

Thank you for purchasing the Ball Differential for the Mini Quake.

Note: This differential will only work with the DuraTrax optional CV shafts (DTXC7407) for the Mini Quake.

This ball differential is assembled, but the following assembly instructions should be used as a reference when performing maintenance and cleaning.

BALL DIFFERENTIAL ASSEMBLY



- □ 1. Install a 6x10 bearing (61) onto the diff outdrive 1 (44).
- □ 2. Install diff outdrive 1 (44) into diff plate holder 1 (45).
- □ 3. Install a diff plate (46) onto the diff plate holder 1 (45).
- 4. Install the 4x7mm bearings (49) onto the diff plate holder 1 (45). Then install the differential main gear (47).
- □ 5. Apply grease to each of the 12 differential balls (48) and install them into the differential main gear (47).
- G. Install the other differential plate (46) onto the differential plate holder 2 (69).



- 7. Install a differential thrust plate (71) onto the differential bolt (73).
- 8. Place a generous amount of diff grease (not included) onto the differential thrust plates (71). Then install six differential balls (48) onto the diff thrust plate (71).
- 9. Next install the second differential thrust plate (71) onto the differential bolt (73).
- □ 10. Install a rubber spacer (70) onto the differential bolt (73) and slide it up against the differential plate (71).
- 11. Apply threadlocking compound on the diff bolt (73) threads and install the diff bolt into the diff plate holder (69). Do not overtighten the bolt. Only tighten until you feel a little resistance.





12. Install a 6x10mm bearing (61) onto the diff outdrive outer side 2 (75). Then install the diff outdrive outer (75) into the diff outdrive inner (74). Secure the pieces together by installing a 5mm E-clip (C). Slide this assembly into the differential.
13. Using a 1.5mm hex wrench, gently tighten the differential bolt (73). Tighten the bolt until it becomes snug. Then back it off 1/16 of a turn. Note: Do not over tighten the bolt. It could damage the differential balls and differential plates. The differential bolt may need to be tightened after the first couple of runs. This is due to the parts wearing in.

BALL DIFFERENTIAL TUNING

You can use the adjustable ball diffs to tune your truck's handling. Tightening the ball diff will increase forward traction, but decrease cornering. **TIP:** Be sure not to overtighten or loosen the ball diff. Overtightening will put flat spots on the balls, causing excess drag. Too loose of a setting will make the differential slip and overheat.

