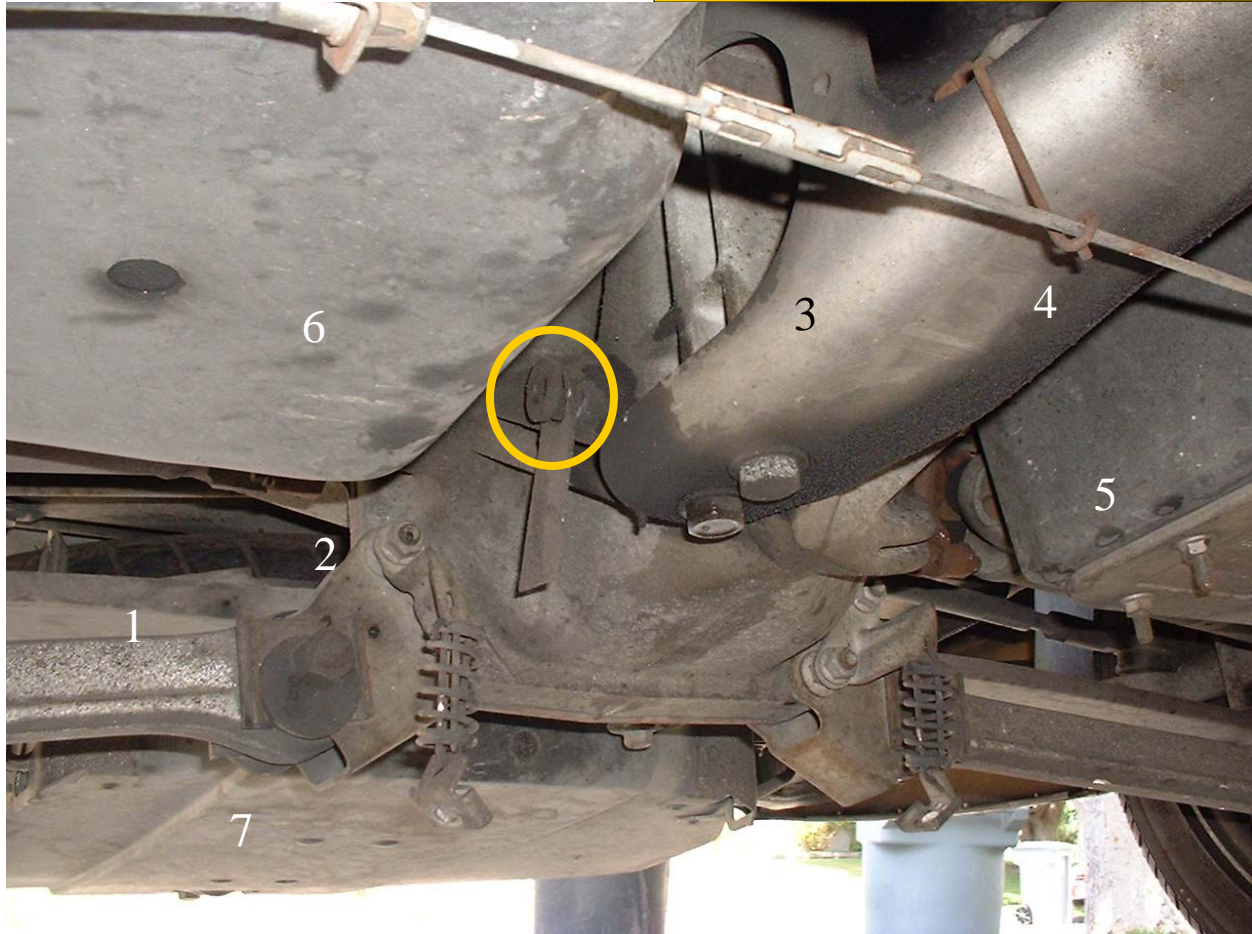




CHANGING REAR DIFFERENTIAL FLUID

By Andy Bogus, Editor

| Overview | Parts Needed |
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| <p>This is an interesting reality - GM does not have a service interval for the rear differential fluid. Personally, this is rather odd.</p> <p>Some gear oils already come with the additives built in, check the packaging to be sure which lube you have.</p> <p>The two bottles of differential additive are a recommendation given by none other than Gordon Kellebrew. Mr. Kellebrew helped write the Factory Service Manual and is considered the foremost authority on the fourth generation Corvette.</p> <p>There are two types of rear differentials used on the Corvette. Within those types, there are many different ratios, but for our needs, we only need to be aware that the two types exist.</p> <p>In 1984, all rear differentials were Dana model 36. Starting in 1985, all manual equipped Corvettes came standard with the Dana model 44.</p> <p>The Dana 44 was never made available from the factory with an automatic equipped car.</p> <p>The difference is the size of the ring gear. The Dana 36 uses a 7.5" ring gear, and the Dana 44 uses an 8.5" ring gear. That larger ring gear allows for more ratio options (up to 4:11:1) and a stronger differential housing.</p> <p>Proper maintenance will allow this expensive and important component to last a long, long time.</p> <p>REMEMBER: Always raise and secure the car safely!!! Use jack stands or ramps to better secure the vehicle.</p> | <ol style="list-style-type: none">1. Two bottles of GM differential additive2. Gear oil—GL-5 rating 75/90 weight |
| | Parts Sources |
| | <p>The only source for the GM differential additive is your local GM dealership.</p> <p>Gear oil is available at most auto parts shops. I suggest you get one of the brand names, Mobil and Valvoline are a couple of suggestions.</p> |
| | Time and Effort |
| | <p><i>How long:</i> One hour <i>How hard:</i> Easy</p> |
| | Models Affected |
| | <p>All years.</p> |
| | Tools Needed |
| | <ol style="list-style-type: none">1. Jack stands and a floor jack or ramps2. Transfer pump3. 10mm hex socket or pipe wrench |
| | <p>Please read these directions completely BEFORE starting the project!</p> |
| | <p>Photos by author</p> |



This is the rear differential of a 1992 Corvette with an automatic transmission. All years look the same, regardless of the transmission.

The factory did not install a drain plug. If your car has one, it's because someone added it. All fluid is transferred via this plug (circled in yellow). The plug is on the right side. I removed the exhaust for other projects and does not need to be removed for this task.

Some parts to point out:

1. Spindle Rod (the lower control arm)
2. Alignment Cam
3. C-beam
4. Parking brake cable
5. ABS/ASR storage bin
6. Storage bin
7. Spare Tire



This is a Mity Vac Fluid Transfer Pump. It is available at most automotive parts stores and Sears. Expect to pay about \$13.00 for one.



Removing the plug can be tricky.

Technically, a 10mm hex key will fit, but, the space is tight. I have found that using a pipe wrench is a very effective way of removing the plug. Not perfect, sure, but effective.

Transferring the fluid is as easy as inserting a hose into the hole.

Pump out the old oil, reverse the hoses on the pump and fill with the two bottles of additive, topping off with gear oil until full. It takes about two quarts. Reinstall the plug, lower the car, and it's done!

Conventional wisdom suggests the gear oil should be changed every 30,000 to 50,000 miles, depending on driving style. If you race, I would suggest more frequently.

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