

Wheels: Pat has a 1994 Saturn and wants to know what the warning signs are when the clutch is getting close to needing replacement.

Halderman: The clutch on your Saturn should last the life of the vehicle under normal driving conditions. The hydraulic clutch mechanism that operates the clutch may need to be replaced and does not require the extensive labor needed to replace the clutch assembly. If the hydraulic clutch system is not functioning correctly, here are some likely symptoms:

- Hard to shift into reverse when the engine is running; it shifts OK when the engine is off
- The transmission is difficult to shift into first gear when the engine is running.
- The transmission is difficult to shift into second gear or the transmission makes a grinding sound when going into the next gear.

Many hydraulic-activated clutches must be bled of trapped air. This is similar to bleeding the air out of the hydraulic brake system. If air is trapped in the system, the clutch will not fully disengage and difficult shifting can result.

Wheels: What are the symptoms of the clutch itself getting close to needing replacement?

Halderman: If the clutch itself is worn, then it will slip when the vehicle is accelerating. A quick and easy test involves driving the vehicle on a deserted stretch of road and speed shifting (shifting rapidly) between first and second gear with the throttle close to wide open. If the clutch is slipping, the engine speed will remain high after the shift has been completed into second gear. If the clutch is OK, the engine speed will drop as soon as the shift is completed and the clutch pedal is released.

Wheels: If a clutch is needed on the Saturn, what parts do you recommend be replaced?

Halderman: The clutch is composed of several different parts, all of which must work correctly.

This is the reason I recommend that all of the parts of the clutch be replaced when the transaxle (or a transmission if a rear-wheel-drive vehicle) is removed. These parts include:

- Pressure plate – used to clamp the friction disk to the surface of the engine flywheel
- Friction disk
- Release bearing (also called a throwout bearing)
- Pilot bearing in the end of the crankshaft used to support the input shaft of the transaxle/transmission.

I would also recommend that the flywheel be removed and resurfaced and the linkage inspected and serviced or replaced as needed.

Wheels: All of these parts and labor sound expensive. What is your advice regarding determining whether the clutch should be serviced or replaced?

Halderman: Because a defective clutch is often difficult to determine, have an experienced service technician test drive your vehicle. I recommend that the service technician first ride in the vehicle while you do the driving so you can duplicate when the problem occurs. The service technician should then drive the vehicle to verify that the clutch is, in fact, defective.

