BMW X3 (E83), X5 (E53/E70) and X6 (E71):  pat #  27 10 7 566 296, 27 10 7 541 782
Land Rover Discovery LR3 and LR4, Range Rover Sport:  pat # ITC1228991, ITC 1 22 899 1
Mercedes-Benz GL and ML (164/166):  pat #  164 540 01 88GR

BE SURE TO ALSO SEE THE VIDEO UNDER THE HOW TO SECTION OF OUR WEBSITE

Once the transfer case actuator motor is removed from vehicle. Remove four bolts the secure the motor to the gear housing. Hold onto the plastic electrical connection and wiggle the motor apart.
Motor and electrical connection removed as one piece. This ensures that the motor contacts do not spring out making reinstallation harder.

Using several size small screwdrivers, wedge behind the c clip inside of the white gear, you will be reusing this clip so do not lose.
Tip over assembly and remove the washer, you will be reusing this washer do not lose.

Using a small screwdriver at one corner, wedge the screwdriver between the housing and the metal plate. Twisting the screwdriver to get under the plate and working around the edge to remove.
Insert a long screwdriver from the motor side under the gear assembly and while prying up with the screwdriver with one hand gently twist the gear assembly with the other hand. This helps to keep from damaging the internal seal as this is not available without purchasing a new assembly from BMW.

Grasp the white gear with one hand and the black gear with the other, wiggle the two parts apart.
The material we use to reproduce this gear is a high temperature nylon material with carbon fiber reinforcement.

Using your hand install the new gear from Odometer Gears.

Next you want to use brake cleaner to remove any residue or debris from the gear housing. Apply a layer of high temperature or marine axle gear to the new gear. Reinstall in the reverse order.