



Drivetrain: Drive Shaft & U-Joints



Description: A drive shaft and universal joints (U-joints) connect the transmission to the rear drive axle on most rear-wheel-drive vehicles. Many four-wheel-drive vehicles also use drive shafts and universal joints, with one drive shaft between the transfer case and rear drive axle and a second drive shaft between the transfer case and the front drive axle. The drive shaft is sometimes called a propeller shaft.

Purpose: The drive shaft and U-joints provide a means of transferring engine torque to drive axles. The universal joints allow the drive shaft to move up and down, to allow for suspension travel. Some drive shafts also have a slip joint that allows the drive shaft to make minor length changes as the vehicle suspension height changes.

Maintenance Tips/Suggestions: Check your vehicle's owner's manual for maintenance intervals on the drive shaft and U-joints. Many vehicles have U-joints that are lubed-for life from the factory and do not require periodic lubrication. Even if the U-joints can't be lubricated, they should at least be inspected at every oil change. Also, SUVs and pick-ups often have lubrication fittings on drive shaft slip joints. Ask for these to be lubricated when bringing your vehicle in for service. Replacement of U-joints often come with lubrication fittings, so if the U-joints are replaced on your vehicle, make sure they're lubricated at every oil change. Symptoms of a bad universal joint include a repeating squeaking sound when accelerating from a stop, a heavy clunking noise when shifting from drive to reverse or vice versa, or a shuddering sensation when accelerating or driving. If your vehicle shows any of these symptoms, have it inspected as soon as possible by a qualified service technician. Neglecting the warning signs of a bad U-joint could cause the drive shaft to separate from the vehicle, making repairs more expensive and possibly damaging the vehicle.