

## Can Low Transmission Oil Cause Transmission Problems?

Transmission oil is crucial for a car's health; its levels directly affect transmission and engine functions. All modern vehicles rely on proper lubrication from the transmission oil to facilitate smooth gear shifts and optimal performance. This article explores the causes of low transmission oil and the potential effects of low transmission oil in automatic and manual transmissions, such as overheating. It also further explains how you can correctly refill your car's transmission oil and gives you valuable insights on transmission maintenance.

### Can Low Transmission Oil Cause Transmission Failure

Yes. Transmission oil, also known as transmission fluid in cars with automatic transmissions, serves several purposes. In manual transmissions, transmission oil is responsible for lubricating, cooling, and protecting the transmission internals, gearings, bands, and bearings, from rapid wear and tear. On the other hand, transmission fluid serves as a hydraulic and frictional fluid in addition to lubricating and cooling the transmission internals in a car with an automatic transmission.

If the transmission oil in a manual transmission is low, heat will build up due to friction caused by lack of lubrication, leading to mis-shifts and gear slippages, among other issues. The same thing happens in automatic transmission, but it can be worse since there will be no hydraulic pressure to engage and disengage gears. When ignored, metal shavings from the transmission internals accumulate on the seals and gaskets within the transmission. And if you have existing transmission oil leaks, it will worsen if the seals and gaskets break.

### Problems Caused by Low Transmission Oil

Transmission oil, unlike engine oil, is often not paid attention to. A reduction in quantity goes unnoticed one too many times. Most car owners only realize it after significant problems or during a maintenance schedule. Here are some common problems of low transmission oil.

#### Gear Slippage

Lack of sufficient oil in the transmission reduces the lubricant that creates a film between the gears causing them to slip when you shift gears in a manual transmission. Gear slippage is also caused by weak gears resulting from overheating. Excess heat softens the gears since the oil in the transmission cannot dissipate heat as it should, and other internals also get affected, thus exposing them to rapid wear and tear.

In automatic transmissions with low oil, slippage is mainly caused by insufficient hydraulic pressure causing the clutches and bands to engage and disengage correctly. Overheating and insufficient lubrication also pose a risk to the transmission's internals, having the same effect as in manual transmissions, thus causing gear slippage.

#### Mis-shifts

This happens in cars with automatic transmission due to reduced hydraulic pressure. Automatic transmissions have a transmission control module (TCM) that controls gear shifts at certain RPMs and ratios. If you're low on transmission oil, gear shifts are delayed, and the transmission will shift later at higher RPMs than usual.

You might also experience inconsistent gear shifts, especially in higher gears. This happens when the lower gears shift correctly, but the transmission takes longer to engage higher gears. In some cases, the engine redlines without the transmission shifting into a higher gear which might cause further damage to the engine if not paid attention to.

#### Hard Gear Shifts

If you're having trouble getting your car into gear and the issue persists even after driving the car for a while, there's a high chance that you're running low on transmission oil. It happens when there's too much friction between the gears, and you have to use more force pushing the gear level to get the transmission into gear. Sometimes, the issue goes away after the oil in the transmission heats up, but you need to check the oil level if it happens consistently.

#### Noises From Transmission

Noises from the transmission automatically mean that you're in for an expensive bill when you take your car for repairs. Perhaps even a transmission replacement. Any clunking, grinding, and vibration noises occur as a result of ignoring the signs listed above that indicate that the transmission is low on oil. These noises mean that the internals

are too worn out to function and are constantly in contact with each other due to a lack of lubrication and overheating due to insufficient cooling.

### Transmission Warning Light Comes On

Most modern cars have a transmission warning light to indicate transmission faults, one among which is low transmission oil which is the most common reason for the light to come on. If you recently refilled your transmission oil, maybe you didn't reset the transmission, or you have leaks. Since the transmission warning light might come on for several reasons, including a faulty transmission sensor or solenoid, you'll need to diagnose the issue before rushing to fill the oil.

Source; [repairsmith.com](https://www.repairsmith.com)

In older cars, especially those with a manual transmission, without a transmission warning light, the engine warning light comes on if the transmission is low on oil and experiencing resulting issues, mainly overheating. If your car has any of the above-listed signs and the engine check light is on, continuing to drive it is highly advised against.

Source; [Nissan24auto.com](https://www.nissan24auto.com)

### Excessive Fuel Consumption

Low transmission oil/fluid will ultimately lead to excessive fuel consumption, especially in a car with an automatic transmission experiencing mis-shifts. Gear slippage in manual transmission cars also causes excessive fuel consumption as power isn't sent to the wheels efficiently, and the engine has to work harder to deliver power to the transmission.

### Causes Low Transmission Oil

After you notice signs that your car is running on low transmission oil, what next? For many, the first thing is visiting a repair shop for a diagnosis and repair if possible. But if you love working on your car or would like to know the cause of low transmission oil before visiting a repair shop, here's what you should look out for.

#### Oil Leaks

It's recommended that you check your car occasionally for fluid leaks, especially if you often drive long distances, and transmission oil is one of the fluids you should pay close attention to. However, how can you check for leaks if it's too late and you're already experiencing issues related to low transmission oil?

The easiest way to do it is to check underneath your car near the transmission area. Depending on your car's transmission placement, it could be in the middle or towards the rear. If there are droplets and you are unsure of the source, place a clean cloth or cardboard underneath the transmission and check back afterward. Transmission oil in manual transmission cars has an amber accent and brown if it has been in the car for a while. Automatic transmission fluid is dark red and turns darker through use. It's also more viscous than regular engine oil.

#### **Summary**

Check for amber or brown spots underneath your car's transmission if your car has a manual transmission and red spots if your car has an automatic transmission.

#### Incorrect Transmission Fluid Level

Cars with automatic transmissions are equipped with dipsticks that you can check to know if the transmission fluid is at optimum level. The dipstick is located in the engine bay near the firewall in most cars and is marked. Experts recommend checking transmission fluid level with the car parked on a flat surface and the engine running for a more accurate reading.

The dipstick has two markings, with the lower one indicating low transmission fluid and the higher one indicating that the fluid is at the correct level. If you refill and check after some time and the transmission fluid level has gone down, the transmission probably has a leak. Cars with a manual transmission don't have a transmission oil dipstick or a transmission pan which is another cause of low transmission fluid in cars with automatic transmissions.

## Physical Damage to the Transmission Fluid Pan

In cars with automatic transmissions, physical damage to the transmission pan could also cause low transmission fluid. It's common in cars with low ground clearance or frequently driven on bumpy roads, especially since the transmission pan is underneath the transmission housing. Any slight cracks or dents on the pan will cause fluid leaks, and the best way to prevent this is to get a transmission pan guard/skid plate. Some transmission pans are repairable, but only if they are made of metal that can be welded without posing any future risks.

## How to Refill Transmission Oil in Your Car

Refilling transmission oil or fluid is one of the minor maintenance services you can do, especially if you know a thing or two about cars. This part explains how you can do it without visiting a vehicle repair shop.

### What You'll Need

- Transmission oil as per the recommended quantity for your car.
- Funnel and transfer pipe or a car fluid transfer pump.
- A car jack and axle stands. Tire ramps can also work in place of axle stands if they are high enough to allow you to get underneath the car, but you'll need tire stops.
- Torque wrench or a socket and ratchet set
- WD40 or any spray penetrating oil and an oil catch pan or a draining container of any sort as long as it's wide enough to catch the oil.
- Drain bolt washer if required.

### Manual Transmission Oil Change

<https://youtu.be/ZY-OJ7O2OLc?t=62>

1. Park your car on a leveled surface, raise it using the jack, and support it using the axle stands. If you're using ramps, drive the car onto them and ensure the parking brake is well engaged before placing the tire stops behind the rear wheels.
2. Locate the drain and the fill bolts. The drain bolt is usually at the bottom of the transmission, while the fill bolt is on the side.
3. Place the oil catch container underneath the drain bolt and slowly loosen it. If it's too tight, spray penetrating oil to prevent the head from breaking off or damaging your tools.
4. Let the oil drain until drops no longer fall into the catch container.
5. Clean the drain bolt's threads and also the threads on the transmission.
6. Reinstall the drain bolt and unscrew the fill bolt.
7. Measure the recommended oil quantity as per the owner's manual or manufacturer's recommendation. If you're using a fluid transfer pump, measure the oil in the pump using the markings on the bottle.
8. Pass the filler pipe through the engine bay, insert it through the transmission fill hole, then attach the funnel to the other end and fill the oil. If using a fluid pump, attach the socket to the fill hole and pump the oil into the transmission.
9. Screw in the fill bolt, tighten it, lower the car, and check for leaks before and after the test drive.

### Automatic Transmission Fluid Change

[https://youtu.be/yb\\_1wbiPz9g](https://youtu.be/yb_1wbiPz9g)

1. Park your car on a leveled surface, raise it using the jack, and support it using the axle stands. If you're using ramps, drive the car onto them and ensure the parking brake is well engaged before placing the tire stops behind the rear wheels.
2. Find the transmission pan, loosen the drain bolt with the catch container underneath it, and let the fluid flow until there are no drops.  
In cars without a drain plug, unbolt the bolts holding the pan to the transmission but don't fully unbolts the bolts on one side. This allows the transmission pan to lean on one side, allowing fluid to flow into the catch container.
3. Clean the bolts or the drain bolt, depending on which you removed. You can also completely remove the transmission pan and clean it with a degreaser to eliminate impurities and debris that might affect the efficiency of the new transmission fluid.

4. Measure transmission fluid as per manufacturer recommendation.
5. Remove the dipstick from the filling tube in the engine bay and fill up the new fluid using a funnel.
6. Let the car run for a while, then check the fluid level using the dipstick. Top up if it's below the optimum level mark, lower the car.

## FAQs

Is transmission oil the same as transmission fluid?

Transmission oil refers to the oil used in manual transmission, while transmission fluid refers to the fluid used in automatic transmissions. Both serve the same purposes, but automatic transmission fluid (ATF) has hydraulic properties to operate the clutches and bands found in automatic transmission.

What are the signs of low transmission oil?

Early signs of low transmission oil or transmission fluid in automatic transmissions include gear slippage, hard shifts and the transmission light coming on.

Can low transmission oil damage the transmission?

Yes. If left unattended, low transmission oil can lead to complete transmission failure, leading to a rebuild or replacement.

## Conclusion

Can low transmission oil cause transmission problems? The answer is most definitely yes. By reading this article, you've already come to the same conclusion and now understand why regularly checking your transmission's oil level is crucial. If you drive a car with a manual transmission, it's impossible to check the oil level but pay attention to how the gear shifts feel, especially if it has been a while since you last had a transmission oil change.