

# SS 1033889 Hydromax Hydraulic Brake Booster Pump Function Logic

## Hydromax Hydraulic Brake Booster Pump Function Logic

### Applicable Vehicles

Business M2 with hydraulic brakes

### Issue/Solution

This solution is intended to help prevent confusion as to when the Hydromax pump motor should or should not run when the engine is off (no power steering fluid flow through the booster):

Below are the conditions when the Hydromax pump motor should operate. Refer to Hydromax system wiring diagram G06-88760-000 in module 877, specifically showing the park brake switch and the park brake relay control of the Hydromax ignition circuit:

Key	Engine	Park Brake	Hydromax Ign	Brake Pedal	Pump Running
ON	OFF	SET	NO	Not Depressed	NO
OFF	OFF	SET	NO	Not Depressed	NO
OFF	OFF	NOT SET	NO	Not Depressed	NO
ON	OFF	NOT SET	YES	Not Depressed	YES*
ON	OFF	SET	NO	Depressed	YES
OFF	OFF	SET	NO	Depressed	YES
OFF	OFF	NOT SET	NO	Depressed	YES
ON	OFF	NOT SET	YES	Depressed	YES*

\*pump would run regardless of brake pedal input

The idea behind controlling Hydromax ignition power based on park brake status is to prevent the pump motor from running all the time when the vehicle is parked (park brake set) with the key on/engine off - such as when in the shop for service/diagnosis.

There is one additional thing to know. Under conditions when there is no ignition power to the Hydromax module, the Hydromax module will still power up if it receives power on the brake pedal input, pin 12. This pin gets 12V power any time the brake pedal is depressed.

Therefore, under any of the conditions above where no ignition power is supplied to the Hydromax module, and if the engine is not running (no power steering fluid flow), the pump will run whenever the brake pedal is depressed.

NOTE: Older M2 Hydromax systems did not have this park brake ignition logic. On these systems, it was normal for the pump motor to run with the key on/ engine off.

23-13143-900  
 DASH\_OL\_H\_MOD\_HYDROMAX\_BK\_C1 HYDROMAX MODULE

