



Many Players, One Team

Closed Circuit Principle of Operation – 0740A & 0740B

Instructor – Rod Erickson

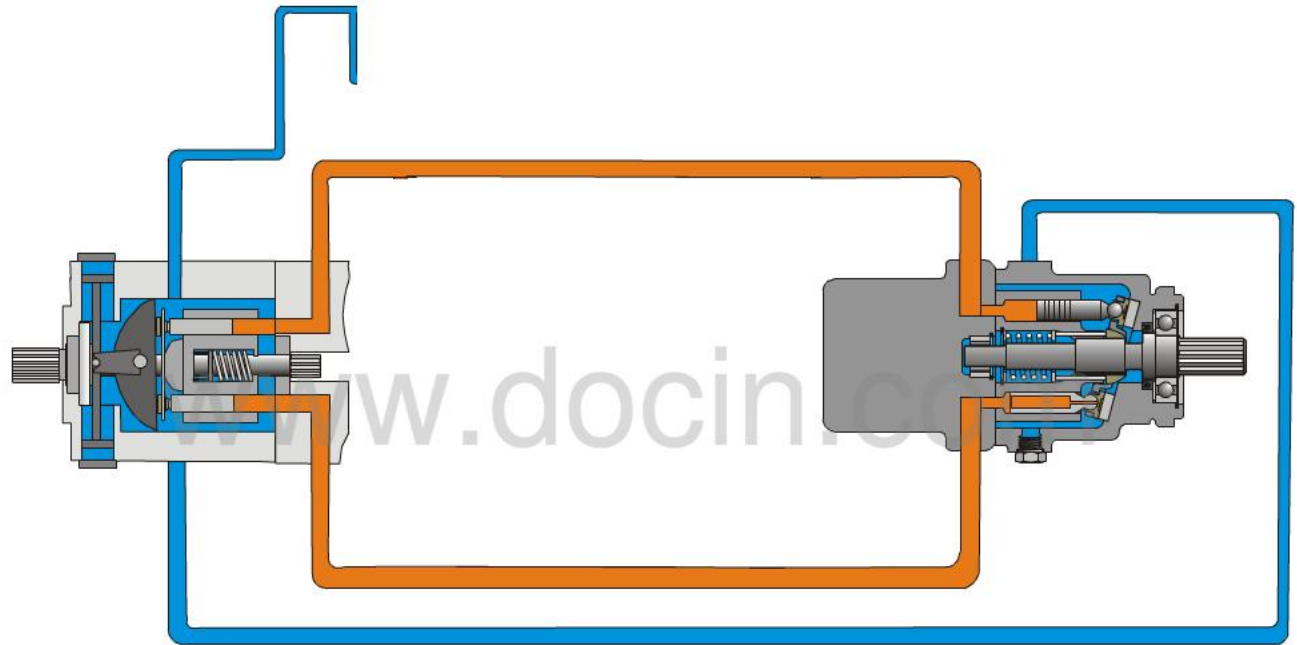
October 2nd & 3rd, 2007

Gaylord Palms Resort & Convention Center, Kissimmee, Florida

Variable Pump & Fixed Motor



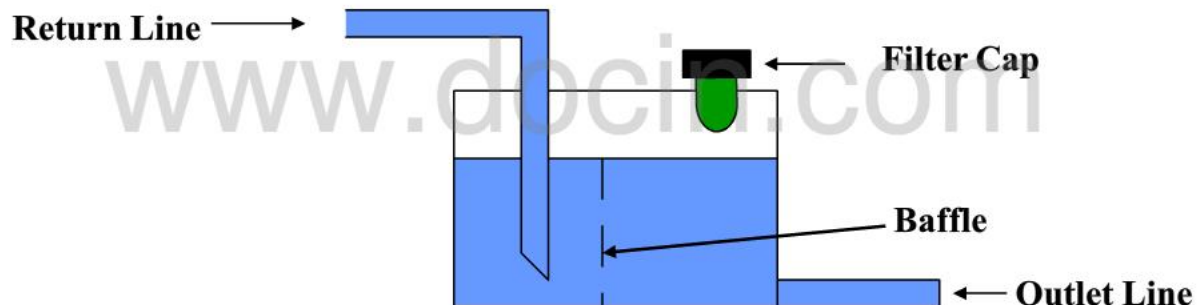
CASE DRAIN



RESERVOIR

- Reservoir, Application Guidelines
 - **Filler Cap May be Sealed or Breather Type**
 - **Return and Outlet Line Must be Located Below Fluid Level**
 - **Should include Baffle to Separate Inlet, Outlet Fluid**
 - **Minimum Reservoir Size Should Not be Less Than 60% of the Maximum Charge Pump Size**

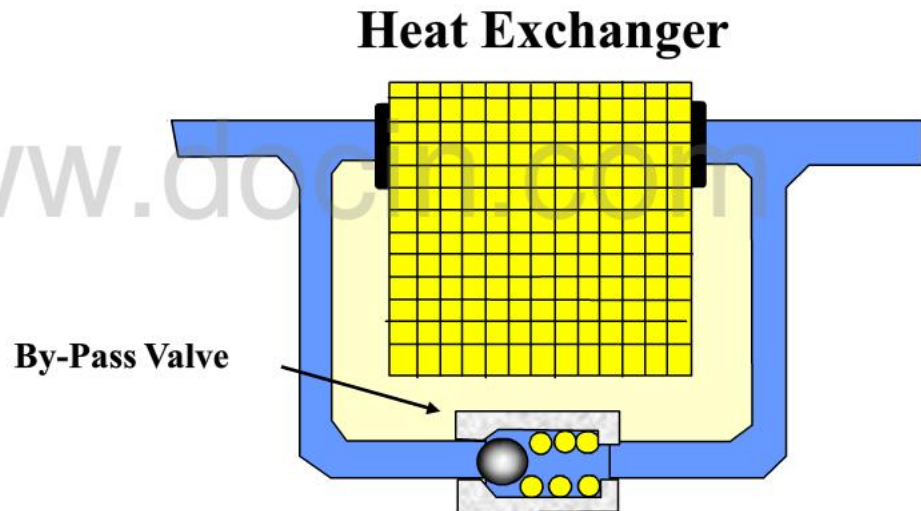
Reservoir



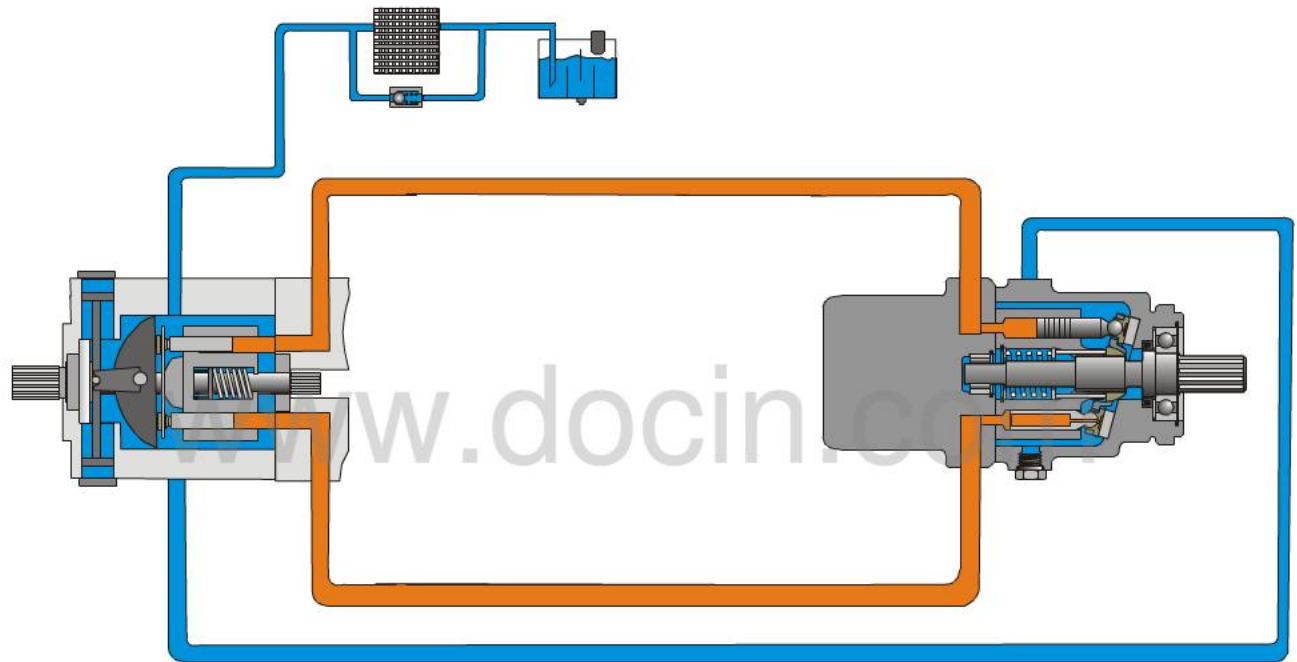
HEAT EXCHANGER

Heat Exchanger Application Guidelines

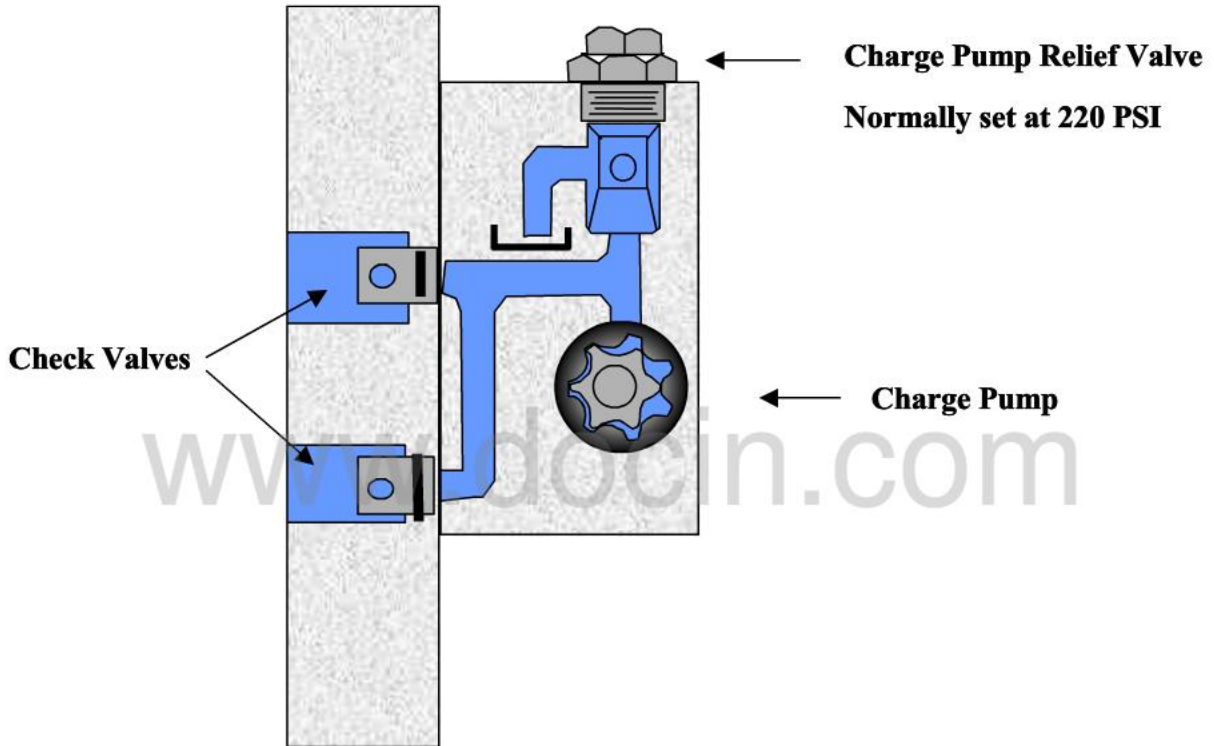
- A. Heat Exchanger size must be capable of Dissipating Approximately 25% of the Maximum Input Horsepower
- B. Must include a By Pass Valve to Limit Possible Excessive Case Pressure as Sometimes Experienced During Cold Starts (Case Pressure not to Exceed 40 PSI)



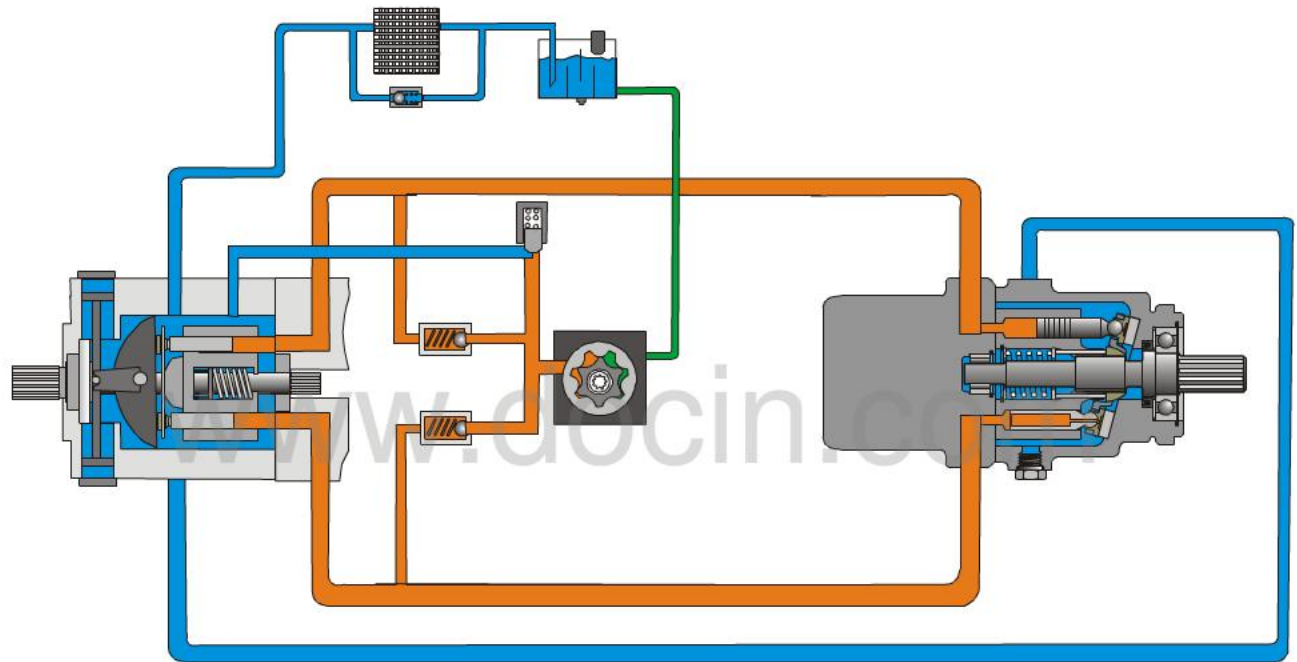
RESERVOIR & COOLER



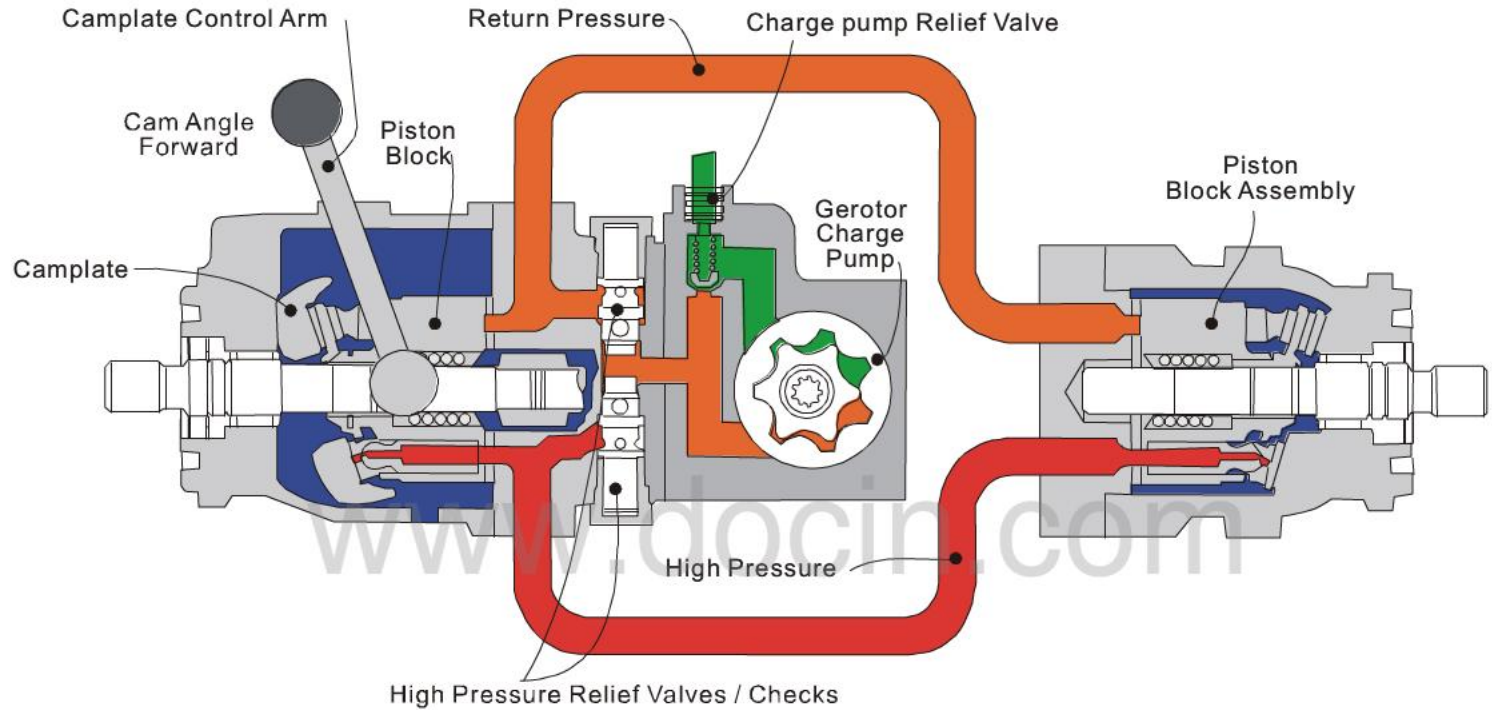
CHARGE PUMP & CHECK VALVES



CHARGE PUMP – Relieve to Case



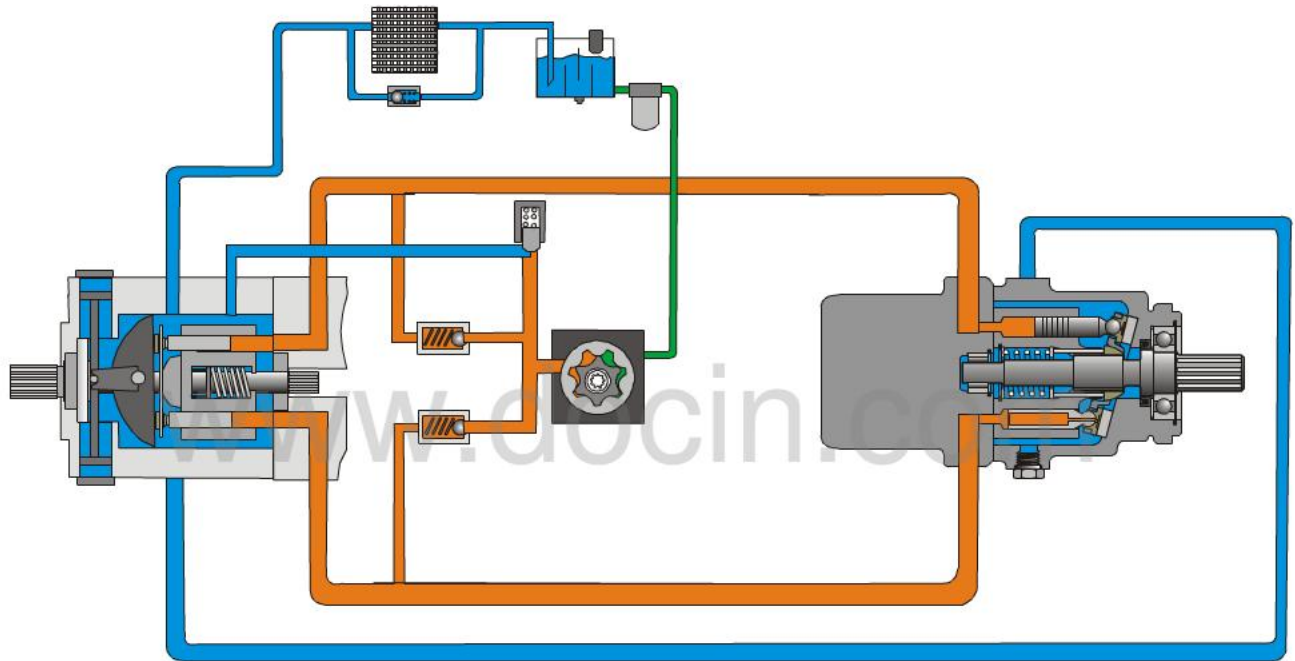
CHARGE PUMP – Re-Circulating



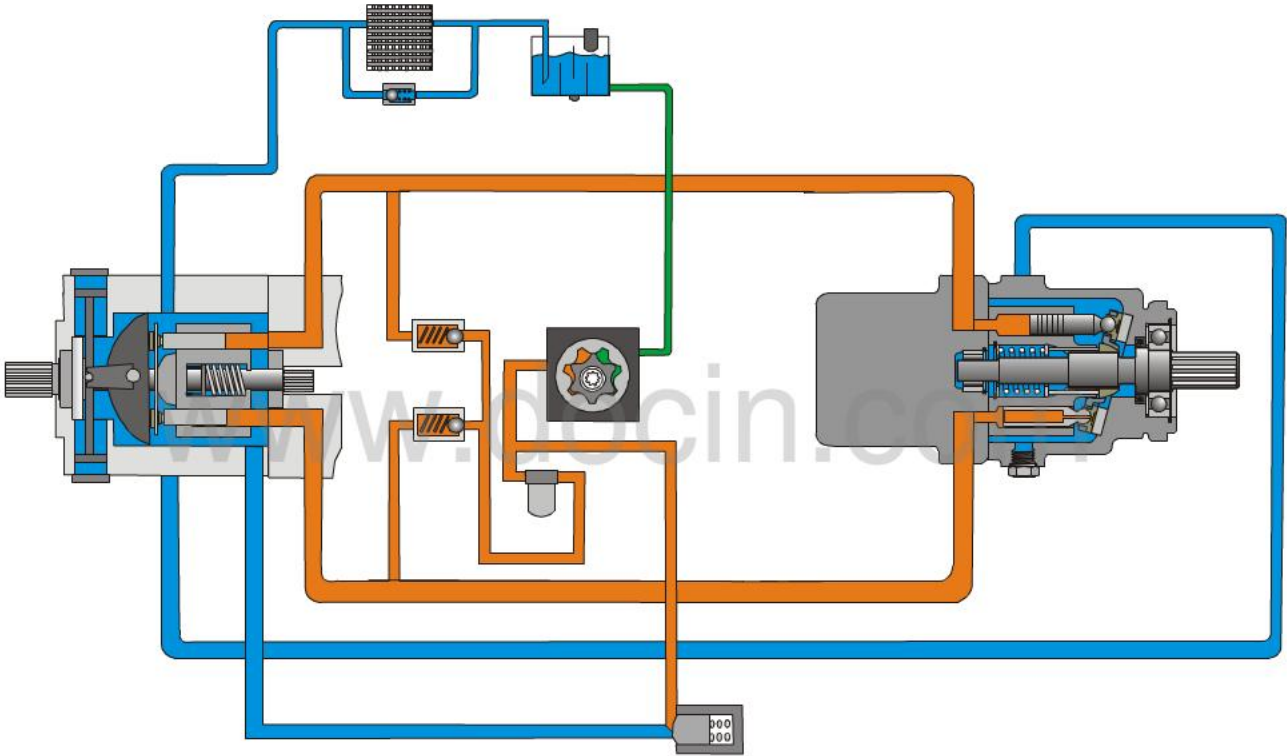
FILTER – Inlet (Suction Side)

- Inlet Filter Application Guidelines**

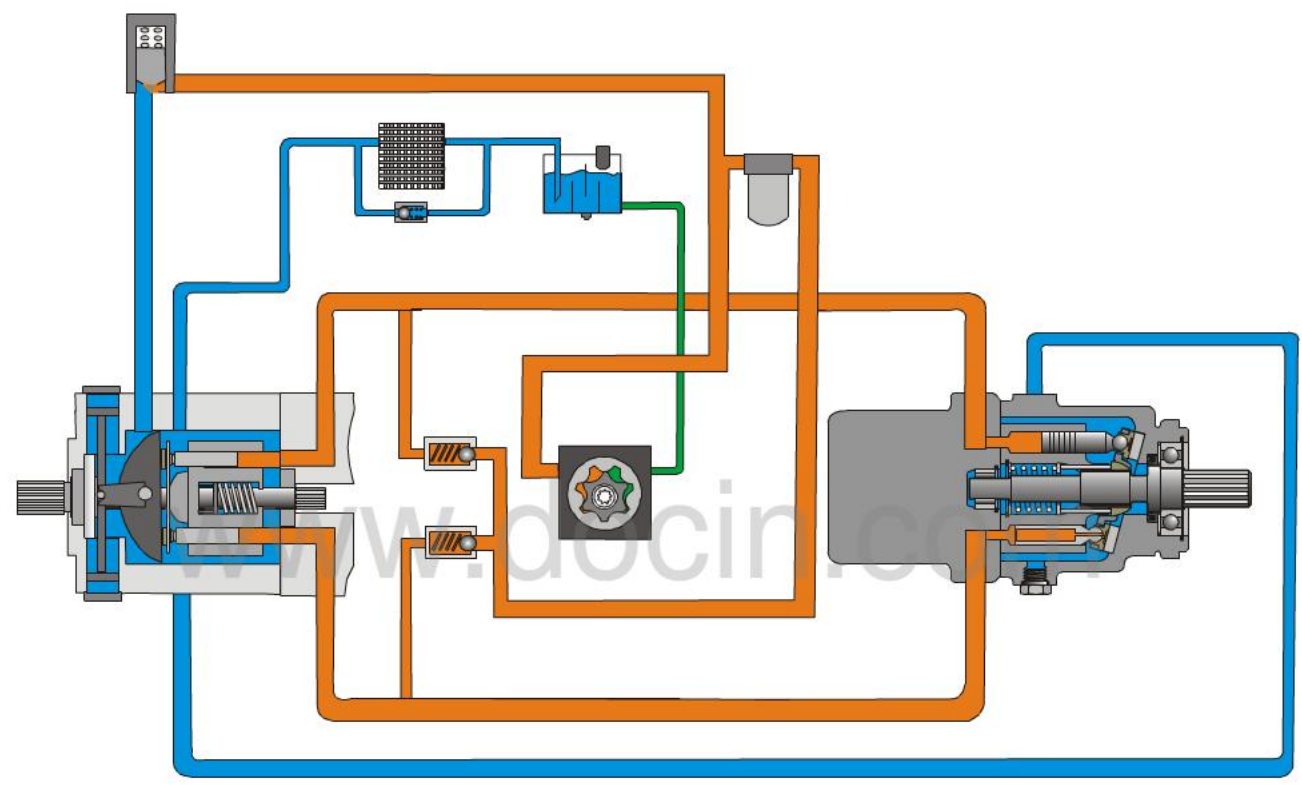
- **10 Micron Filter Without By-Pass (Indicator) (Must Maintain A ISO 18/13 Cleanliness Level)**
- **Minimum Filter Size Should Equal Four Times Maximum Charge Pump Flow**
- **Inlet Vacuum Should Not Exceed 10 in. Hg (During Normal Operating Temp)**



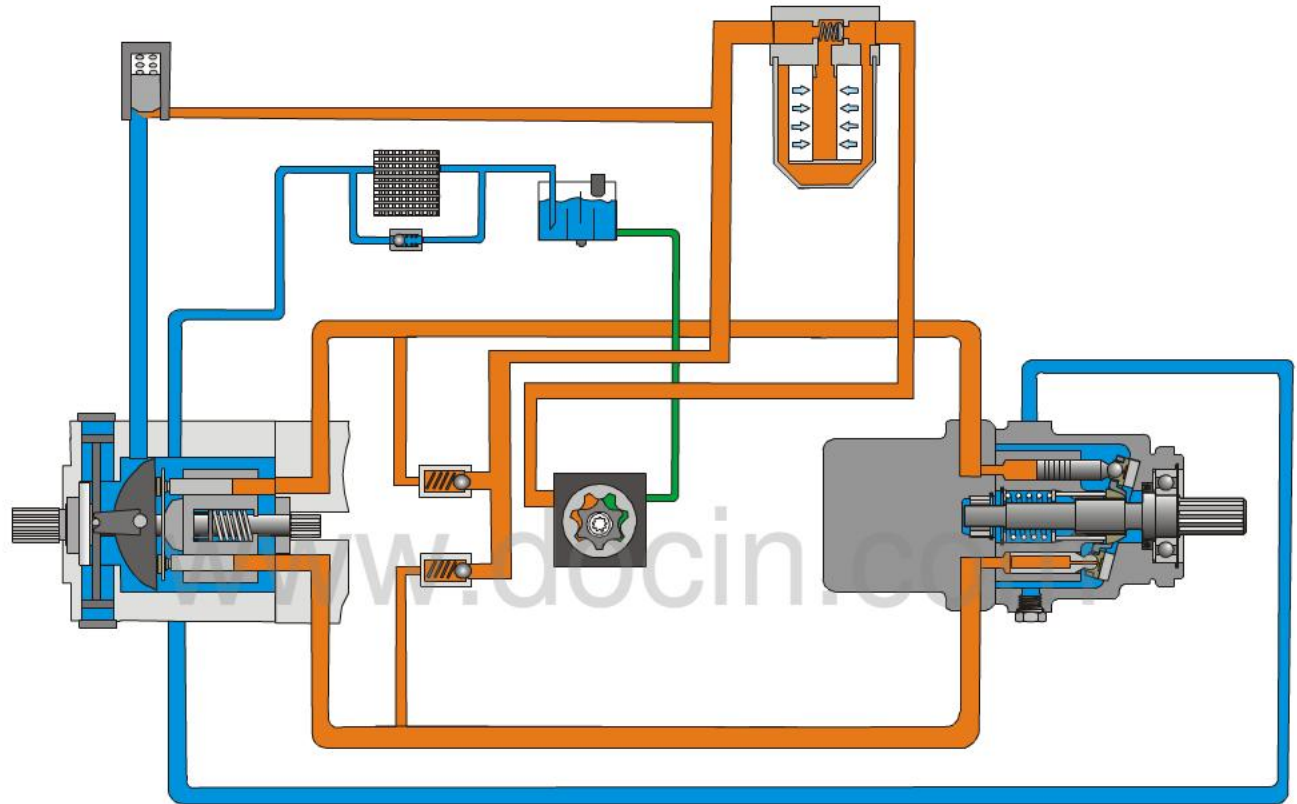
FILTER – Pressure Side (Heavy Duty Series One & Two)



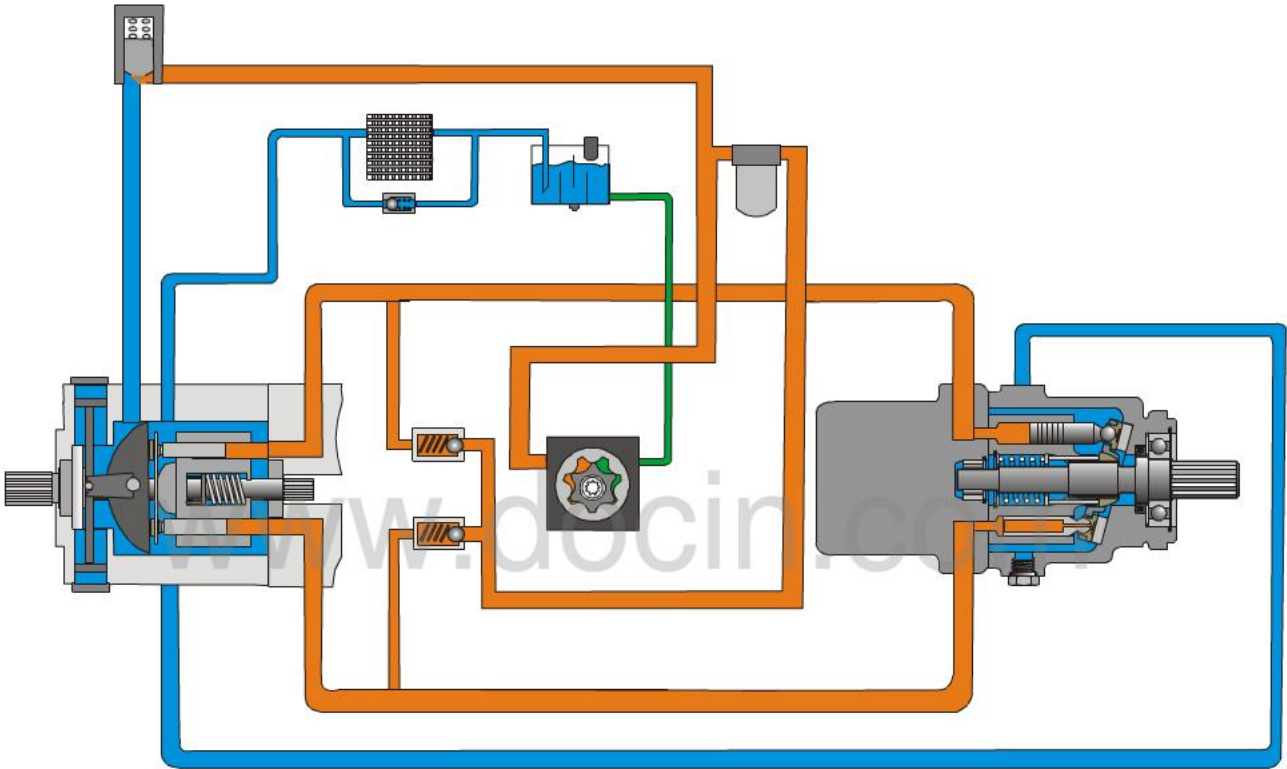
FILTER – Remote Filter Ports (Heavy Duty Series One & Two)



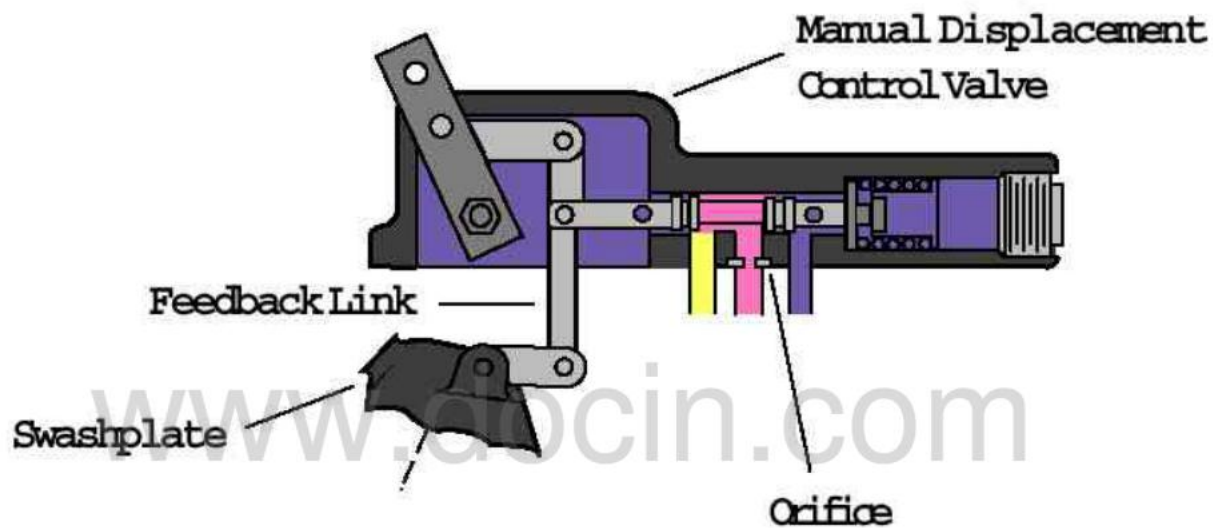
FILTER – Pressure Side Full Flow (Medium Duty 72400)



FILTER – Pressure Side Partial Flow (Medium Duty 72400)



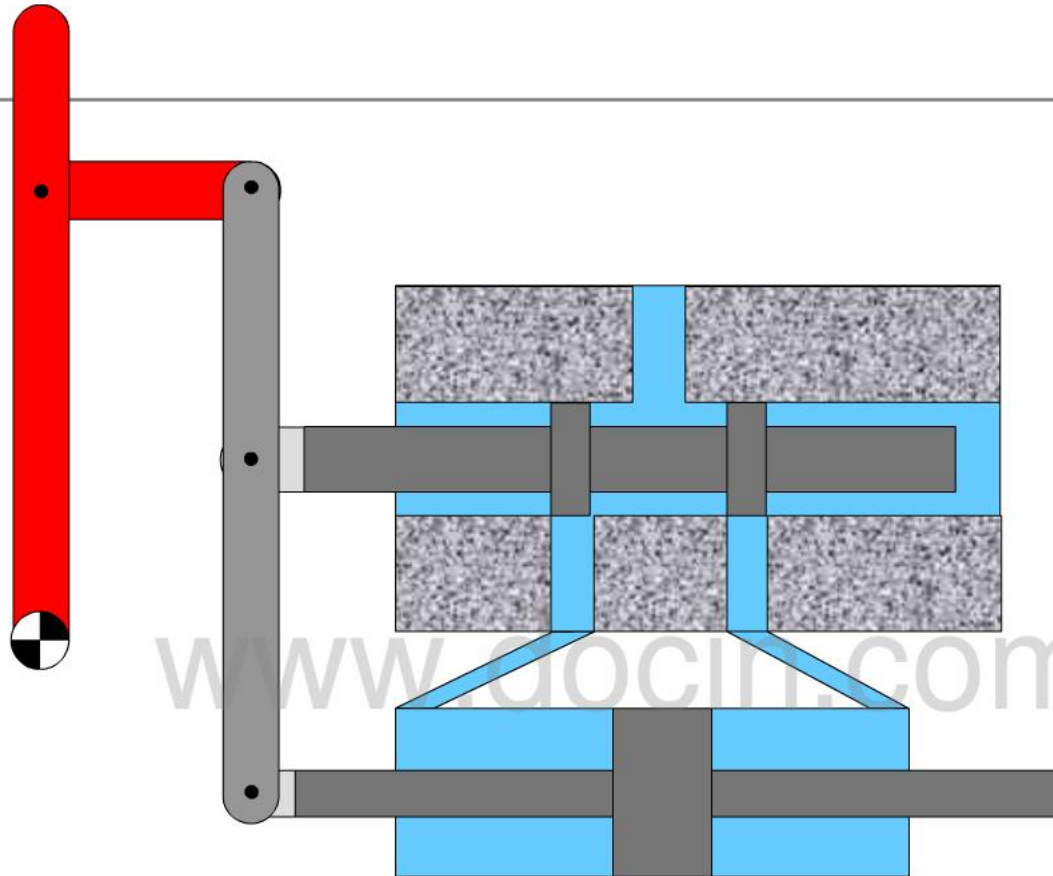
MANUAL CONTROLLER



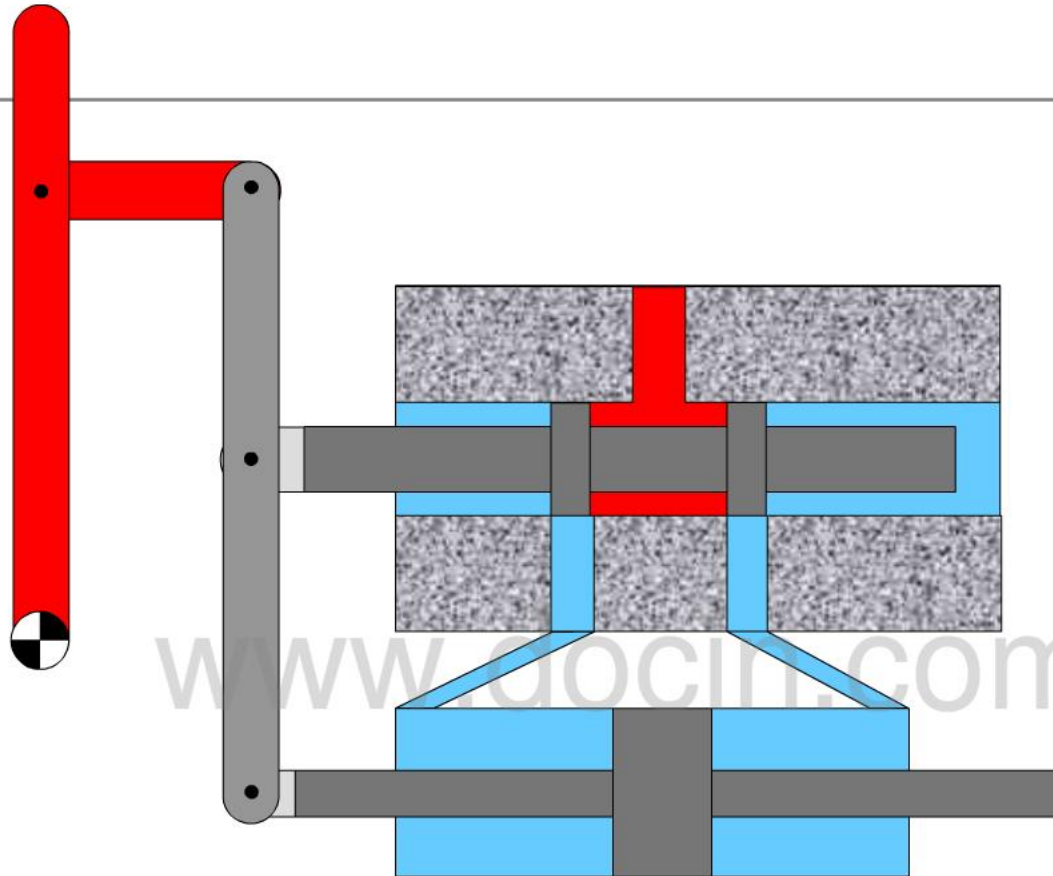
Mechanical Servo

www.docin.com

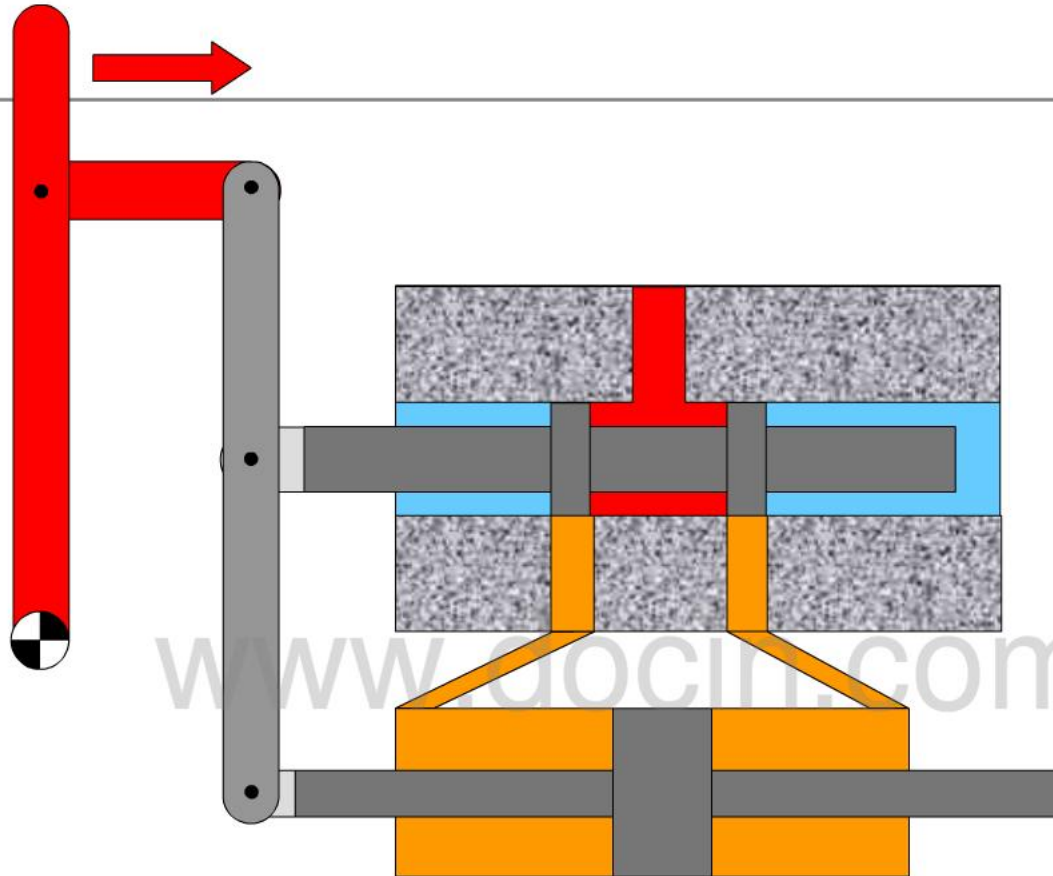
Follower Servo Mechanism



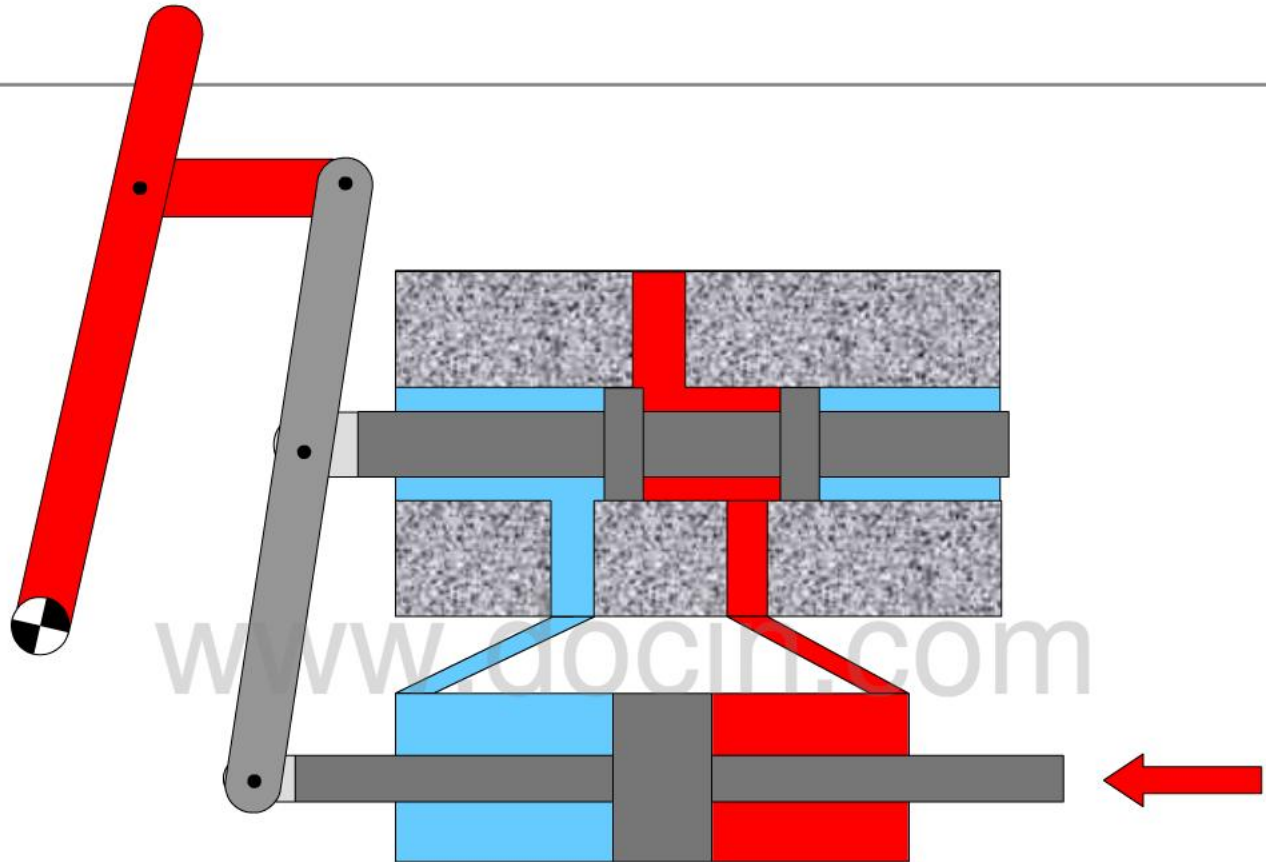
Follower Servo Mechanism



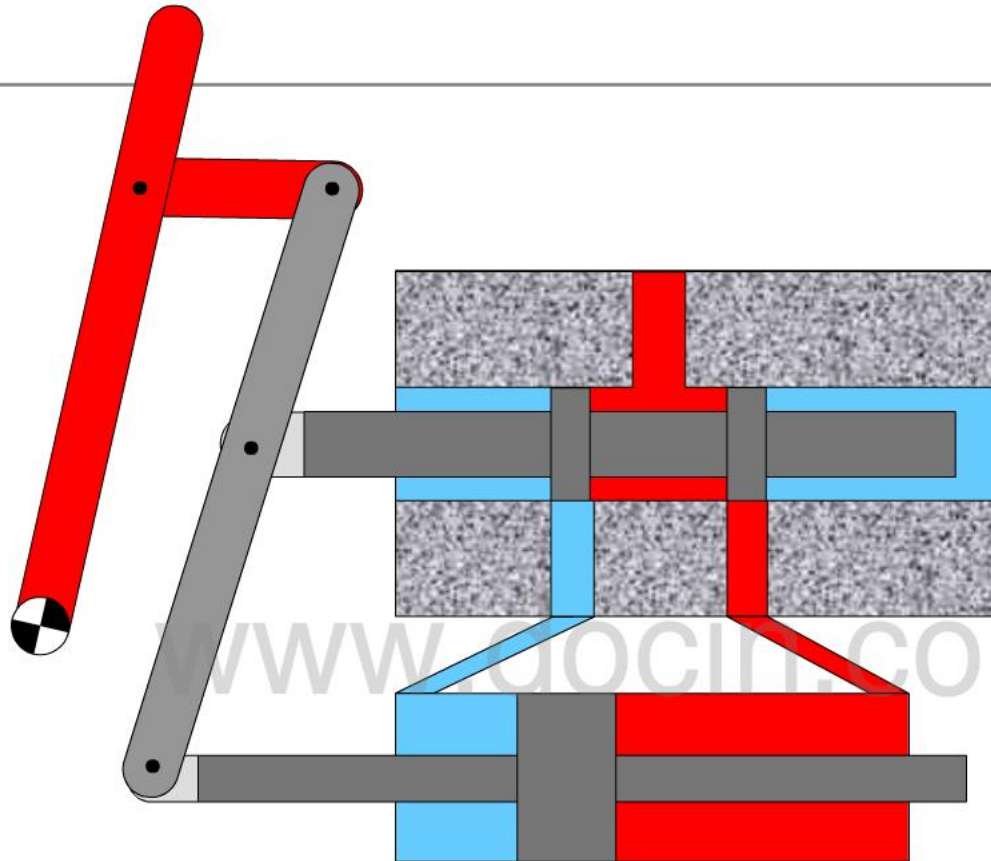
Follower Servo Mechanism



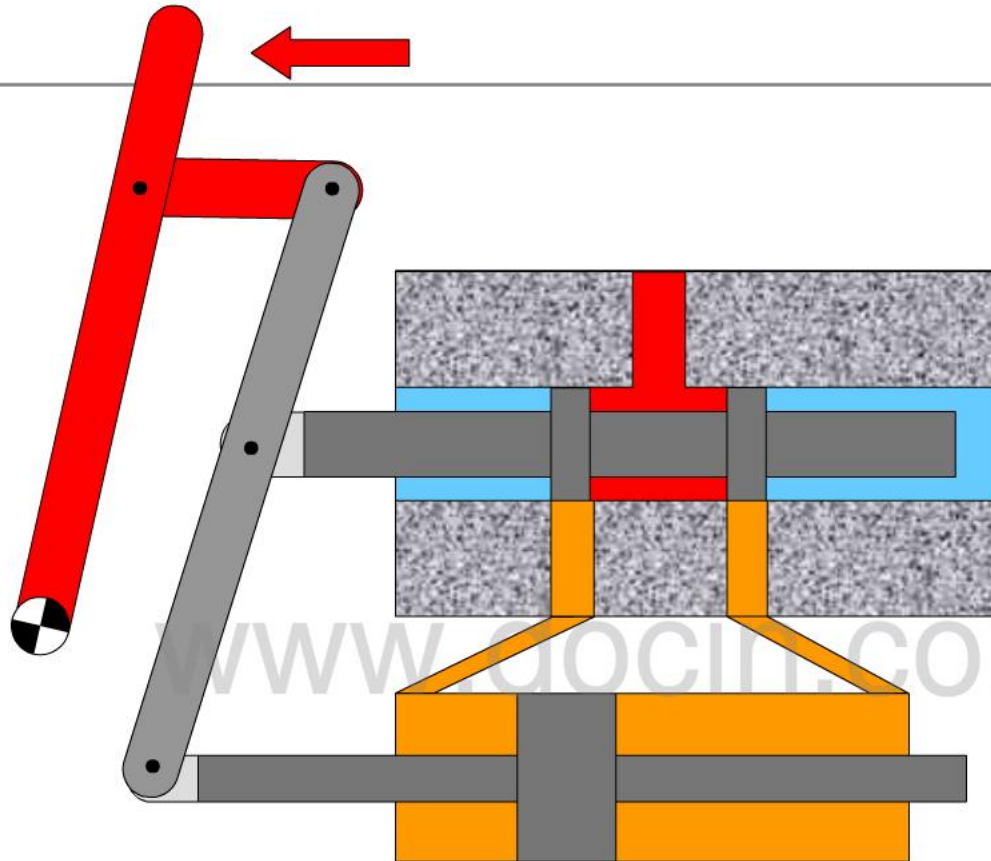
Follower Servo Mechanism



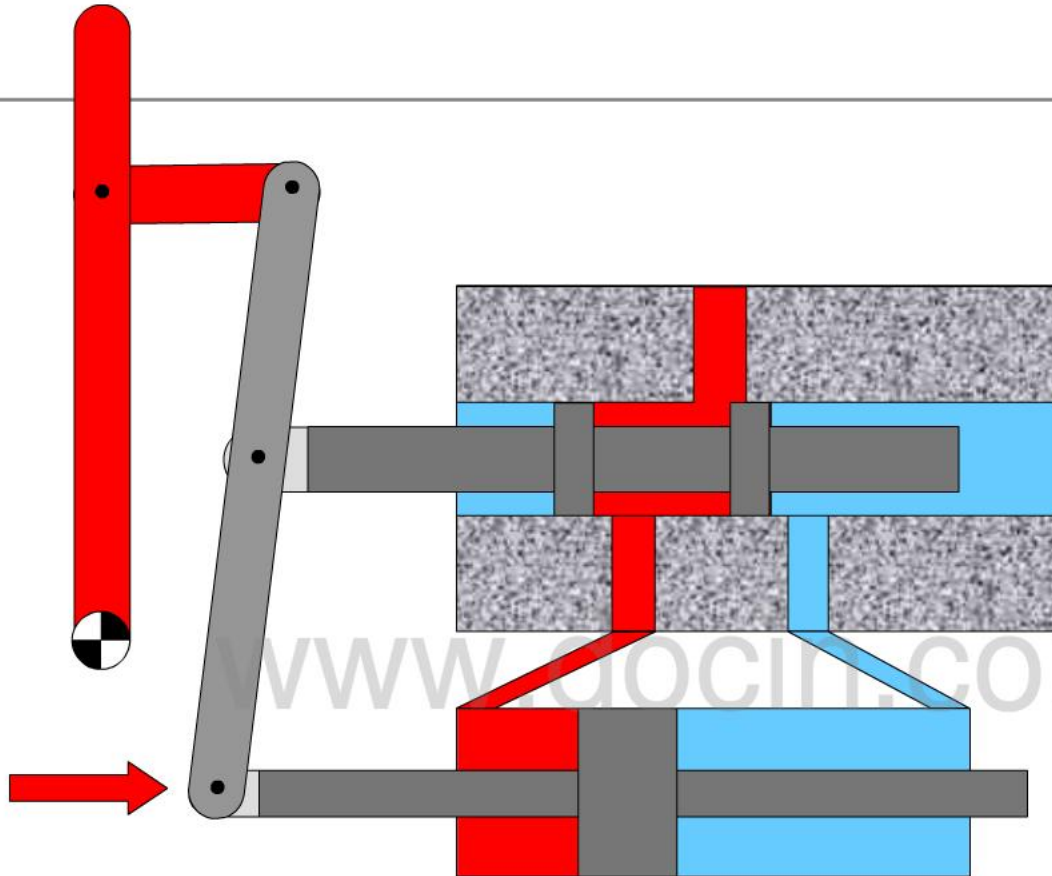
Follower Servo Mechanism



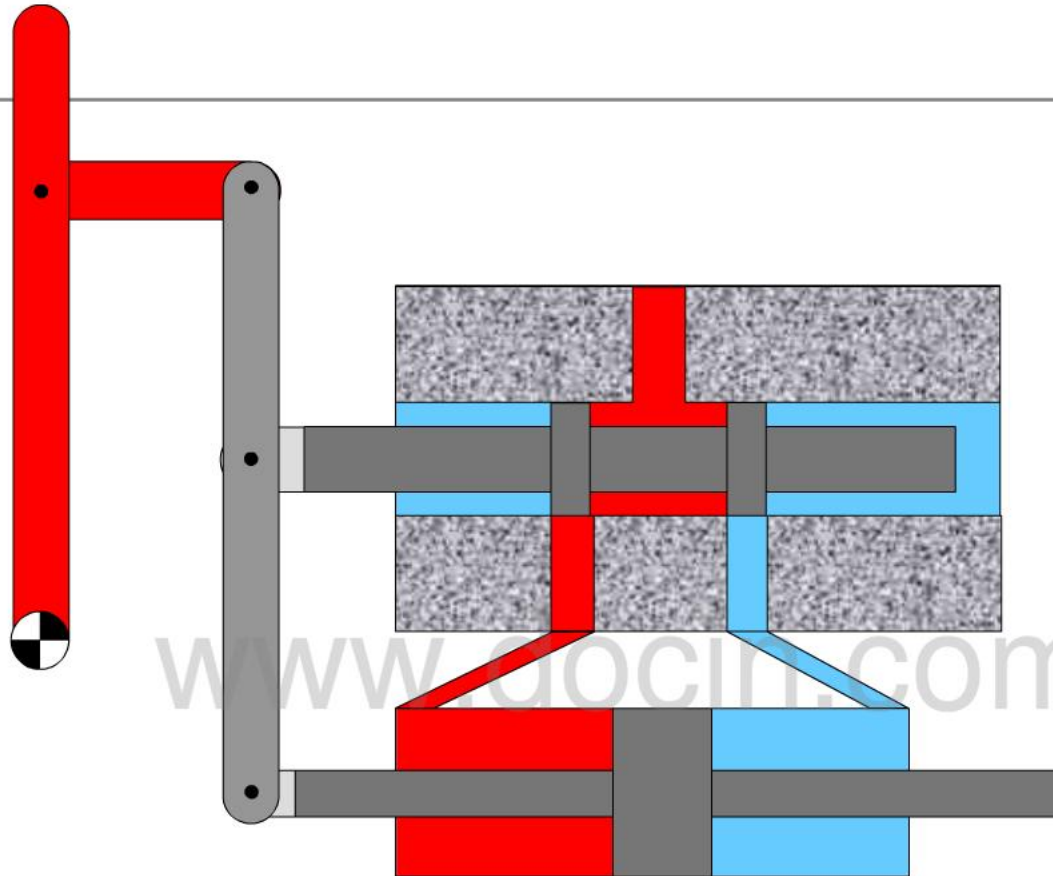
Follower Servo Mechanism



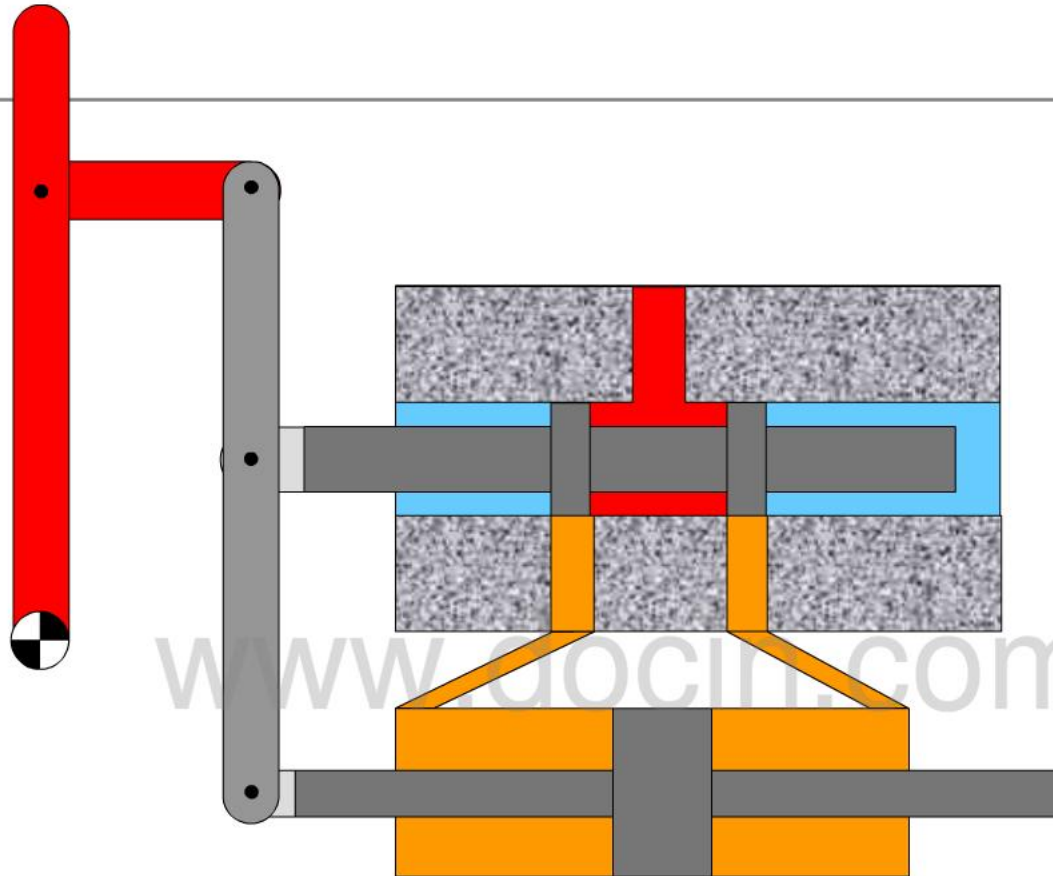
Follower Servo Mechanism



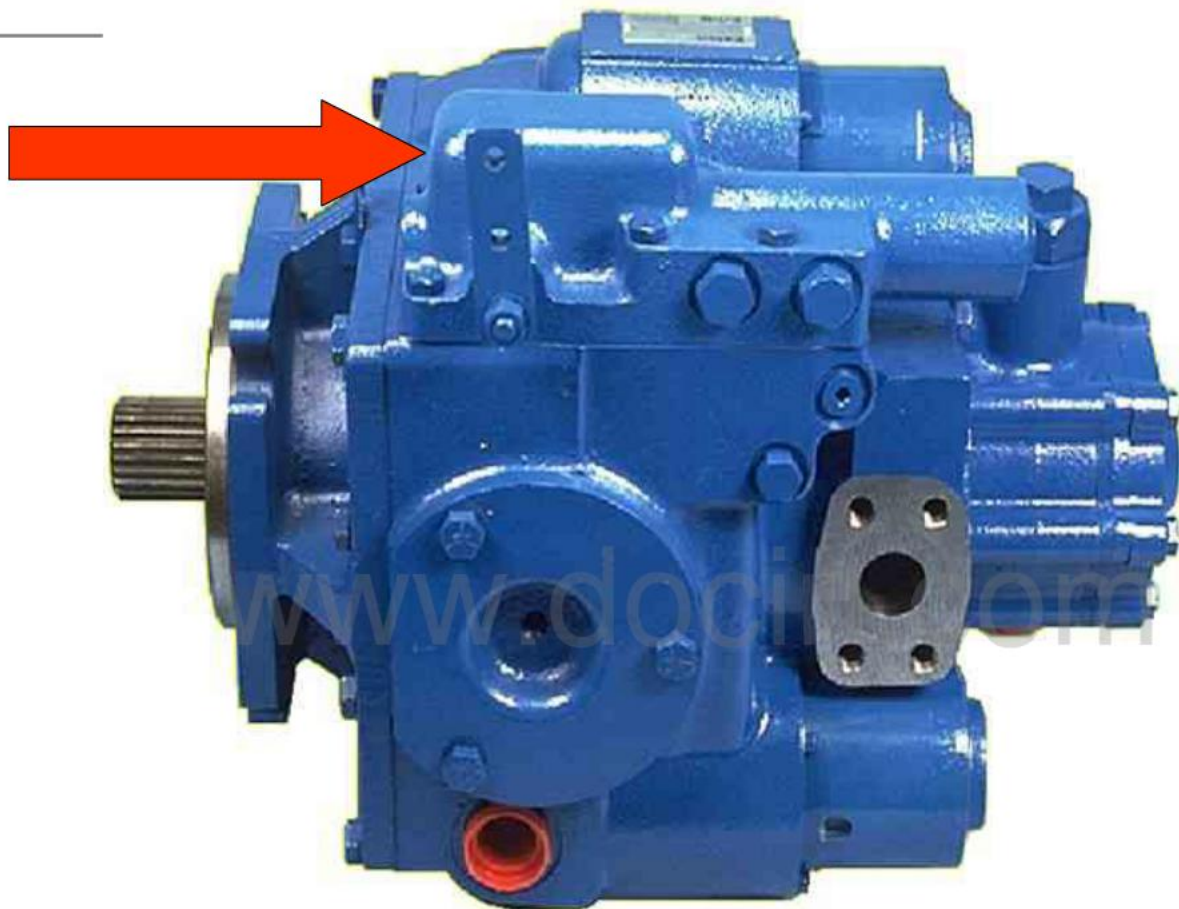
Follower Servo Mechanism



Follower Servo Mechanism



Typical Application

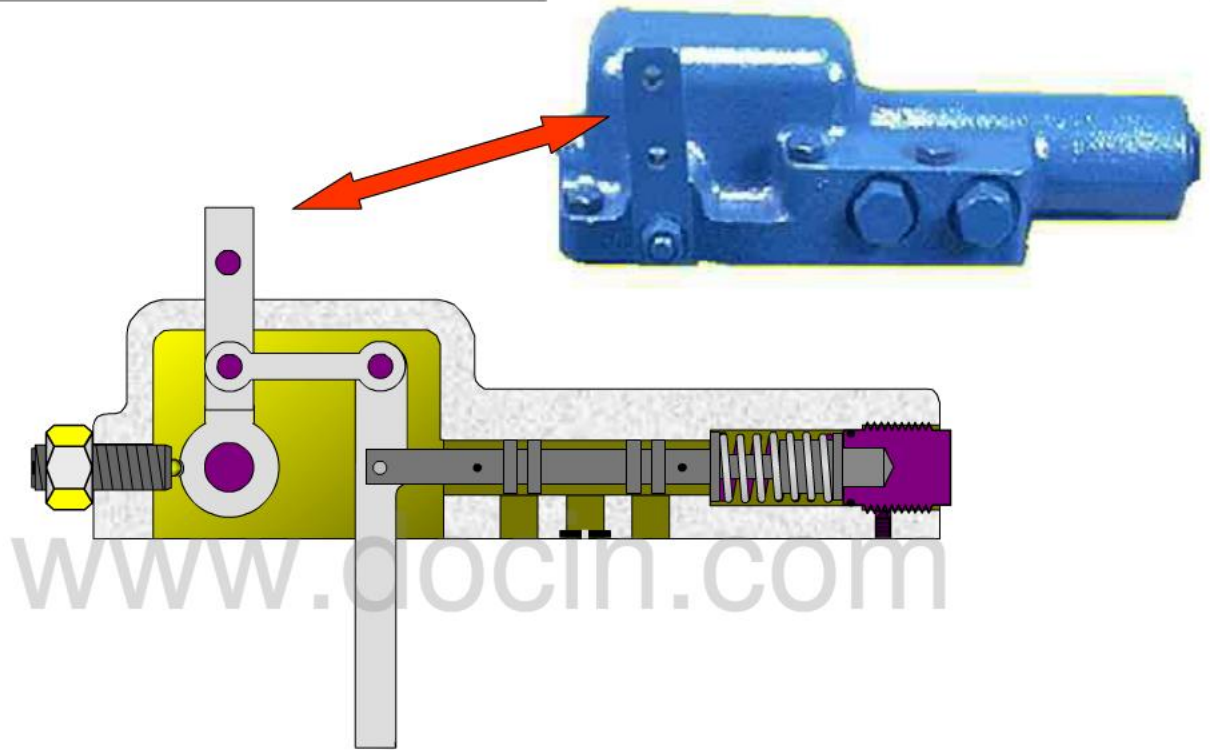


Typical Application

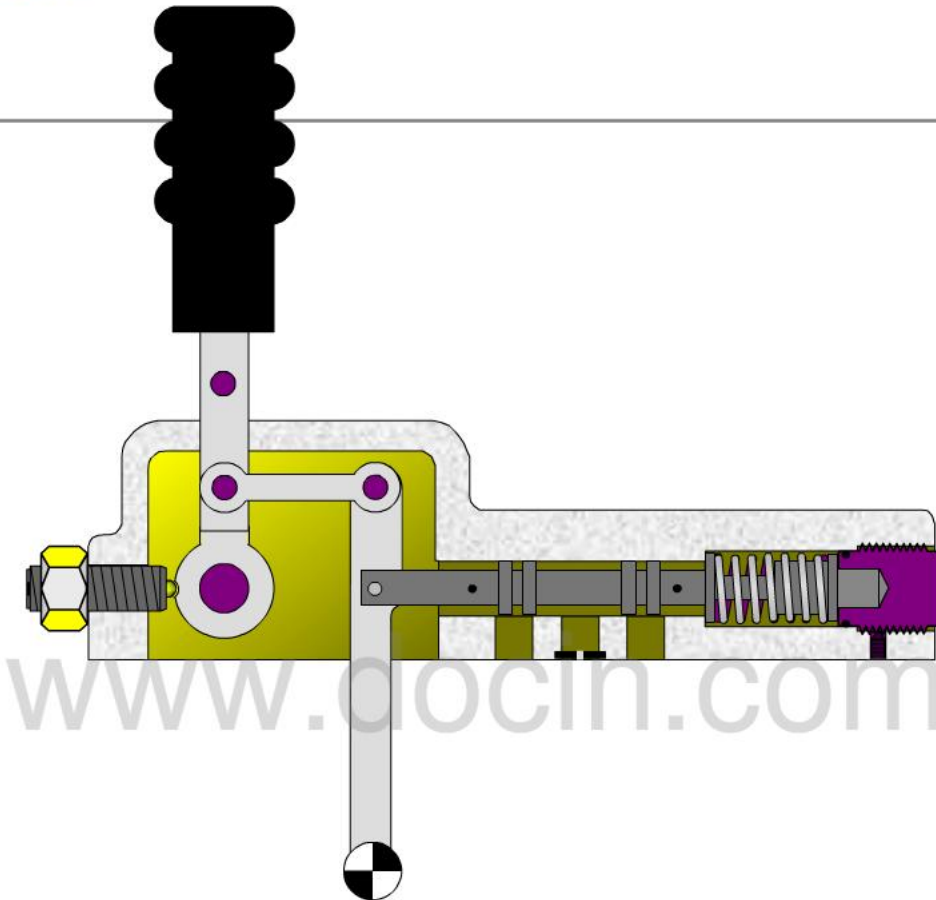


www.docin.com

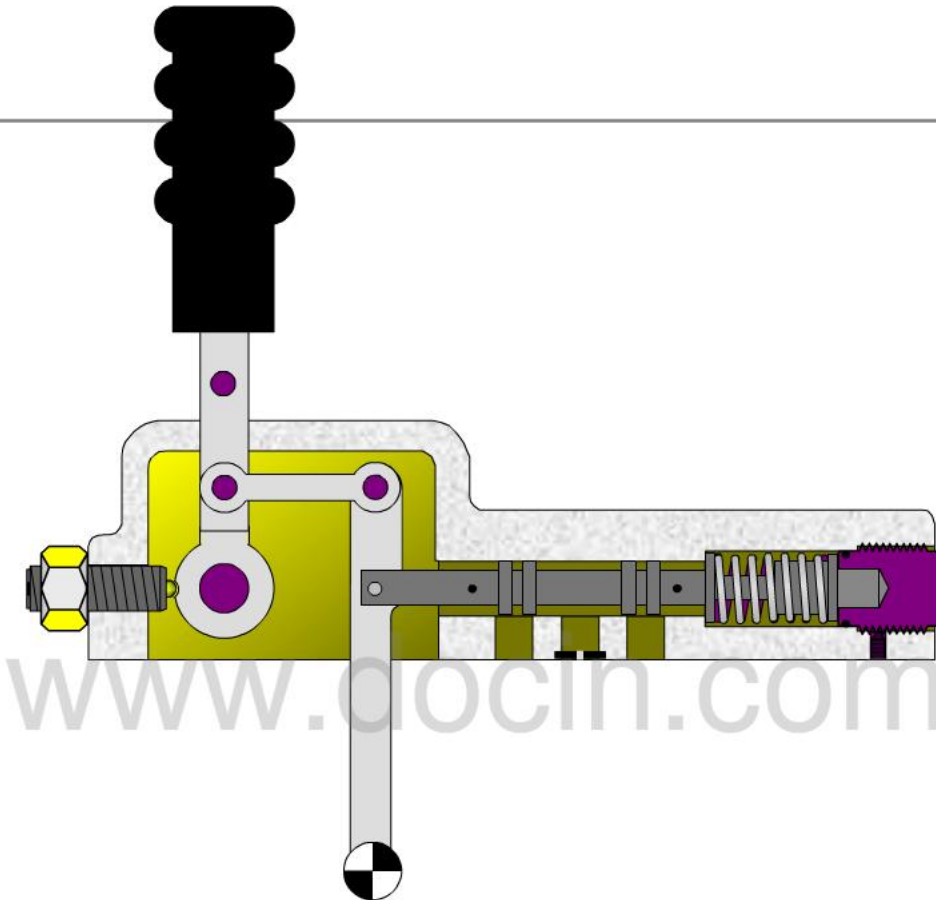
Typical Construction



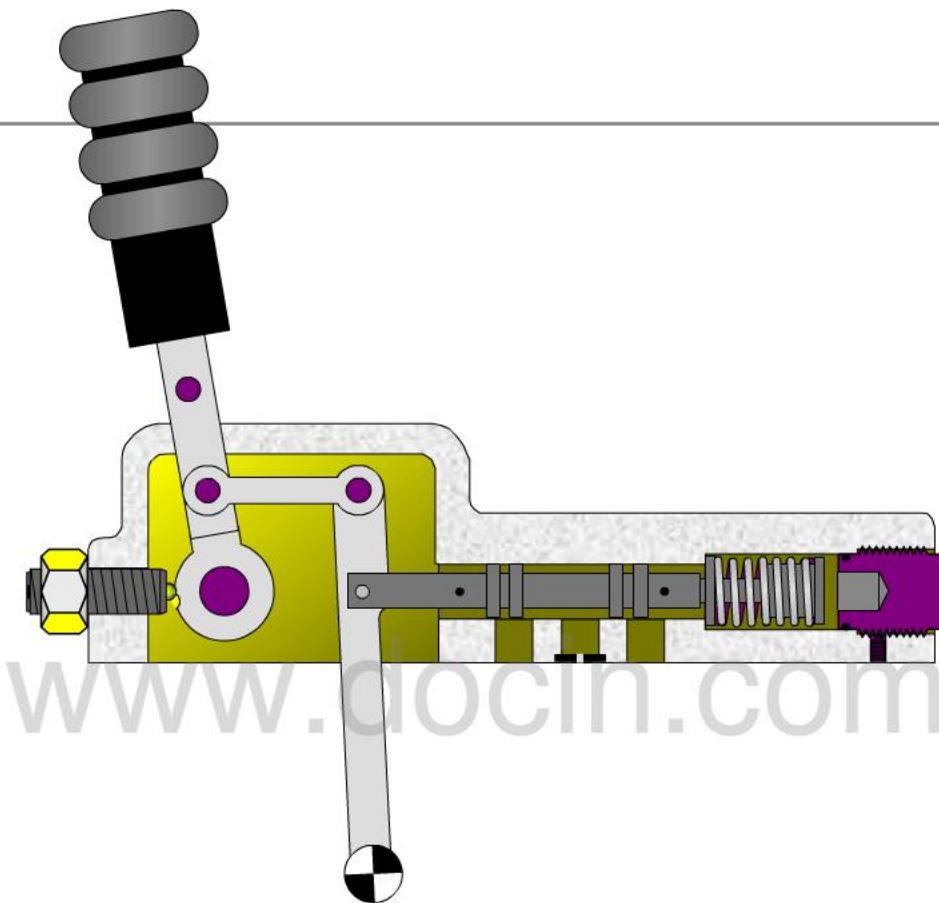
Typical Construction



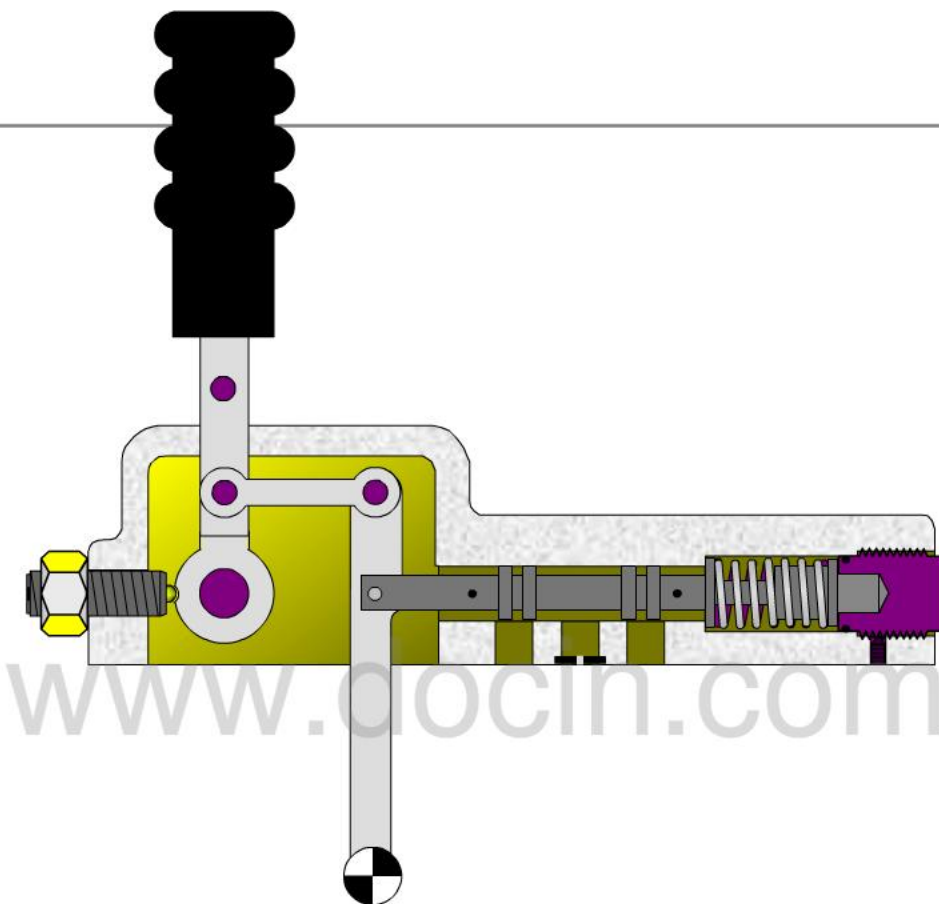
Operation



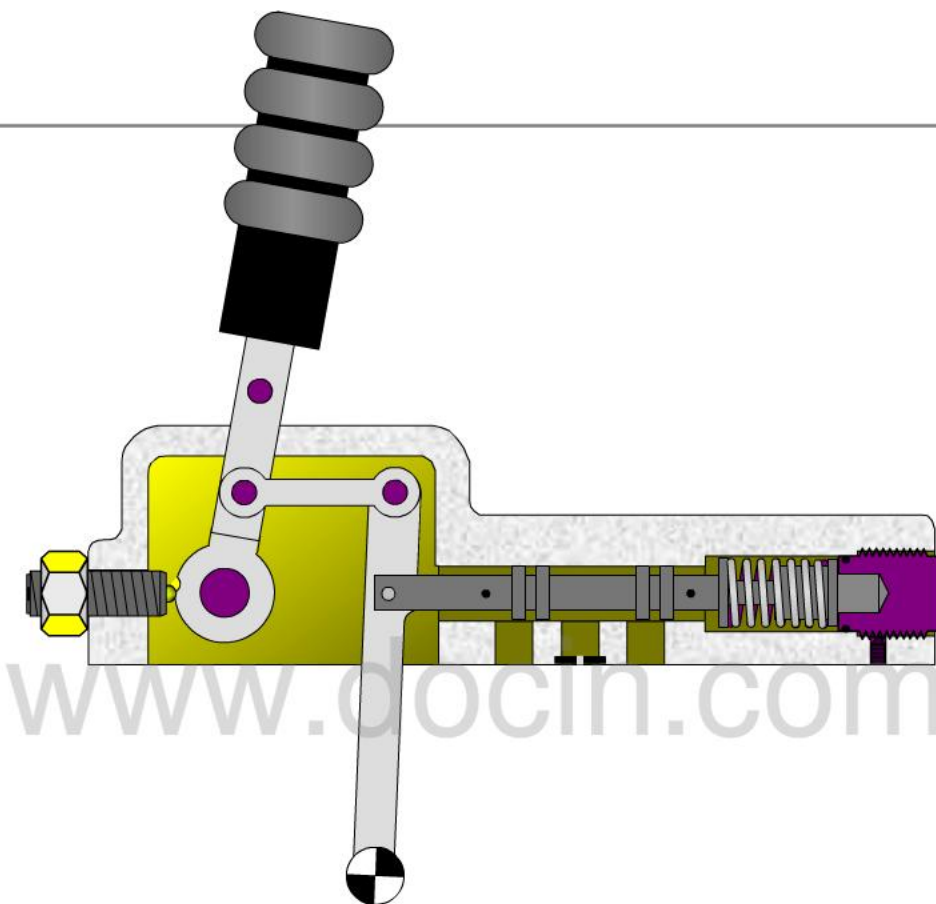
Operation



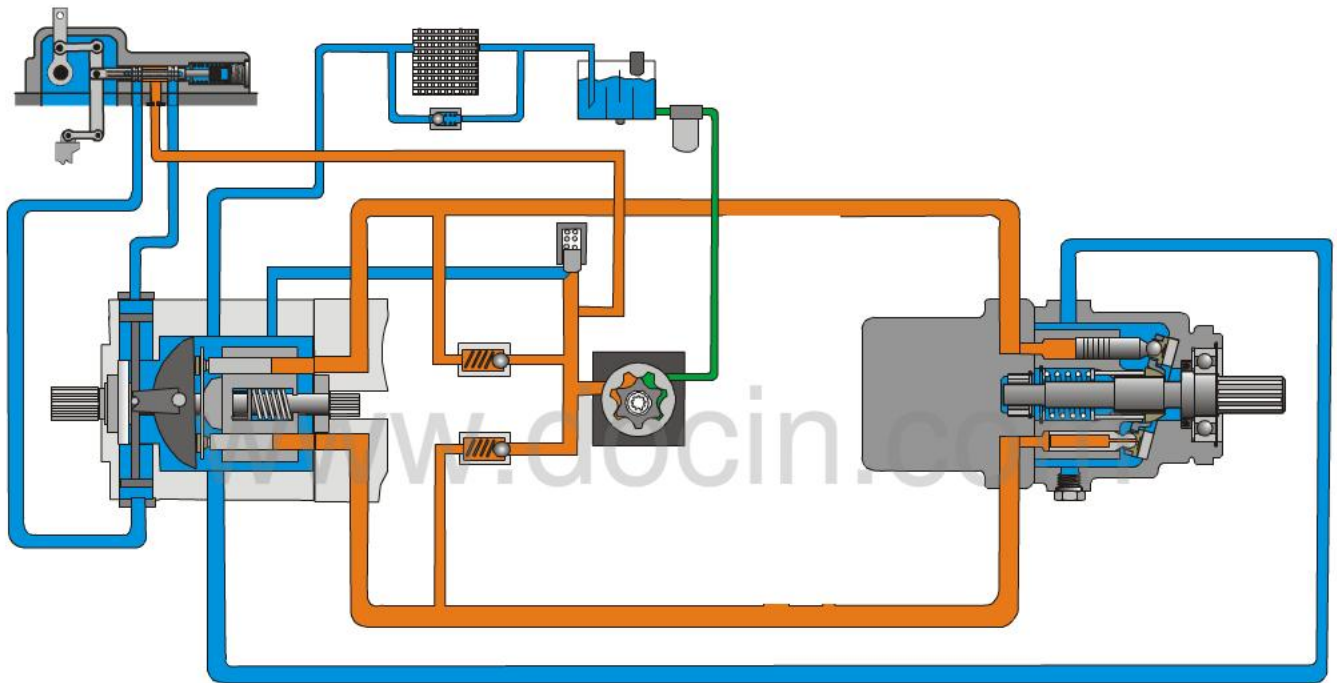
Operation



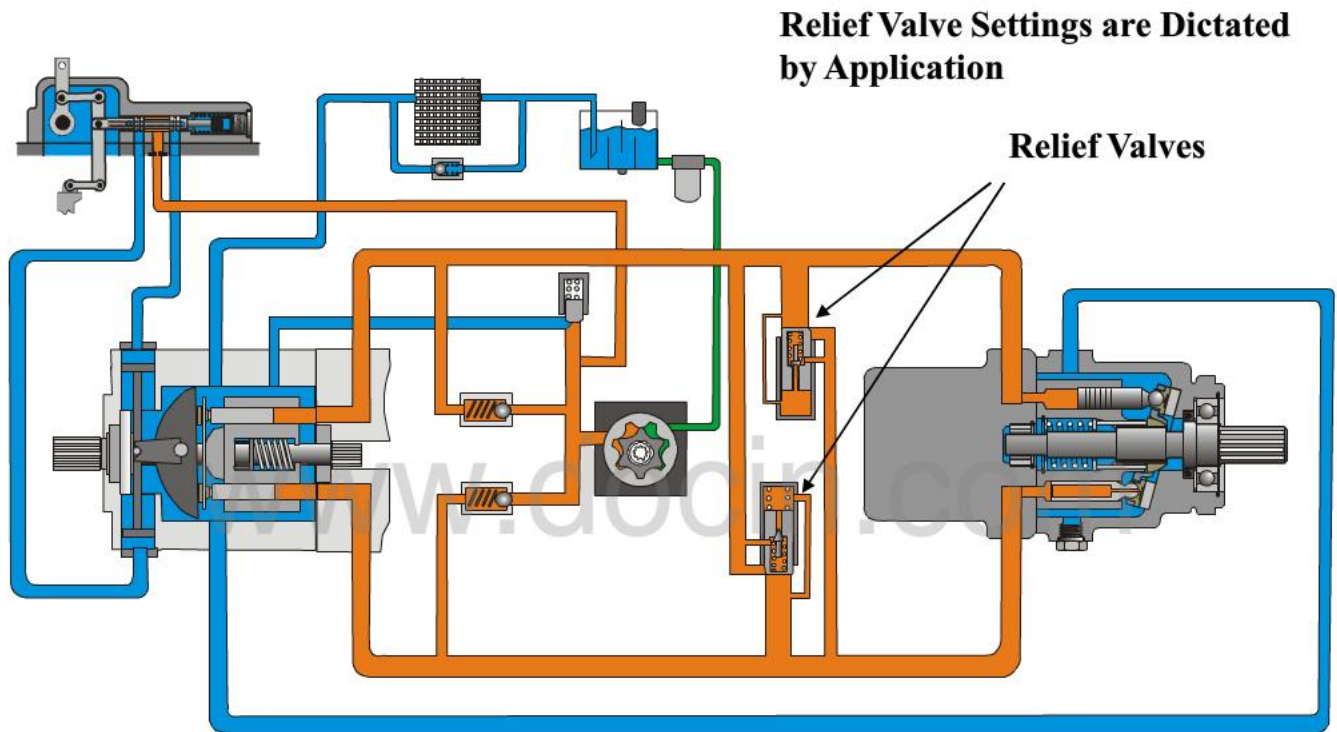
Operation



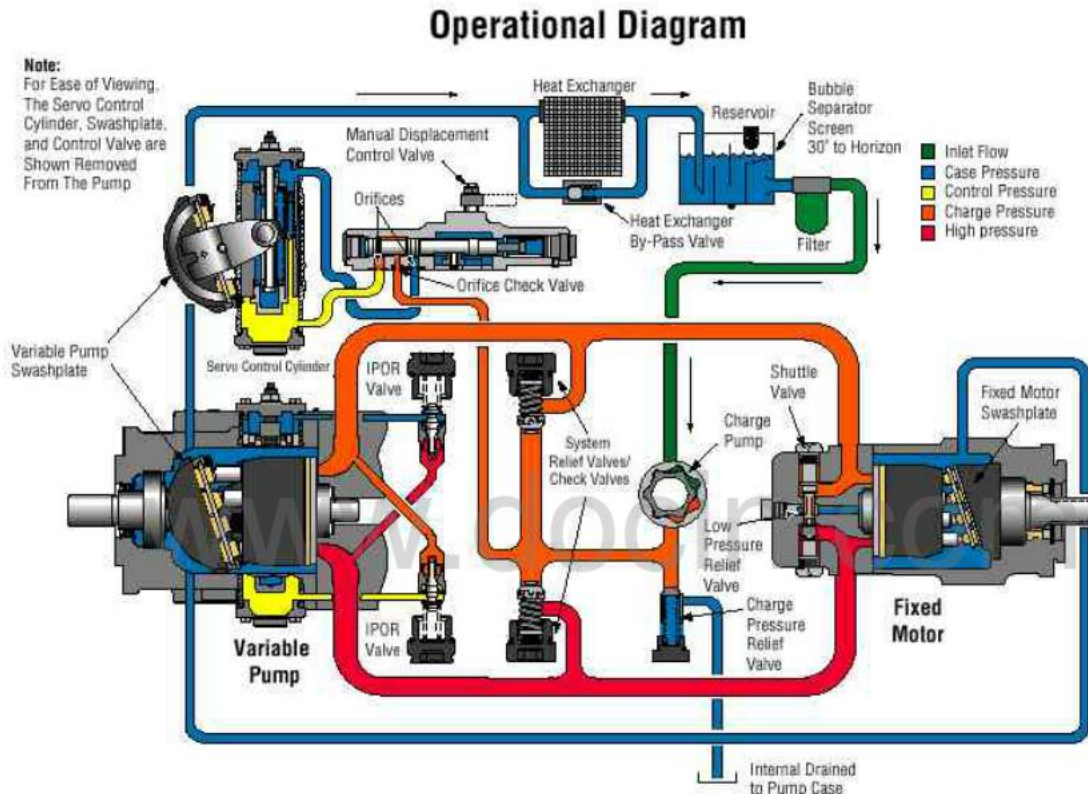
MANUAL CONTROLLER



CROSS PORT RELIEF VALVES

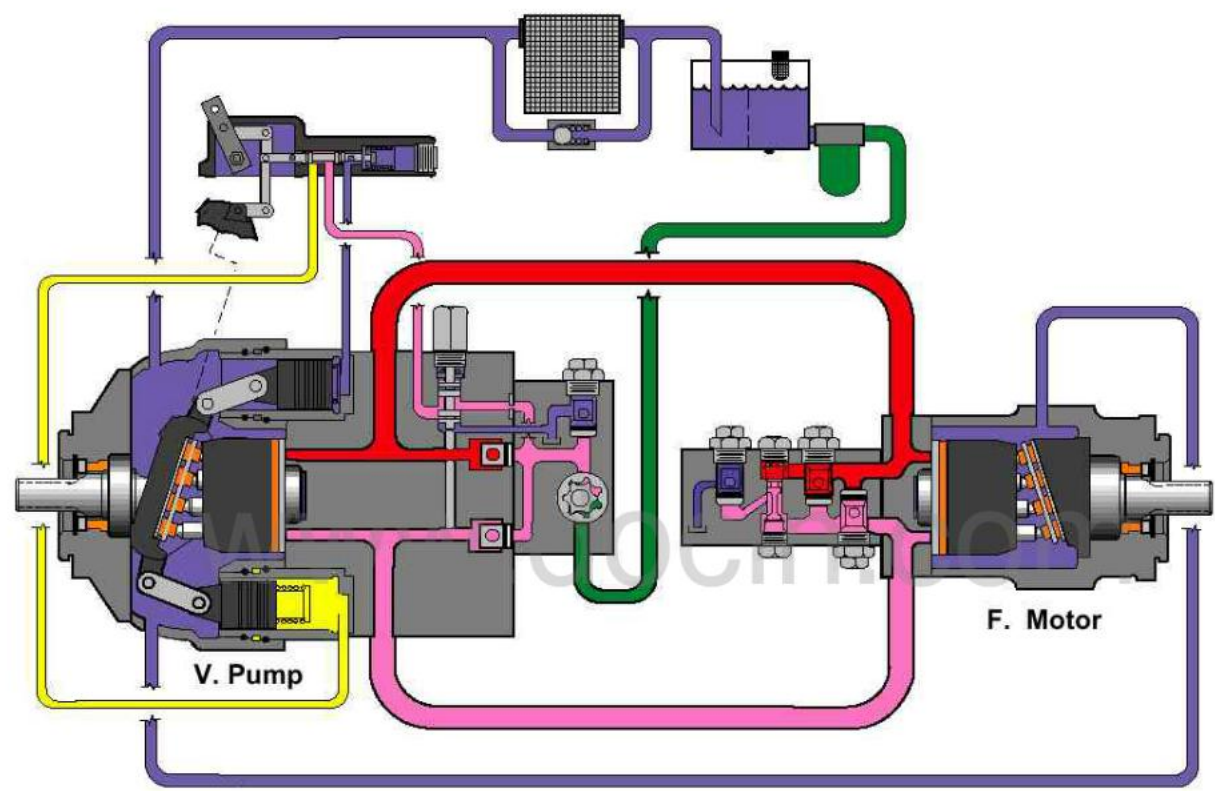


INTERNAL PRESSURE OVERRIDE – Series Two Heavy Duty

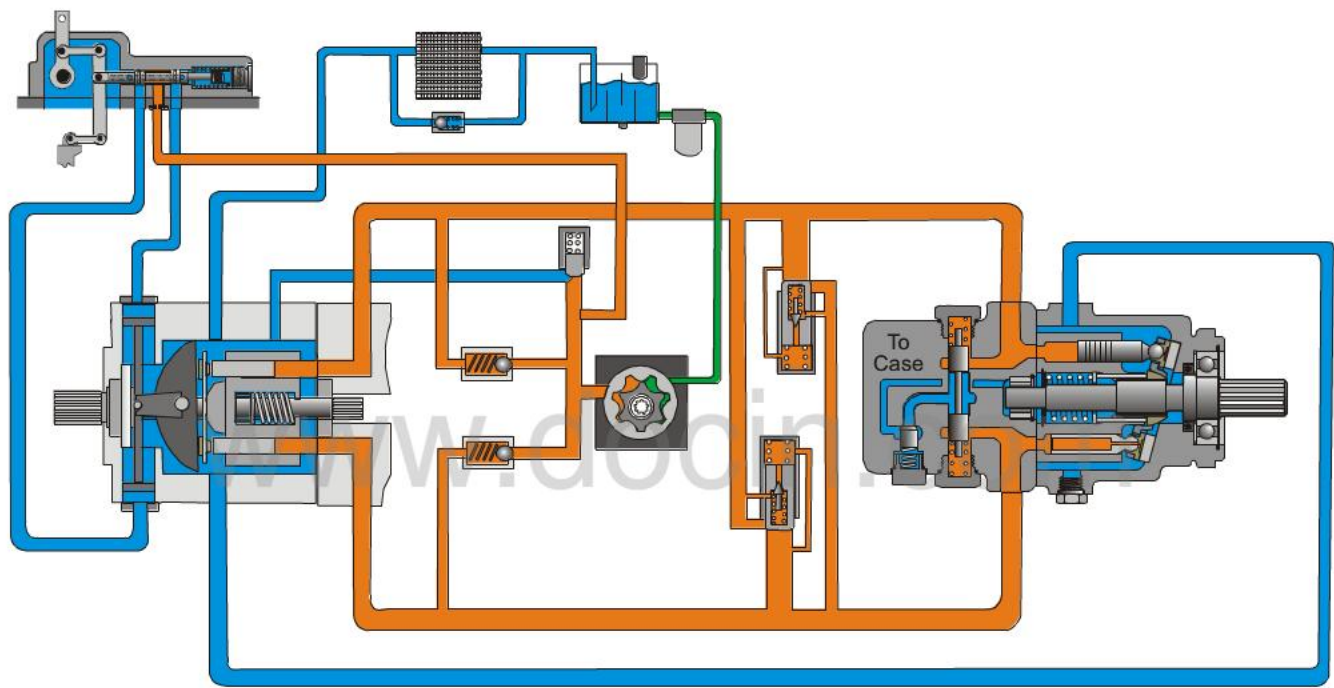


Typical Series 2 Variable Displacement Pump/Fixed Displacement Motor Schematic

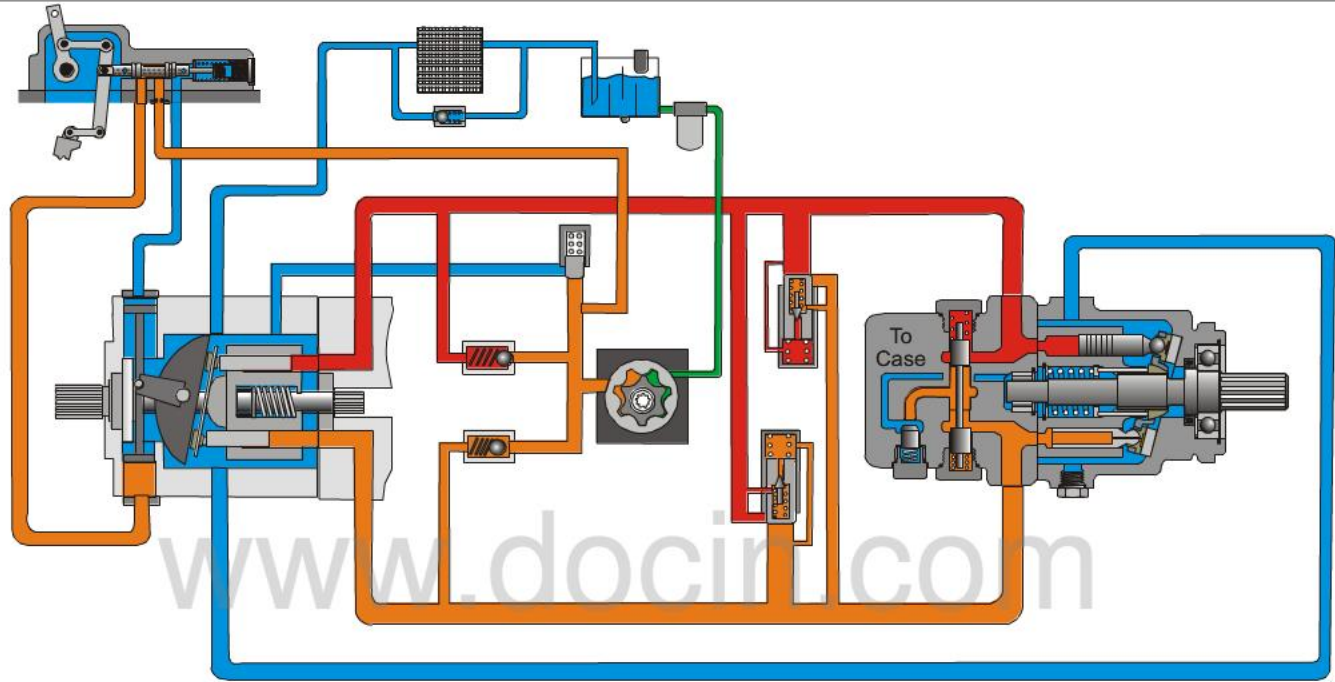
INTERNAL PRESSURE OVERRIDE – Series one Heavy Duty



INTEGRAL SHUTTLE VALVE



CIRCUIT OPERATION



Control Flow

High Pressure

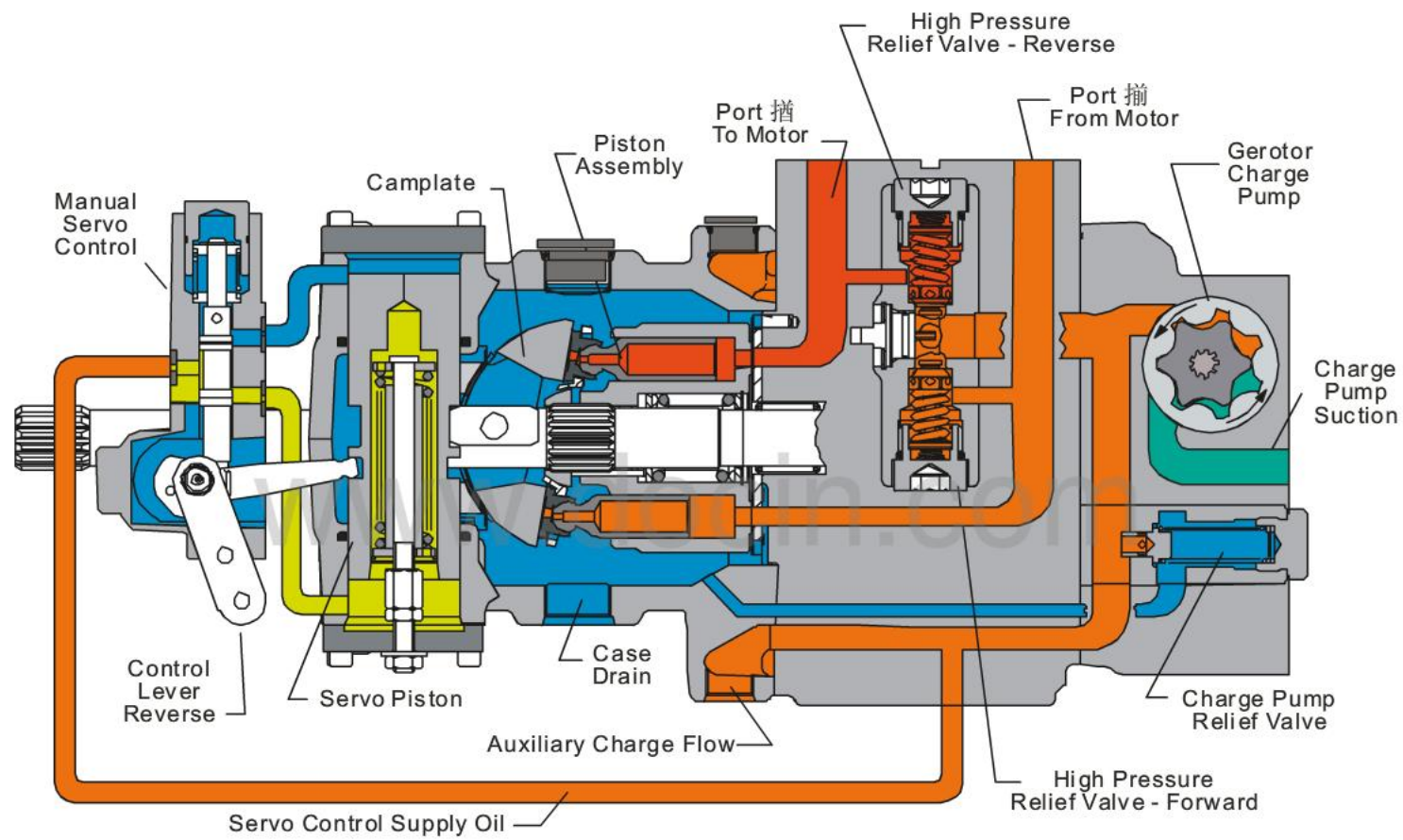
Charge Pressure

Case Pressure

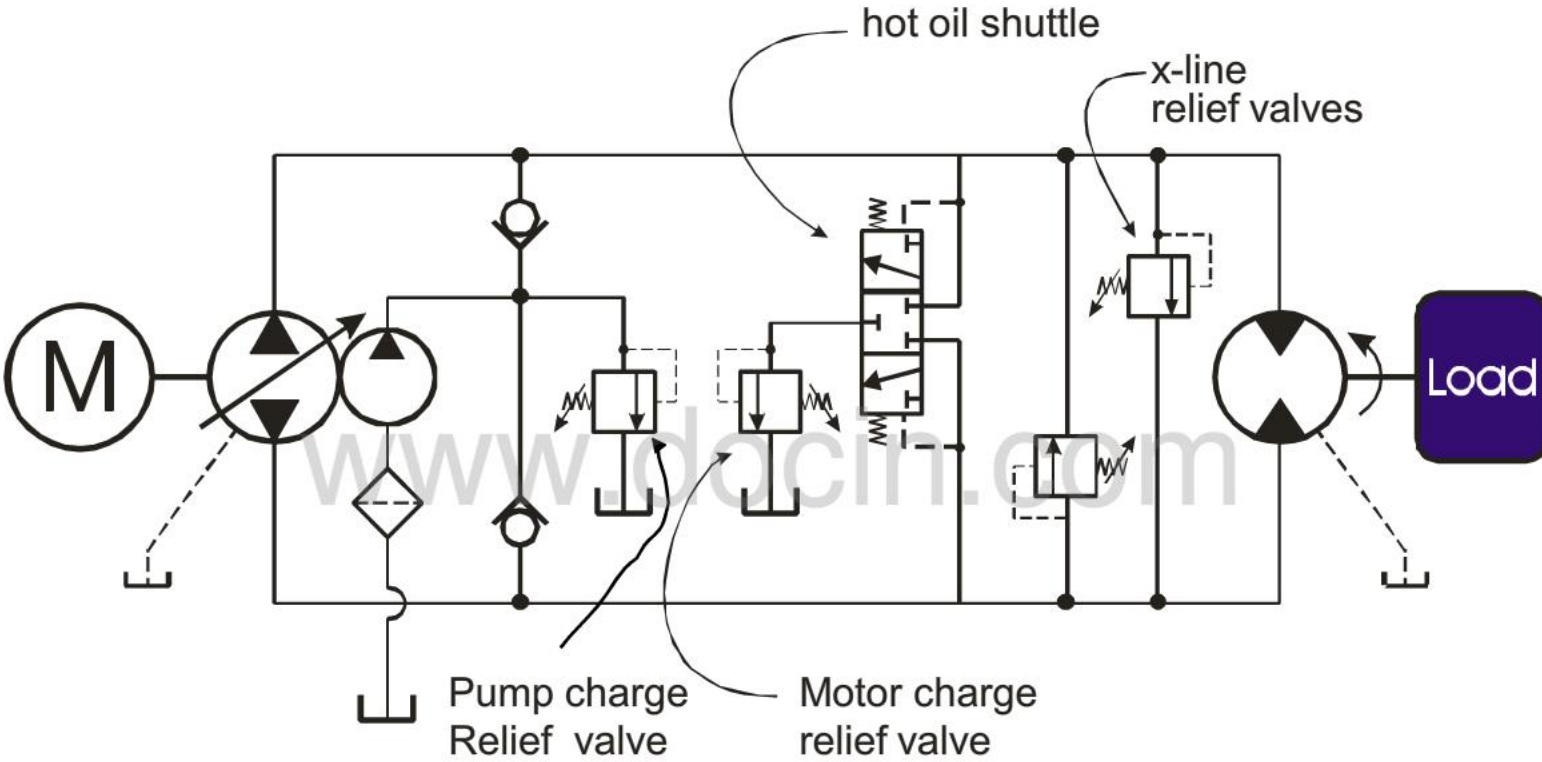
Inlet Oil



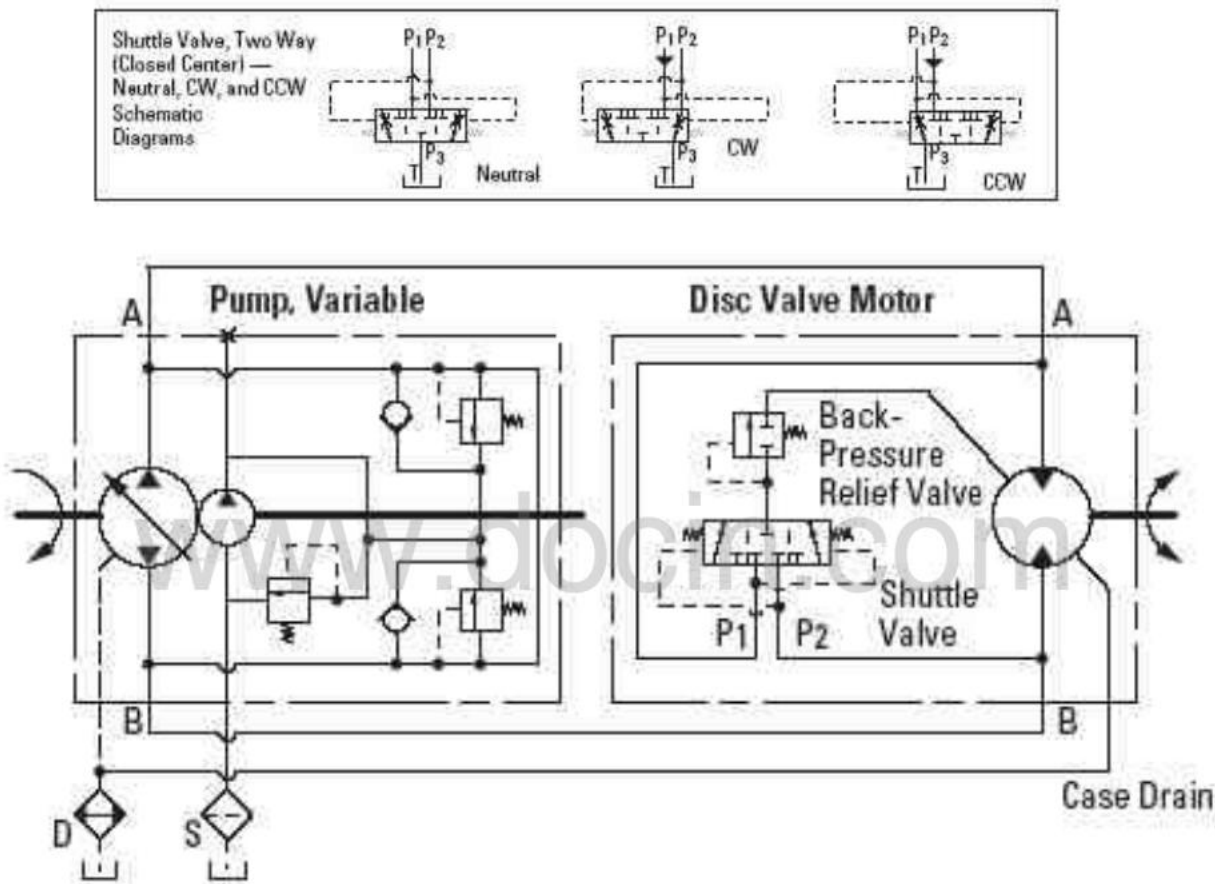
CIRCUIT OPERATION- 72400



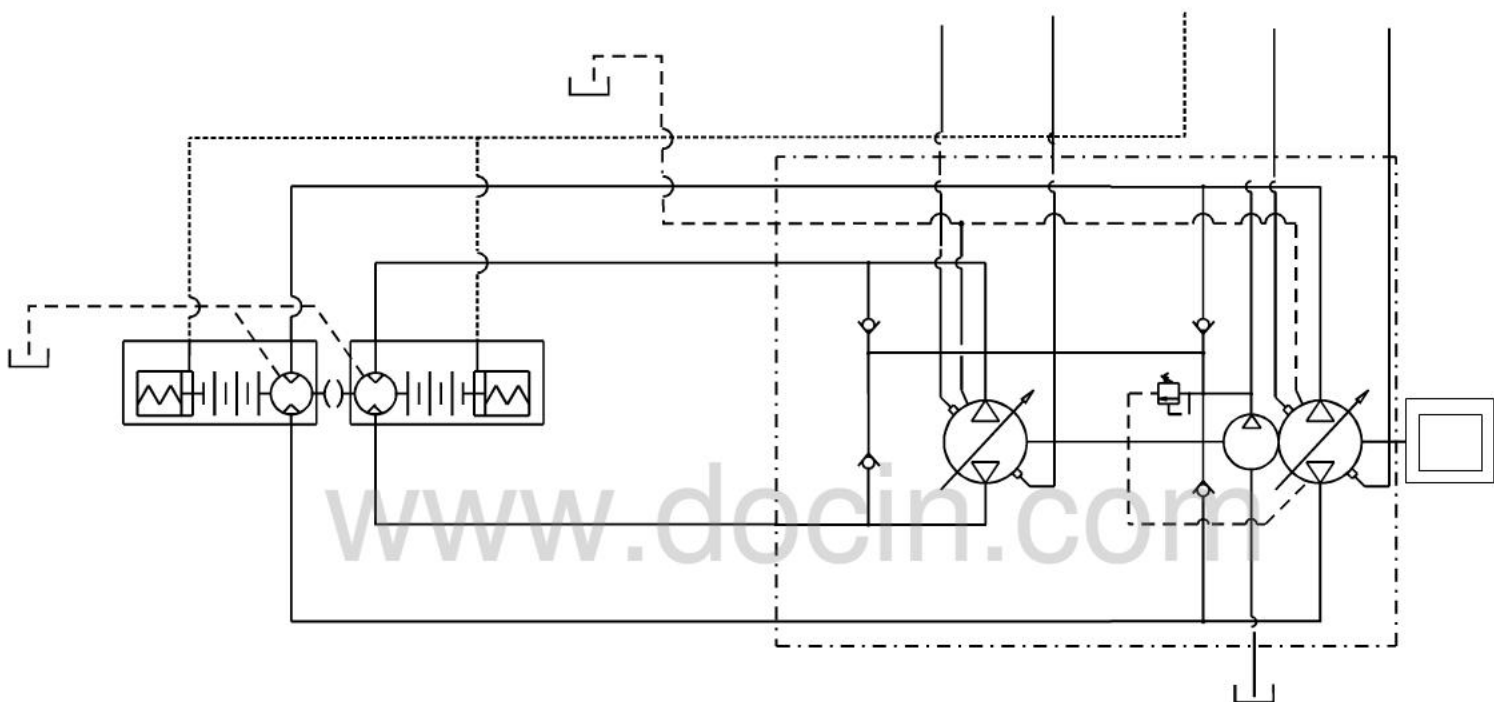
CLOSED CIRCUIT SCHMATIC



CLOSED CIRCUIT SCHMATIC WITH DISC MOTOR



CLOSED CIRCUIT SCHMATIC WITH TWO MOTORS



.84 cl

Any Questions?

www.docin.com