

E4RS II - Tip 5: Differential Lubrication

The first thing to understand with gear differential is there is no lubricant in the silicone oil we use to fill it. May be you feel it strange, but it's true: silicone oil is NOT a lubricant.

So, it's necessary to put molybdenum grease (e.g. GreenRC GRC6052) on the gears before filling the differential with silicone oil. You also can apply some Teflon grease (e.g. GreenRC GRC6056) between the outrives and the differential case.

As you can see on the right pictures, I use Teflon grease on the O-ring and diff outrive. It will increase the overall seal, and provide a smoothest movement of the parts.

After installation of the O-ring, outrive, pressure washer and gear pin, I put some Teflon grease on the pin. It will maintain the gear on the outrive and lubricate the movement between the washer and the gear.

Finally, I install the differential gear, and put molybdenum grease on it.

Now I can finish the differential assembly and fill the silicone oil I wish.

