

Lokka Installation - Toyota Floating

Read the instructions completely before starting this part of the procedure.

Remove the cross shaft bolt by rotating the carrier so the head of the cross shaft bolt is next to the carrier bearing retainer bolt head. There is just enough clearance to remove this long thin bolt. Undo and remove the bolt.

Remove the cross shaft. Examine the shaft. If there is any sign of wear, particularly where the pinion gears spin then replace the shaft. It is essential for the correct operation of the locker that this shaft is in perfect condition. Wear of only 0.002" is unacceptable. Sub standard replacement cross shafts are characterised by soft case hardening and are therefore not suitable for this application.

Spin the side gears so that the pinion gears and cup washers can be removed. Remove both gears and washers.

Remove the side gears. Remove the thrust washers from the base of the side gears. Examine condition.

Grease the base of the axle gear and fit thrust washers.

Grease the locker spacer and fit to axle gear. Face any flat surface towards the cross shaft.

Fit the axle gears into the carrier, spin to make sure they have settled. Temporarily push the cross shaft in. With a feeler gauge measure the gap between the cross shaft and the spacers on both sides. This gap should be between 0.006 and 0.020".

Note: SHORT CUT

Remove the cross shaft and spacers. Fit the cam gears in place temporarily and measure the gap between the cam gears. This gap should be between 0.145 to 0.165".

If the gaps are not within tolerance, then replace or machine the thrust washers equally to satisfy the above clearances. The inter-cam gear clearance has the priority. The cam gears must sit symmetrically about the cross shaft for optimum vehicle performance.

If the clearances are within tolerance, then simply proceed with the fitment.

Grease the cam gear teeth and small holes.

Fit a small pin into each of the slotted holes in each cam gear, (2 per gear) with the stepped end of the pin toward the base of the slot. Use a little grease to hold the pin in place.

Grease the spacers and slide into the cam gears.

Fit the cam gears to the axle gears still inside the carrier. The grease will hold the teeth meshed.

Align the 2 cam gears and with a small scribe or screw driver push the pins into the opposite cam.

Feed a spring into each slot in turn, ascertaining the end of the spring seats over the stepped end or nipple of the pin. Each spring will keep a small amount of pressure on each pin.

When the 4 spring sets are fitted, rotate the locker assembly so that the distance between the 2 cam gears can be measured. Use a feeler gauge. The measurement should be from 0.145 to 0.165 inches. If not, then both thrust washers will need to be equally changed or machined to compensate.

Rotate the locker assembly so the cross shaft can be slid into position and fit shaft.

Fit the cross-shaft locating bolt.

The third member is now ready to be refitted to the vehicle.