

## **The Ultimate Mi3 Diff**

Before starting think of diff building like cooking with chicken. The black thrust lube is the chicken and if you get it on the diff balls, rings or pulley your diff will get sick and DIE!

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1. If you haven't gotten a U1954 Tungsten Carbide Thrust Bearing get one. Its better then the one included in the kit.

Clean it all out and use Schumacher Black Thrust lube. Measure the outside diameter of the thrust washers. The small diameter one goes on the screw first.

Go wash your hands and get every bit grease off your fingers.

2. Sand U2408 diff rings with 600 grit wet dry on both sides using motor spray to wet the paper until you see even scoring of the rings entire surface.

Clean them with motor spray and place them on a clean paper towel.

3. Toss the ceramic diff balls. The U2459 Tungsten Carbide diff balls are smoother and longer lasting. Place the balls on a clean paper towel and CAREFULLY spray them with motor spray to get rid of any protective oil that is on them. If you spray too hard you will launch \$15 of diff ball all over you room and they will be gone forever. When they are clean and dry put them in the tub of U1301 Silicone diff grease. Pluck them out and place them in your diff pulley. Thats all the grease you will need.

4. Gradually tighten up the diff until one output starts to spin opposite the other one. Gradually tighten the diff a little then spin it a little until you feel the diff screw has collapsed the spring washers next to the thrust bearing and it doesn't want to turn anymore.

The goal is to tighten the diff but not pit your freshly sanded diff rings.

5. Loosen the diff 1/4 turn then lock down the grub screw on the opposite side.

6. Put the diff in your car and turn everything on. wit the car up on a car stand. Run the car at low throttle while alternately touching each rear wheel until it stops. Repeat this 2-3 time per side.

The diff should be super free, super smooth and should not slip at all.

If you diff slips just once during a race it will score your rings and it will be junk. You will have to rebuild it and flip, re-sand or replace the rings.

The U1954 thrust will last longer than your kit so it will never be the cause of diff problems. The U2459 ball will survive at least 6 months or more. The only things that go bad in a diff assembled with these parts as described are the rings and you can re-sand them several time before you need to replace them.

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