

tech bulletin

GM ELECTRONIC VARIABLE ORIFICE (EVO) STEERING SYSTEM

The "Electronic Variable Orifice" (EVO) steering system was introduced by General Motors. The vehicle's computer monitored vehicle speed and steering wheel action to activate and deactivate a solenoid on the steering pump that controlled fluid flow to the steering gear. At slow speeds the EVO solenoid is fully open making the steering easier. At high speeds the EVO closes, restricting the flow, which makes the steering firmer.

Due to inconsistent steering feel, GM introduced a kit (19168825) to remove the EVO component from the system. The kit has an adapter and union that allows the existing high pressure hose to be connected to the back of the pump after the EVO unit was removed. The GM kit allows the pump to function as a normal steering system would. This makes the steering feel "sportier" than it is with the EVO system.

Today, the EVO solenoids are no longer available on the market. The concept GM used for replacing the EVO solenoid has been integrated into the aftermarket. The EVO actuator (bypass pipe) replacement pumps have a direct connection to the power steering pressure hose. The pumps with bypass pipes installed fit the same as the OE unit and function as a standard steering system would.

Moving forward, all remanufactured EVO pumps will be built with the bypass pipe installed.

Pump with EVO Solenoid Installed



Pump with Bypass Pipe Installed

