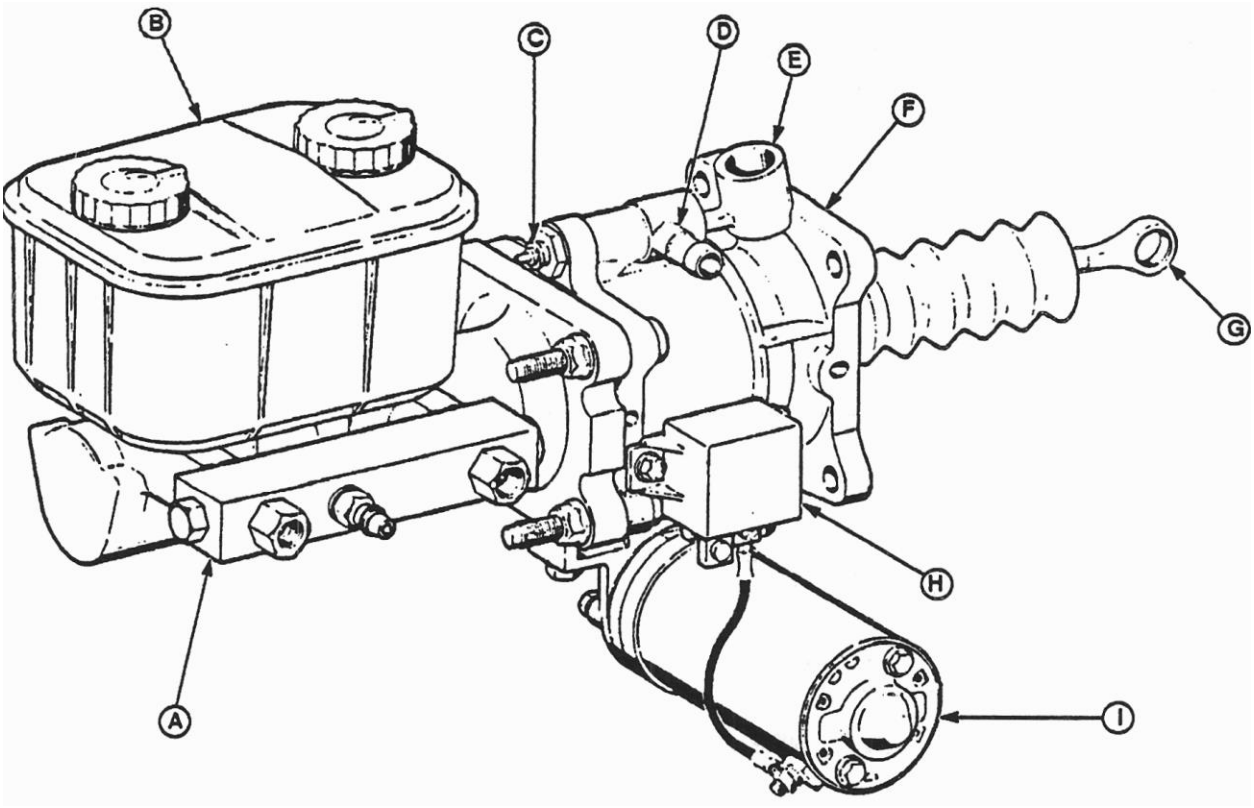
## **HYDRO MAX POWER BRAKE BOOSTER** - Oshkosh




A--Pressure Differential Valve'
**And** Warning Switch **(Mounted Remote on EFI Chassis)**

**B−Mini-Master Cylinder**
**C- Port - Flow switch.**
**D- Return Port**
**E-Inlet Pressure port**
**F- Hydro Max Booster**
**G- Pedal Rod**
**H-Electric Motor Relay**
**I-Electric Pump Motor**

DESCRIPTION AND OPERATION
The Hydro-Max power brake system is composed of a hydraulic-powered booster (F), mini-master cylinder (B), reserve system electric pump motor (I), relay (H), electric monitor and a warning system.

During system operation, normal flow from the engine driven hydraulic pump passes through the steering gear, enters the inlet port (E) of the booster, flows through the poppet valve and booster then the flow switch (C) and exits from the retum port (D) and returns to the reservoir then back to the brake Pump.

Force applied to the pedal rod by the vehicle operator activates the booster. The resulting pressure in the booster applies a force to the master cylinder.
A pressure regulating valve inside the booster limits the maximum internal booster pressure developed during a full application.
Fluid flow through the flow switch "opensn the reserve motor pump electrical circuit during normal operation.
A separate check valve in the motor pump prevents backflow through the motor pump during normal power applications.
In the event normal fluid flow from the engine driven hydraulic pump is interrupted, the electric motor pump provides the power for reserve stops. Upon flow intemption, the integral flow switch "closes" energizing a power relay, thereby providing electrical power to the motor pump.
During reserve operation, fluid is retained within the booster by an inlet port check valve. The motor pump recirculates fluid within the booster assembly with pressure built on demand via the poppet valve. The number of applications is limited only by the electrical capacity of the vehicle.
Manual braking is also available in the event both the power and reserve systems are inoperative.
Stopping distances and pedal efforts during a manual brake application are significantly increased. The vehicle should not be driven except for emergency removal from the roadway.