The Neighborhood Wrench
Sales and Service LLC

# Hydrolock

*Customer Education Sheet*

Hydrolocking occurs when an engine draws in enough water (in place of air) that the pistons can no longer move. An engine will stall immediately when hydrolocked and will not restart (don't try, as this can severely damage the engine).

**Causes of Hydrolock**

Hydrolocking is almost always caused by driving through flooded roads or high water. When this happens, the vehicle's air intake system draws in water instead of air. This water follows the path that air would take and gets into the engine's cylinders. The piston will then go up to compress what is supposed to be a mixture of air and gasoline vapors. Unlike air, water is not compressible and this results in the connecting rod bending or breaking when the piston can't compress the water. This results in severe engine damage, often requiring a new engine.

**Repairing Hydrolock**

In rare cases, the engine may simply stall when hydrolocked and no connecting rods will be bent. If this happens, the engine *might* be savable if the water is removed and the air filter, spark plugs, and oil is replaced. However, <u>time is critical</u> here. If the engine is sits for more than a day or two, the water will rust the cylinders and the engine will be junk. If your engine hydrolocks, do not try to restart it and have the vehicle towed to a service center immediately.