



# Tech Articles

## Changing the Fiero's Antifreeze

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To begin with, the anti-freeze, thermostat, and the coolant temperature sensor should be changed at least every two years in all cars that are equipped with computer controls.

### **Before you begin, make sure that the coolant is not hot!**

There are two drain plugs built into the coolant pipes that run along the driver and passenger side of the Fiero, located just behind the left and right jacking points of the body. These plugs need to be removed to allow the anti-freeze to be drained from the car. Put the anti-freeze into a safe container and dispose of it properly. After the first plug is pulled out, remove the thermostat cap located on the engine and remove the thermostat itself to allow air to enter into the top of the system so that the coolant will drain out.

In order to completely remove all of the anti-freeze from the system, the engine needs to be drained. On the 4 cylinder engines, there is an anti-freeze drain for the engine block on the right side (firewall side) near the rear of the engine. On the V-6 engines, there are drains on both sides of the engine block. The drain plug built into the radiator does not need to be removed because the lowest point in the coolant system are the drain plugs in the coolant pipes. Thus, due to gravity, the coolant in the radiator will flow out the drains in the coolant pipes.

After the coolant has been drained from the system, you can easily remove the coolant temperature sensor (GM Part# 25036979) without worrying about anti-freeze spillage. On the 4 cylinder engine, the coolant temperature sensor is located in the thermostat housing on the engine. On V-6 engines, it is located under the thermostat housing and above the water pump. You may also consider changing these other coolant related components at this time:

coolant temperature gauge/hot light - GM Part# 25036909 - 4 cyl. 87-88 models

coolant fan switch - GM Part# 3050223 - 4 cyl. 85-86 models

GM Part# 3040674 - V-6 models and 84-86 4 cyl. models

To refill the coolant system, remove the radiator cap (on the radiator at the front of the Fiero) and fill the anti-freeze through the thermostat housing (located at the rear of the Fiero) because the thermostat housing is the highest point in the cooling system and gravity will pull the anti-freeze through the system. As you slowly add anti-freeze to the system, it is helpful to have an assistant watch for the antifreeze to fill up the radiator. When the radiator is full of anti-freeze, put the radiator cap back on the radiator. Then, continue filling antifreeze in through the thermostat housing (in the rear) until it is full. Replace the

thermostat housing cap and start the engine. Continue running the engine until the temperature gauge begins to move toward the normal operating temperature, 195 degrees Fahrenheit. Once reached, turn the engine off and let the system cool down so that you can safely remove the thermostat housing cap (on the engine) without begin scalded. Add more anti-freeze, if needed; replace the thermostat, and then put the thermostat cap back on the engine. Make sure that the radiator overflow reservoir is filled to the proper level; check for any leaks in the coolant system at this time. If all is well, you are ready to roll for another two years!