

# 97-13 GETRAG DIFFERENTIAL BREAK-IN PROCEDURE

## Pre-Installation Warning

If you purchased a new or rebuilt differential because of a previous blown up differential, for warranty purposes Zip requires you to have the output shaft of the transmission professionally checked for straightness. When a differential housing or pinion fails, it can cause a slight bend in the transmission output shaft. This is a very common issue. The max runout tolerance in the output shaft is .003. The shaft needs to be spun on a lathe with both ends chucked to properly check the runout. Failure to do so will cause oil cavitation in the pinion bearing and lead to a very quick failure of the pinion bearings. This is NOT covered under warranty.

## Getrag Differential Installation

1. It is very important to properly break in your new differential. Failure to properly break in the differential will lead to failure of the differential that will not be covered under warranty.
3. Follow all removal and installation procedures as outlined in the Chevrolet Service Manual.
4. Zip highly recommends the Driven Oil 80W-90 Conventional gear oil, part number MG-275. The break in does not have additive, one bottle of POSI additive should be added during break in procedure. MG-276 Driven Oil synthetic gear oil does include the positraction additive. 2-3 bottles of oil will be required to fill the differential. You should fill until oil is coming out of the fill hole.

## Break-In Procedures

### Street

1. Your first drive must be short (about 10 minutes), just to warm up the oil inside the differential. Do not exceed 50mph. Once you have done this, pull the fill plug and then top the differential back off.
2. The second trip should be only 30 to 40 miles of normal highway driving; you do not want to exceed 65mph. If you have a 3.90 or 4.10, keep it down to around 50-55mph max. Repeat this procedure of short drives three more times.
3. After finishing the initial break-in procedure, your Corvette can be driven for an unlimited distance but do not apply high loads to the differential for the first 500 miles. High loads such as full throttle launches, drag racing, road racing or any type of driving where throttle and traction are factors. You must first put an easy 500 miles on the differential.

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4. Once you have reached the 500-mile break in, drain the fluids out of the differential and refill with a GM or equal 75W-90 synthetic lube with friction additive. You can also add more friction additive if needed. Zip recommends Driven Oil part number MG-276, it already has the friction modifier in the oil.

*Note: This break in procedure was created by a Motive Gear engineer to provide proper break in of the face of the ring and pinion. Failure to follow the break in procedures will cause a less than desirable pattern on the face of the gear resulting in noise and eventually gear failure.*

## Road Racing

For road racing applications, you will not be able to properly break in your Corvette's differential. Zip suggests filling the differential with Driven Oil 80W-90 Conventional gear oil, part number MG-275. Go out during warmup and run a 20-minute warmup but keep the car at a safe cruising speed on the track without hard acceleration. Follow this procedure for two sessions. Once warm up sessions are completed, change fluids to Driven Oil synthetic gear oil, Zip number MG-276.

## Drag Racing

We understand that some drag cars will not be able to successfully do the break-in because they are not streetable. We recommend you drive it around the pits to get the gear oil lubricating the bearings and clutches. Make a couple of easy passes just so the differential can get temperature and cool down time. Keep the break in oil in the differential for approx. 10 passes before changing over to Driven synthetic gear oil. If this is a street car that you drag race, please follow the break in procedures for the street.

There is no warranty on race application differentials. Please take precautions and make some easy passes before attempting a full launch on the differential.