RWRG0037 - Towing Damage

Symptom(s)
- Hard lever shifts
- Lever movement
- Unable to shift front box gears

Cause
The transmission mainshaft is allowed to spin at high RPMs when a vehicle is towed with the drive wheels on the ground, axle shafts or drive shaft still connected, main box in neutral and engine off. In this condition the majority of the oil has moved to the auxiliary section and the front box gearing is not rotating. Generally the auxiliary section will be in low range and as the unit is “back-driven” the speed of the mainshaft is multiplied by the ratio of the reduction gearing (usually 2.5 times). Coasting in neutral can cause similar damage.

The combination of high mainshaft RPMs, minimal lube splash in the front box, and stationary front box gearing sets the stage for a transmission failure. Damage can occur to the mainshaft gears and washers of any style or design. The washers can show evidence of heat, and ultimately fail breaking the mainshaft key.

Towing a vehicle from the front for any distance without first removing the drive shaft or axles is not recommended. Only when the vehicle is towed by the rear with the drive tires off the ground can you leave the axle shafts or drive shaft in place. Warnings are clearly stated in the Driver Instructions and the General Troubleshooting Guide

Warranty Statement
Towing damage is not the result of a product defect and is not a warrantable failure.