

## DIY – Rear Axle / Differential oil change, with pics – for FAQ

### DIY: Changing the oil in a base C6 rear axle / differential

If you are experiencing the common differential chatter noise on turns when cold (rubbing, scraping, clunking, grinding or chatter sound), changing the differential lubricant will rid the noise instantly, at least after doing a few figure 8's with the new lubricant in place.

For some, a simple differential lube change has proven to be the cure for many thousands of miles, and for others, it has only helped for just a few thousand miles. If you prefer to avoid the dealership and wish to take immediate action, change your differential fluid and you will get rid of the chatter noise for likely up to a few thousand miles minimum if not much more. It's a good first step in any case.

Overall, changing the oil in a base C6 rear axle / differential is very easy. If it's your first time, this DIY article will at least give you an idea of what to expect.

This refers to base C6s only. Z06s have differential coolers (base C6's do not) and require a bit more effort. Z06s and export vehicles have different axle oil capacities than the base C6 as well.

First, run the car a while to get the axle oil warm. I ran my car about 40 miles. When I got back, the axle case was quite hot to the touch. 20 minutes after shutting off the engine, the mufflers were finally cool but the axle case was still hot. With this in mind, it is a good idea to wait about a half hour after shutting off the engine until the exhaust system cools down so you do not severely burn yourself... the axle and axle oil will still be very warm for good drainage.

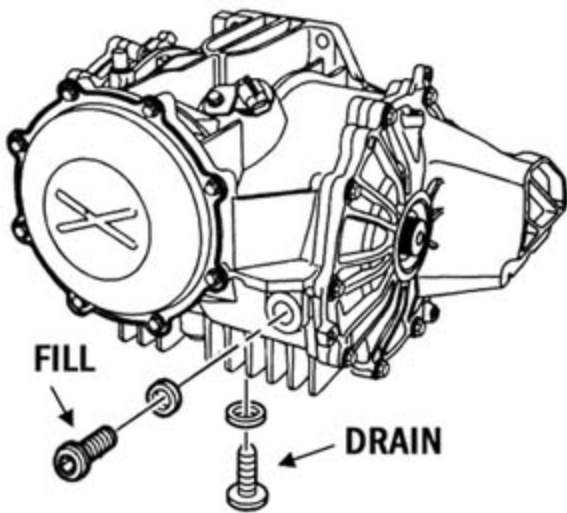
You'll need to get the car up off the ground a bit as in photos, but keep car LEVEL. First choice would be to use a real lift. Second choice, back the car up on Race Ramps and then jack the front end in order to level the car. Last choice (most laborious), jack the car from both front and rear.

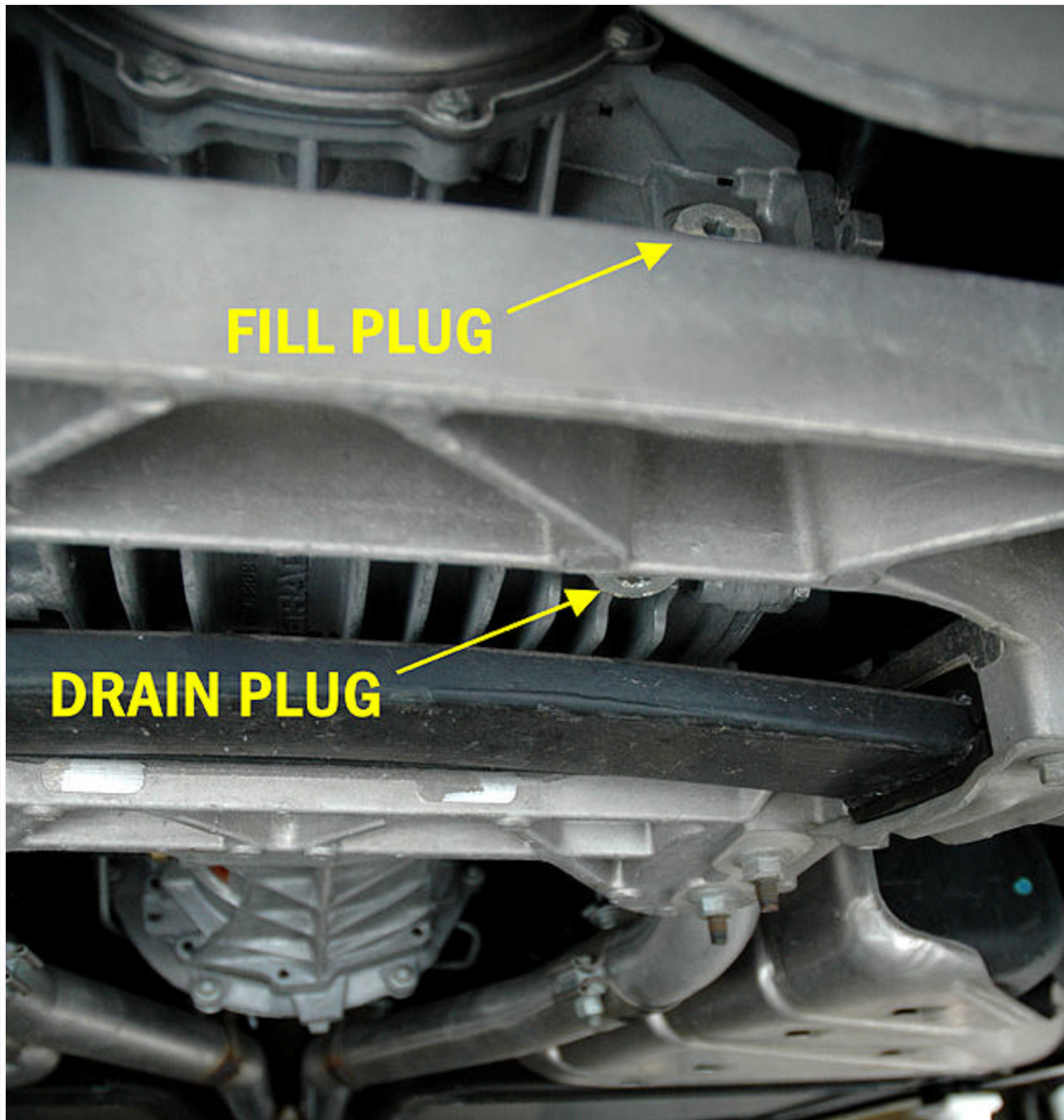


Since you need to access the rear axle from the rear, you cannot block the rear with a jack. I had initially tried to use my [4-point jack system](#), but was not able to access the axle plugs with the rear jack and cross member adapter in the way. I had to add stands under the rear puck locations and then remove the rear jack and cross member adapter. I then added two extra screw jacks under the rear "preferred" jacking locations for extra support and safety. This

worked out fine. But next time I think I'll try backing up on ramps... would be easier.

The axle case has two plugs that must be removed... a fill plug and drain plug. The fill plug is on the rear vertical side of the case, the drain plug is on the bottom horizontal side of the case. Both plugs exist on the right half of the case (passenger side). Both plugs are identical in size / type.





Put some cardboard down on the floor and have some rags on hand as you will inevitably spill / splash some oil. Place a drain pan directly under the drain and fill plugs.

Clean the areas around both plugs. Using a 3/8" drive swivel arm socket wrench and 10mm allen socket of about 1 - 3/4" total length (as shown), loosen and remove the fill plug. (*Always remove the fill plug before removing the drain plug*) There are different ways of accessing this plug but the photos show one method that seems to work well and is easy. Note in the photos that the socket wrench handle extends down through the middle of the aluminum cross member. Some oil may start to drip out. If the plug is very tight, use a piece of pipe over your

socket handle for leverage. Both my plugs did not require much effort to loosen... pipe was not needed.



**VIEW FROM DRIVER'S SIDE  
REAR CORNER OF CAR**



**VIEW FROM ALMOST DIRECTLY  
UNDER THE FILL PLUG LOOKING  
STRAIGHT UP**

Next, loosen and remove the drain plug. The oil will come blasting out and may splash in the pan so shield your face. Allow the axle to drain for a while. Mine was still dripping 12 hours later.

Clean the drain plug and area around the drain hole and install drain plug. Torque to 35 Nm or 26 lb/ft. I chose to torque by hand... basically just got it nice and snug. Do not overtighten. You could get a torque wrench on the drain plug easily if you wanted, but not on the fill plug. If you are not sure about the torque "feel", use a torque wrench on the drain plug in order to get a

good "feel" for what it should be, then do your best to apply that same "feel" to the fill plug using your regular socket wrench.

Time to refill the axle:

**IMPORTANT:** Read the latest GM TSB regarding rear axle chatter to determine which GM gear oil / additive and amounts you should be using. This info has changed over the years and is subject to further periodic change. The latest axle TSB (as well as previous axle TSBs) can be found in post #2 of this thread:

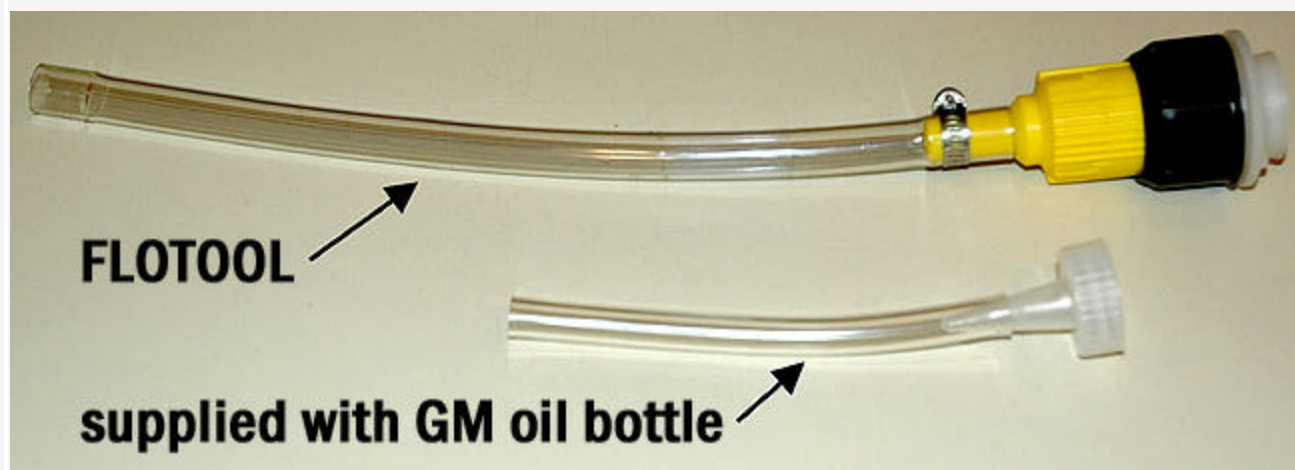
<http://forums.corvetteforum.com/show...24&postcount=2>

As of January 2008, the oil specified for use in the Corvette differential is Dextron LS Gear Oil 75W-90, part #88862624 (#88862625 in Canada). No additive is required or recommended – just add straight Dextron LS 75W-90 only.

Your C6 differential requires roughly 2 quarts (*check manual and/or TSB for exact specs for your year / model*). But be sure to have at least 3 quarts of oil handy since it is almost impossible to squeeze all the oil out of the bottles into the axle, plus you'll likely spill some anyway.

Since you will not be able to get the oil bottles higher than the fill hole, you must pump or squeeze the oil up into the hole.

The GM oil bottles come with extra pointed nozzle caps and a short piece of clear tubing. I found this set up to be too short and too small a diameter, plus after a while the nozzle gets oily and the hose starts slipping off the nozzle no matter what you do. One solution is to buy an aftermarket fill tube at the local auto store. The product I found (at Pep Boys) is made by Hopkins Manufacturing, called a "FloTool"... it threads right onto the GM oil bottles and has a 12" long section of clear tubing attached... twice as long and larger diameter than what you get with the GM oil bottle. This FloTool fit really nice and made the oil fill a breeze.



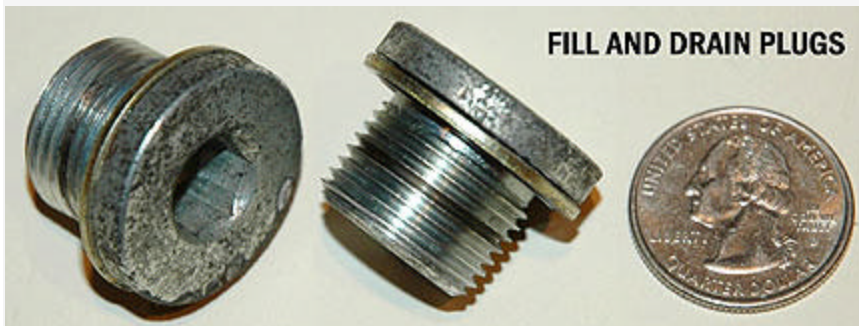
Insert the tubing into the fill hole of the axle holding the gear oil bottle up between the mufflers and squeeze the bottle. You will see the oil flow through the tube and into the axle. One headache though is that you can only get about half or two thirds the contents of the bottle into the axle even if you squeeze / crush the bottle as hard as you can... so you need to refill the bottle and repeat. This is the main reason to have at least one extra bottle of gear oil on hand.

I guess you'd need a pump of some type to really empty the entire bottle into the axle... but not necessary because whatever oil does not make it into the axle can be saved for the next fluid change.



*Note: I am holding the bottle upside down in the photo – was just posing in that shot – bottle nozzle should be as low as you can get it with relation to the rest of the bottle.*

Add oil to the differential until oil starts dripping out of the axle oil fill hole. Then allow the oil to drip out for a bit to make sure the axle is not overfull. Again, it's important that the car is level. Reinstall fill plug.



Once everything is buttoned up, it is recommended (per TSB) to run the car in a tight "figure 8" pattern about 8 or 10 times as soon as you possibly can after the oil swap. Many consider this

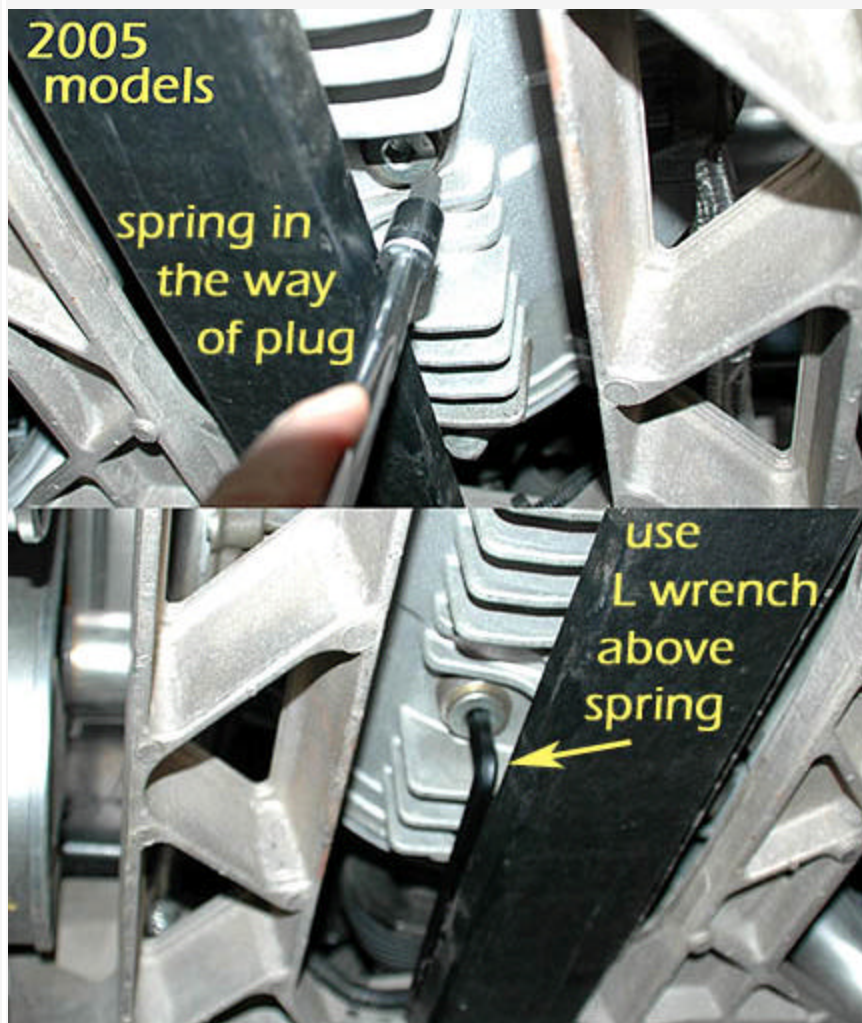
an important step so do not overlook it.

Thanks to the forum and its members for much of the info in this DIY post! 🙌

**Note:** I was just alerted by member **Paulct** that the axle drain plug on 2005 models (at least on his 2005) sits above the leaf spring so that you cannot get an allen wrench straight in from below. The spring is in the way. An L-shaped allen wrench tool must be used so that it can be pivoted above the leaf spring. On my 2006 model, the spring is NOT in the way of the plug and you can easily get an allen socket straight into the plug from below. (see photos below) So if you have an `06 or newer C6, you will only need a good allen socket and socket wrench to do the entire job. If you have an `05 model, you will ALSO need an L-shaped allen tool and most likely a short piece of small diameter pipe for extra leverage on the L-shaped wrench. Thanks **Paulct** for the below "2005" photos.

We suspect this difference in drain plug position has to do with the differential case change between 2005 and 2006. For more info regarding differential differences between `05 and `06 models, click below link:

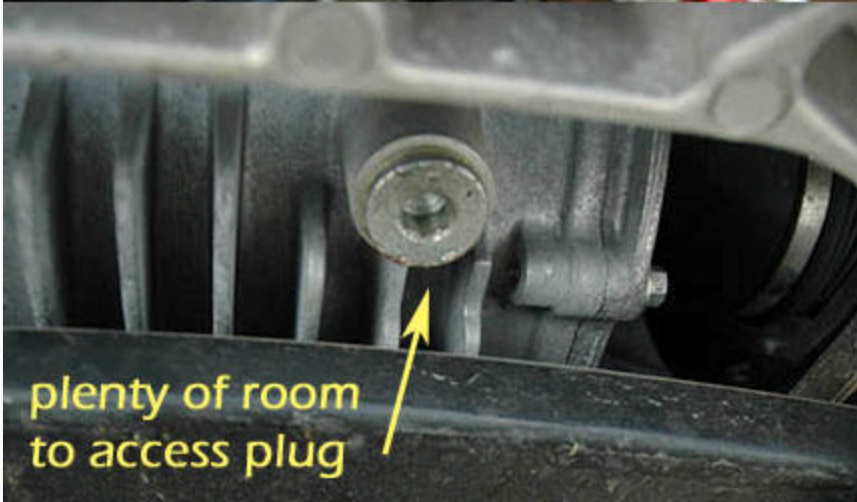
[http://forums.corvetteforum.com/show...9&forum\\_id=101](http://forums.corvetteforum.com/show...9&forum_id=101)



2006+  
models



socket goes  
right in from  
below



plenty of room  
to access plug

Last edited by Vet; 07-23-2008 at 10:59 AM.



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09-12-2006, 02:59 AM

# 2

[Vet](#)

CF Senior Member

★★★★★



Latest axle chatter TSB (thanks to member,



[My Corvette Photos](#)

Member Since: Sep 2004

Location: Long Island NY

calemasters):

**Date: 01-09-2008**

**TSB: #07-04-20-002A**

**Document ID# 2048181**

2005 - 2008 Chevrolet Corvette

Subject: Rear Axle Clunk and/or Chatter Type Noise on Turns

(Drain/Refill Rear Differential Fluid) #07-04-20-002A - (01/09/2008)

Models: 2004-2008 Cadillac XLR (Including V-Series and Export)

2005-2008 Chevrolet Corvette (Including Z06 and Export)

This bulletin is being revised to change the fluid recommendation and to remove the requirement of adding friction modifier. Please discard Corporate Bulletin Number 07-04-20-002 (Section 04 -- Driveline/Axle).

Condition:

Some customers may comment on a clunk and/or chatter type noise from the rear of the vehicle while making turns.

Cause:

This condition may be caused by slip/stick of the posi-traction clutch plates due to insufficient limited-slip axle additive. As plates slip and stick, a jumping or jerking feel occurs accompanied by a clunk noise.

Correction:

Important: DO NOT remove the differential cover from the rear or the two sides. It is not necessary to flush the old fluid from the differential.

Drain and refill the rear differential fluid using the procedure listed below.

Draining Procedure:

Raise and support the vehicle. Clean any dirt from around the differential drain plug. If not equipped with a differential cooler, remove the drain plug (1) and washer (2) from the differential.

If equipped with a differential cooler: 4.1. Using a

bent tip screwdriver, remove the quick connect fitting retaining ring (3) from the quick connect fitting (4) and discard the retaining ring.

4.2. Remove the differential cooler inlet pipe from the differential nut.

Drain the fluid.

Filling Procedure:

If not equipped with a differential cooler, install the drain plug (1) and washer (2) to the differential. Tighten the differential drain plug to 35 N•m (26 lb ft).

If equipped with a differential cooler: 2.1. Install a new retaining ring.

2.2. Connect the differential cooler pump inlet pipe (2) to the differential. A distinct snap should be heard or felt when assembling the cooler pipe to the fitting.

2.3. To ensure the cooler line is properly installed, give the cooler pipe a gentle pull.

Clean any dirt from around the differential fill plug. Remove the fill plug and washer from the differential.

**Important:** DO NOT add any limited-slip additive (friction modifier). With this new fluid (**Dexron LS Gear Oil 75W-90**) it is no longer required to add friction modifier. If friction modifier is added, it will cause the fluid to lose some of its friction reducing properties as well as reducing seal life.

Fill the differential with the new DEXRON® LS gear oil, P/N 88862624 (Canadian P/N 88862625). Refer to the table listed below for lubrication specifications.

Check the fluid level to ensure it is even with the bottom of the fill plug hole to no lower than 6 mm (0.25 in) below the opening. Install the fill plug and washer to the differential. Tighten the differential fill plug to 35 N•m (26 lb ft).

Important: Steps 8-13 are for vehicles equipped with the differential cooling system. For vehicles not equipped with the cooling system, proceed to step 14.

Raise the vehicle so the wheels are about a foot off the floor. Make sure the wheels can spin freely without obstruction from the hoist or any nearby items. Start the vehicle and put the transmission in second gear. Slowly accelerate to 10 mph and hold this speed for one minute. Turn the vehicle off. Raise the vehicle. Check the fluid level in the differential. Add fluid until the recommended level is reached. Lower the vehicle.

Once the differential fluid has been changed, the vehicle must be driven in 8-10 tight figure eight maneuvers to heat the fluid and allow the fluid to be worked into the clutch plates.

#### Lubrication Specifications Application

2004-2005 XLR (Including Export) and 2005 Corvette (Non Export)

1.72 liters  
1.85 quarts

2006-2008 XLR (Including V-Series and Export) and 2006-2008 Corvette (Non Z06)(Non Export)

2.0 liters  
2.11 quarts

2005 Corvette Export

1.88 liters  
1.99 quarts

2006-2008 Corvette Export (Non Z06)

2.16 liters  
2.28 quarts

2006-2008 Corvette Z06

2.75 liters  
2.91 quarts

#### Parts Information:

Description: DEXRON® LS Gear Oil

Part Numbers:

88862624 (US-1 Quart)

88862625 (Canada-1 Liter)

#### Warranty Information

For vehicles repaired under warranty, use:

Labor Operation: F9709\*

Description: Drain & Refill Rear Axle Fluid

Labor Time: 0.6 hr

\* This is a unique labor operation number for bulletin use only. It will not be published in the Labor Time Guide.

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Document ID# 2048181  
2005 Chevrolet Corvette

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Previous axle chatter TSB (thanks to member, **99ssconv**):

**Date: 4-16-2007**  
**TSB: #07-04-20-002**  
**Document ID# 1961528**

Subject: Rear Axle Clunk and/or Chatter Type Noise on Turns (Drain/Refill Rear Differential Fluid and Add Specified Limited-Slip Axle Additive)

Models:  
2004-2007 Cadillac XLR (Including V-Series and Export)  
2005-2007 Chevrolet Corvette (Including Z06 and Export)

Condition:  
Some customers may comment on a clunk and/or chatter type noise from the rear of the vehicle while making turns.

Cause:  
This condition may be caused by slip/stick of the posi-traction clutch plates due to insufficient limited-slip axle additive. As plates slip and stick, a jumping or jerking feel occurs accompanied by a clunk noise.

Correction:  
Important: **DO NOT** remove the differential cover from the rear or the two sides. It is not necessary to flush the old fluid from the differential.

Drain and refill the rear differential fluid using the procedure listed below. Add the increased amount of limited-slip axle additive specified below.

Raise and suitably support the vehicle.

Clean any dirt from around the differential drain plug.  
Remove the drain plug and washer from the differential.  
Drain the fluid.  
Install the drain plug and washer to the differential.  
Tighten the differential drain plug to 35 N·m (26 lb ft).

Clean any dirt from around the differential fill plug.  
Remove the fill plug and washer from the differential.

Important: Prior to adding the limited-slip axle additive, the bottle **MUST** be shaken vigorously for at least 1 minute to mix the additive thoroughly, then immediately poured into the differential.

Add 237 ml (**8.0 oz**) limited-slip axle additive, **P/N 1052358**  
(Canadian P/N 992694).

Fill the differential with synthetic axle lubricant, **P/N 89021677**  
(Canadian P/N 89021678).

Check the fluid level to ensure it is even with the bottom of the fill plug hole to no lower than 6 mm (0.25 in) below the opening.  
Install the fill plug and washer to the differential.  
Tighten the differential fill plug to 35 N·m (26 lb ft).

Lower the vehicle.

Once the differential fluid has been changed, the vehicle must be driven in 8-10 tight figure eight maneuvers to heat the fluid and allow the additive to be worked into the clutch plates.

Part #: 89021677 (89021678 In Canada)  
Description: Synthetic Axle Lubricant  
Quantity: 2 (3 for Z06 and Export)

Part #: 1052358 (992694 In Canada)  
Description: Limited-Slip Axle Additive  
Quantity: 2

For vehicles repaired under warranty, use:  
Labor Operation: F9709\*  
Description: Drain & Refill Rear Axle Fluid  
Labor Time: 0.6 hr

\*This is a unique labor operation number for bulletin use only. It will not be published in the

Labor Time Guide.

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Document ID# 1961528  
2006 Chevrolet Corvette

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**Previous TSB - 12/06/06** (thanks to member, **vetteshop**):

Subject: Rear Axle Chatter Shudder On Turns -  
keywords bind differential **#PIP3559F -  
(12/06/2006)**

Models: 2004 - 2007 Cadillac XLR  
2006-2007 Cadillac XLR-V  
1999 - 2007 Chevrolet Corvette, Corvette Z06

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern:

Rear axle chatter or shudder on turns on Chevrolet Corvette and Cadillac XLR.

Recommendation/Instructions:

Flush and fill the rear axle with synthetic axle lubricant GM P/N 89021677 (Canadian P/N 89021678) and appropriate amount of the friction modifier additive P/N 01052358 (in Canada 992694). See fluid amounts listed below.

Note 1: In some cases it has shown that a second flush procedure on a second repair visit will correct the chatter/shudder concern prior to replacement of the clutch packs.

Note 2: To properly flush the rear differential remove the left differential cover and get all of the old fluid out off the differential, wipe out the residue replace the cover o-ring and then reinstall the cover and fill with the appropriate amount of fluid and friction modifier additive.

If the complaint or the condition persists after the flush and fill, replace the right and left rear axle clutch packs following published service procedures.

After clutch pack replacement use synthetic axle lubricant GM P/N 89021677 (Canadian P/N 89021678). and the appropriate amount of friction modifier additive P/N 01052358 (in Canada 992694). See fluid amounts listed below.

Note 3: PRIOR TO INSTALLING THE FRICTION MODIFIER ADDITIVE FOR EITHER OF THE ABOVE REPAIRS THE BOTTLE MUST BE SHAKEN VIGOROUSLY FOR AT LEAST 1 MINUTE TO MIX THE ADDITIVE THOROUGHLY.

Once the axle fluid has been changed the car must be driven in 8 - 10 SLOW figure eights to work the fluid between the clutch plates.

Fluid capacity:  
Model Year  
Model  
Differential Lube  
Friction Modifier

1999-2005  
Corvette ALL  
1.69 qt (1.6L)  
4 oz. (118 ml)

2006-2007  
Base Corvette  
1.95 qt (1.85L)  
5 oz. (148 ml)

2006-2007  
Corvette Z06  
2.70 qt (2.55L)  
6.4 oz. (190 ml)

Note 4: Export vehicles use 2.01 l (2.12 qt) synthetic axle lubricant GM P/N 89021677 (Canadian P/N 89021678) and approximately 150 ml (5.1 oz) limited-slip differential lubricant additive GM P/N 1052358 (Canadian P/N 992694).

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

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**Previous TSB - [10/13/06](#)**

Subject: Rear Axle Chatter Shudder On Turns -  
keywords bind differential  
**#PIP3559C - (10/13/2006)**

Document ID# 1866944  
2006 Chevrolet Corvette

2004 - 2007 Cadillac XLR  
2006 - 2007 Cadillac XLR-V  
1999 - 2007 Chevrolet Corvette, Corvette Z06

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern: Rear axle chatter or shudder on turns on Chevrolet Corvette and Cadillac XLR.

Recommendation/Instructions:

If this is the first complaint for this condition flush and fill the rear axle with synthetic axle lubricant GM P/N 12378261 (*P/N 12378261 has been replaced with P/N 89021677*), (Canadian P/N 10953455) and appropriate amount of the friction modifier additive P/N 01052358 (in Canada 992694). See fluid amounts listed below.

Note 1: To properly flush the rear differential remove the cover and get all of the old fluid out off the differential, wipe out the residue and then reinstall the cover and replace the fluid and additive.

If this is a repeat complaint or the condition persists after the flush and fill, replace the right and left rear axle clutch packs following published service procedures.

After clutch pack replacement use synthetic axle lubricant GM P/N 12378261 (Canadian P/N 10953455). and the appropriate amount of friction modifier additive P/N 01052358 (in Canada 992694). See fluid amounts listed below.

Note 2: PRIOR TO INSTALLING THE FRICTION MODIFIER ADDITIVE FOR EITHER OF THE ABOVE REPAIRS THE BOTTLE MUST BE SHAKEN VIGOROUSLY FOR AT LEAST 1 MINUTE TO MIX THE ADDITIVE THOROUGHLY.

Once the axle fluid has been changed the car must be driven in 8 - 10 SLOW figure eights to work the

fluid between the clutch plates.

Fluid capacity:

1999-2005

Corvette ALL

Differential Lube: 1.69 qt (1.6L)

Friction Modifier: 4 oz. (118 ml)

2006-2007

Base Corvette

Differential Lube: 1.95 qt (1.85L)

Friction Modifier: 5 oz. (148 ml)

2006-2007

Corvette Z06

Differential Lube: 2.70 qt (2.55L)

Friction Modifier: 6.4 oz. (190 ml)

Note 3: Export vehicles use 2.01 l (2.12 qt) synthetic axle lubricant GM P/N 12378261 (Canadian P/N 10953455) and approximately 150 ml (5.1 oz) limited-slip differential lubricant additive GM P/N 1052358 (Canadian P/N 992694).

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

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**Previous axle chatter TSB: 9/08/06**

Subject: Rear Axle Chatter Shudder on Turns -  
keywords bind differential **#PIP3559A -  
(09/08/2006)**

Models: 1999-2007 Chevrolet Corvette

2004-2006 Cadillac XLR

2006-2007 Cadillac XLR-V

This PI is being superseded to update recommendations, models and years.

**Please discard PIP3559.**

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern:

Rear axle chatter or shudder on turns on Chevrolet

Corvette and Cadillac XLR.

Recommendation/Instructions:

**If this is the first complaint for this condition flush and fill the rear axle with mineral based lubricant P/N 89021669** (in Canada 89021670) gear lube and 4 ounces of the friction modifier additive P/N 01052358 (in Canada 992694).

If this is a repeat complaint or the condition persists after the flush and fill, replace the right and left rear axle clutch packs following published service procedures.

**After clutch pack replacement use 1.6 l (1.69 qt) synthetic axle lubricant GM P/N 12378261** (Canadian P/N 10953455). and 4 ounces of the friction modifier additive P/N 01052358 (in Canada 992694).

Note: 2006 Z06 equipped vehicles require 2.55 l (2.70 qt) synthetic axle lubricant GM P/N 12378261 (Canadian P/N 10953455) and approximately 190 ml (6.4 oz) limited-slip differential lubricant additive GM P/N 1052358 (Canadian P/N 992694).

Note 2: Export vehicles use 2.01 l (2.12 qt) synthetic axle lubricant GM P/N 12378261 (Canadian P/N 10953455) and approximately 150 ml (5.1 oz) limited-slip differential lubricant additive GM P/N 1052358 (Canadian P/N 992694).

Once the axle fluid has been changed the car must be driven in 8 - 10 SLOW figure eights to work the fluid between the clutch plates.

Note 3: PRIOR TO INSTALLING THE FRICTION MODIFIER ADDITIVE FOR EITHER OF THE ABOVE REPAIRS THE BOTTLE MUST BE SHAKEN VIGOROUSLY FOR AT LEAST 1 MINUTE TO MIX THE ADDITIVE THOROUGHLY.

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*Last edited by Vet; 01-24-2008 at 10:38 PM.*



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09-12-2006, 03:00 AM

# 3

[Vet](#)

CF Senior Member

★★★★★



[My Corvette Photos](#)

Member Since: Sep 2004

Location: Long Island NY

A few other bits of interesting info:

\*Member **vetteshop** stated: "...in the past, I have replaced a bunch of clutch packs in the C5's, they have the same issue. Upon inspection of the removed clutch packs, they do not fail, they look brand new with no evidence of wear or damage. The issue seems to be a varnish buildup on the plates that causes binding, resulting in the noise when turning. This is why replacing the fluid (with new additive) may only temporarily cure the problem. The problem is the design of the rear differential. Caprice's and Camaro's with posi rears have had the same issue for years. The difference on the Corvette is that there is not a cover that you can remove to clean the clutch packs, such as every other conventional posi rear end. The only way to clean the clutch packs is to remove the rear from the vehicle and completely disassemble it. One may as well install new clutch packs after going through all that trouble..."

\*Member **calemasters** stated: "...Original axle clutch plates were fiber. New plates are carbon... I believe BG production changed to the carbon plates in late December of 2005... I spoke to one of the Getrag engineers (he used to be on this board) but he was not clear to why the grind chatter occurred with the fiber plates. Just that the carbon plates fix this condition... Time it takes to replace clutch packs: With Automatic Transmission, 7.2 hours; With Manual Transmission 6.7 hours "

\*Member **jabbott** of Rat Pack Motorsports stated: "These are some of the symptoms (chatter, etc) of a Posi Traction unit. Usually you can change the oil or add some slip additive and it will go away. Changing the clutches is not going to make a difference. There are only two ways to solve it (eliminate chatter) and they both require a lot of work if the oil is not doing the trick. You can have some of the carrier machined where the clutches go in, we do this to fine tune our race clutch setup but it could also be done for a street car to help with chatter. The second is we can install a torque biasing carrier which you would never have chatter again. Both of these are very expensive options, in the end the chatter is not going to hurt anything

mechanically, it is more just an issue with the driver thinking something is wrong."

\*Member **shopdog** stated: "To do any good, the additive has to be worked in to the clutch packs. Since the diff is a splash system, it is sometimes hard for the slickum to find its way into the clutch packs before it settles out (isn't miscible in the diff oil). That's why the TSB says to drive the car in figure 8s immediately after adding it. That makes the clutches slip, and lets some of the slickum slip into the clutches too. I have a suspicion that not all of the cars at the factory get driven that way right after the diff fluid is added. Anyway, a few ounces more additive in the differential won't hurt anything. I wouldn't suggest putting 5 pints of additive in, but an extra 4 ounces is cool."

\*Member **shopdog** stated: "You need to realize that the differential is a splash lubrication system. If the car sits for several days without being driven, the lube drains out of the clutches. Then when you first drive it again, the clutches are working dry until enough lube works its way back up there to relube the clutches. This causes uneven wear of the clutches, and after doing this enough times, you get chatter..."

\*Member **mbonness** posted these interesting polls regarding axle chatter:

<http://forums.corvetteforum.com/show...ight=axle+poll>  
<http://forums.corvetteforum.com/show....php?t=151612>

<http://forums.corvetteforum.com/show....php?t=152564>

\*Here's a post by a member with continuing noise issues even after clutch pack and fluid changes:

<http://forums.corvetteforum.com/show....php?t=155889>

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*Last edited by Vet; 05-29-2007 at 01:17 PM.*

