



BRAKES

ENGINEERED SOLUTIONS

Bulletin BES 02-12

Subject: Manual Transmission Clutch Replacement Concerns

Vehicle Involved: Most vehicles equipped with hydraulic clutch slave cylinders.

Condition/Concerns

- When the flywheel is resurfaced, the flywheel thickness is reduced. This reduction may cause the clutch cover diaphragm fingers to extend. The finger extension causes the slave cylinder piston to be positioned at a different location within the cylinder. Depending on the slave cylinder mounting location either class I or class II, the slave cylinder piston may either bottom out in the bore during pedal release, or contact the internal snap ring during pedal apply.
- Heavy-duty clutch covers will increase the pedal effort and system internal hydraulic pressure. Increased operating pressure can significantly reduce the life of the hydraulic clutch system, and lead to premature clutch failure.
- High performance exhaust systems such as headers may significantly increase exhaust pipe temperature. Recommended clearance between clutch hydraulic system components and the engine exhaust system is 4 inches.