I.D. of 6.625, and is used for 1994-2006, 69 Tooth 2" open baskets.

SG-4 has 106 Teeth & an I.D. of 6.535, and is used for 2007 & UP 69 Tooth 2" & 2-3/4" open baskets.