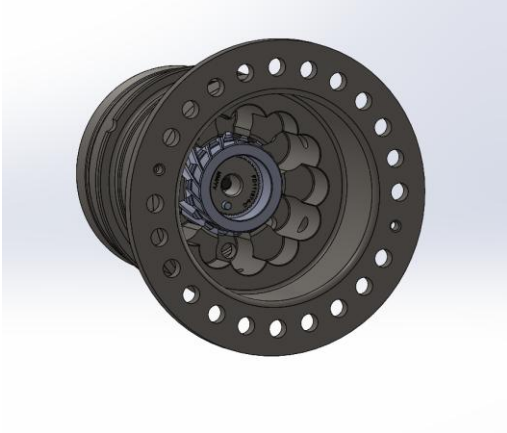
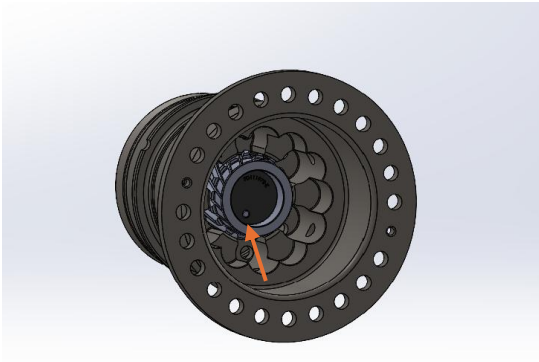


RT2 Differential Assembly Instructions

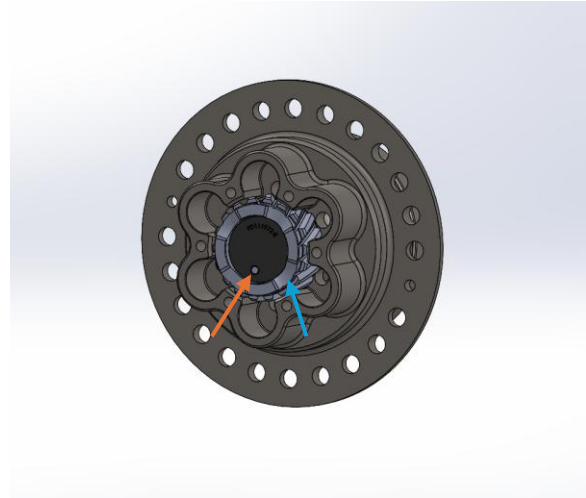
1. Tap the stub axle into the bearing bore (make sure shoulder of stub axle is against bearing face). Slide side gear over stub axle spline.



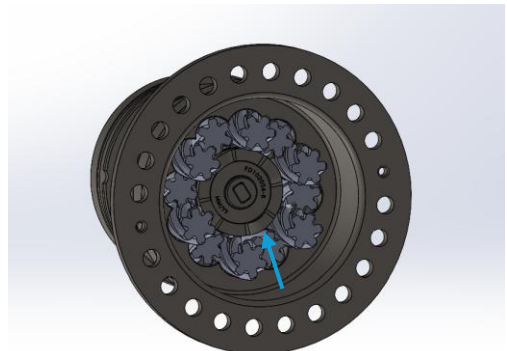
2. Insert the retainer into stub axle and align the dowel pin with the hole on the retainer (orange arrow).



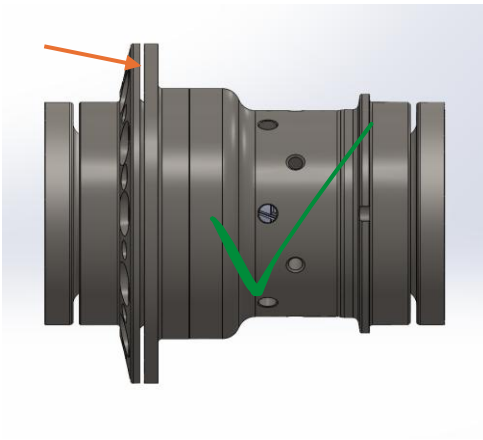
3. Tighten 5/16 bolt to 25 ft-lbs (blue Loctite).
4. Repeat steps 1-3 for opposite side of differential (see next picture for what that looks like).



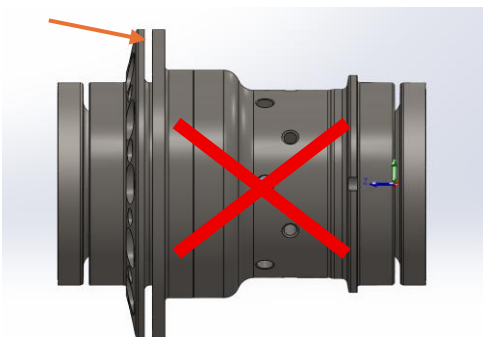
5. Stack the internals per the exploded view. Take note of the scallops on the gear (blue arrow above) and lobes on preload plate (blue arrow below). You will need to align these in step 6. Align a scallop on the gear with 1/4" hole.



6. Rotate the internals so that a lobe on the preload plate is aligned with the $\frac{1}{4}$ " threaded hole. Install the differential cap using the $\frac{1}{4}$ " hole and threaded holes as alignment features. You will need to rotate the stub axle CW and CCW as you lower the differential cap so that all of the gears can mesh appropriately. Once lowered, you can rotate the stub axle CW and CCW to feel the lobe of the preload plate move along to scallop of the gear. When you do this, you should see the diff housing gap (orange arrow below) increase and decrease. For proper alignment, the gap is approximately $\sim .10$ " (2.5mm).



7. If the gap is $\sim .20$ " (5mm), it is improperly aligned and you need to rotate the stub axle until the lobe and scallops align (blue arrows in step 5).



8. You should be able to start the $\frac{1}{4}$ " bolts by hand (if not you have improper alignment). Be sure to remove these after you install the ring gear.