

# BULLETIN

## Customer



### Low Engine Coolant Level Causes Severe Transmission Leak...

Think engine condition doesn't have anything to do with the transmission operation? Think again...

Lately a number of cars have come into transmission shops with severe leaks from around the front seal area. The fluid pours out so fast you'd think the front seal popped out. Then, once the car sits and cools off, the leak goes away... until it heats up again.

Would you believe the problem is being caused by low engine coolant in the radiator? It's true. Here's what happens:

During normal driving, the transmission gets hot just like the engine. To cool the transmission, the fluid is directed through a cooler that sits inside the radiator.

When the engine cooling system is working properly, the engine coolant passes over the transmission cooler in the radiator. This allows the heat from the transmission to transfer to the coolant, and then be carried away to the outside air.

But if the engine coolant level is low, the coolant won't immerse the transmission cooler properly. So the cooler won't release the heat necessary for the transmission to cool off.



The heat continues to increase in the transmission, causing parts to expand and pressures to build. Eventually, the pressure pushes the oil past the expanding front seal, causing a leak that'd make Niagara Falls proud. Then, once the unit cools back off, the leak seals up... until the next time the car heats back up.

The fix? Add coolant to the radiator. That takes care of the problem... at least, on the short term. Of course, you may still have some type of leak in the cooling system. You should have that checked and repaired, to protect both the engine and the transmission.

One more instance of the interconnection between engine and transmission operation.

Use this link to find an [ATRA Member Shop](#) in your area.

