



FACTORY SERVICE BULLETINS

Overrevving damage to torque converter **All models with automatic transmissions**

Running an engine beyond redline can damage the engine by floating or bending valves, twisting connecting rods and other equally dire consequences. To prevent that, Mercedes-Benz engines have included maximum engine speed limiters for many years. Those protective measures, however, can only prevent redlining the engine using the throttle. If a driver manually downshifts the transmission at too high a speed, this could result in the vehicle's momentum spinning the crankshaft above a safe speed.

Besides the damage to the engine potentially resulting from a speed above redline, the torque converter can also distort by centrifugal force acting on the transmission fluid in the converter, 'ballooning' the converter up. The distortion takes the form of thickening the torque converter, this making it interfere with the front transmission pump and damage the front seal. If an engine has sustained overrevving damage, check the torque converter by placing it on a flat surface with the pump-drive side down. Measure the thickness from the surface to the attachment bolt surface as shown in the illustration [p27-2371-13]. As long as the thick-

ness is 121.5 mm or less, the torque converter is satisfactory; if it is thicker than 121.5 mm, replace the converter.