



1/8 Slipperential Center Diff (patent pending)

What is a Slipperential you say? It is just what it sounds like - a 1/8 center differential with an integrated slipper clutch.

The Slipperential is designed from the ground up to handle the rigors of racing, allowing the tuning benefits of an adjustable slipper clutch in conjunction with the already present tuning benefits of a center differential. You no longer have to choose the EITHER power handling and durability benefits of a slipper clutch, OR the power transfer tuning ability of a differential - you can have BOTH in a small, light weight, drop in unit.



1) Assemble 2.5mm x 8 cap screw into Adjusting Ring. DO NOT TIGHTEN yet. (use blue threadlock)



2) Assemble Adjusting Ring onto main Diff Cup. Only thread on a few turns to allow easy assembly of the slipper mechanism. **VERY IMPORTANT**-Add a light coat of grease on the threads before assembling.



3) Place 2 wave springs over diff cup. Wave springs have an overlap section on them. Make sure not to put the overlap sections of the 2 springs on top of each other.



4) Place Pressure Plate over Diff Cup.



5) Place Thrust Washer over Diff Cup.



6) Place 2nd Pressure Plate over Diff Cup



7) Put Teflon Ring into Spur Gear



8) Put Slipper Pads into spaces in Spur Gear



9) Place spur gear slipper assembly on Diff Cup.



10) Lightly scuff the Pressure Plate lightly on the slipper side to aid "traction", Put 3rd Pressure Plate on Large End Cover Plate. Make sure to align the notches.

"tip" - a small amount of grease behind the Pressure Plate will help hold it in place during assembly - DO NOT allow the grease to contact the slipper surface..



11) Place Diff Gasket on Diff Cup.



12) Attach Large End cover plate assembly to Diff Cup with 3mm x 10 Flathead Screws. Use blue threadlock.



13) Put o-ring in groove. And lightly grease o-ring and outdrive hole.



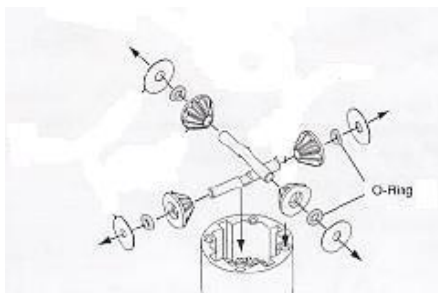
14) Put bearing on endplate and insert outdrive.



15) Put washer over outdrive shaft and insert cross pin thru cross hole.



16) Install crown gear over outdrive shaft and cross pin. Install satellite gear assembly.



17) Satellite gear assembly diagram.



18) Install bearing and outdrive into small cover plate. Lightly grease the hole and/or outdrive shaft before assembly.



19) Put greased o-ring, washer, cross pin on outdrive shaft.



20) Put crown gear on outdrive shaft. "tip" – a dab of silicon fluid under the crown gear will help hold it in place during final assembly



21) Fill diff cup with your choice of diff fluid. Fill just to top of gears. Place gasket on diff cup.



22) Install small cover assembly with 8mm flathead screws. Use blue threadlock. "tip" –If you find the internal gear mesh to be tight on final assembly, remove the small cover and install an additional gasket(included).



23) Put 4mm grub screw into adjustment tool until bottomed out. Use threadlock. – Set screw must be threaded into adjustment tool deep enough to allow the tool to "bottom out" on the adjustment ring in use



24) Assembled adjustment tool.

Slipper adjustment tips: For the initial slipper adjustment, tighten the adjustment ring until there is approximately 1.25mm of space between the adjustment ring and slipper pressure plate. Tighten cap screw on adjusting ring before use. You may find this adjustment slightly "tight" on a buggy or slightly "loose" on a truggy when using the optional 50t spur gear. There is a pretty good range of available slip, but remember – more slip will increase wear (additional wear items available separately). A good base adjustment will allow the slipper to slip for about 12 inches during a hard launch on a high traction surface. Slightly more slip may be beneficial on a loose track to aid traction and slightly less may work best on a hard, smooth surface. Once you find a setting that works best for you, be sure to tighten the cap screw on the adjustment ring to maintain this setting. When a fluid change is needed or desired, the slipper setting need not be touched. The diff can be rebuilt as often as needed by removing the "non-slipper" end cap. The Teflon ring and slipper pads should be checked periodically for wear.

For more tips, tricks and discussion, please visit our forums for the latest Slipperential discussion. WWW.RC-MONSTER.COM/FORUM