JHF is offering two separate hydraulic seminars! The first class covers fundamentals and the second focuses on Components:

**Day One Seminar**

**Basic Hydraulics**
Wednesday, November 6, 2019  
$250.00  
9:00 am - 5:00 pm  
Prerequisite: None

*This JHF training course will teach you:*  
- Basic Physics and Terminology  
- Transfer of Energy  
- Anatomy of a Cylinder  
- Cylinder Force and Speed  
- Pressure and Flow Generation  
- Heat Generation  
- Pump Basics  
- Hydraulic Symbology  
- Basic Schematics  
- Filtration and Contamination Control

**Day Two Seminar (NEW!)**

**Advanced Hydraulics (Components and their Function) s**
Wednesday, November 13, 2019  
$250.00  
9:00 am - 5:00 pm  
Prerequisite: Basic Hydraulics

*Basics of valve spool configurations and how best to apply them:*  
- Pumps  
  Fixed (Gear, Vane, Piston)  
  Variable (Vane, Piston)  
  Transmissions (Closed Loop)  
- Directional Valves  
  Solenoid Operated  
  Solenoid/Pilot Operated  
- Pressure Controls

**Registration Information**

**Day 1**  
11 / 6 / 2019  
$250.00

**Day 2**  
11 / 13 / 2019  
$250.00

9:00 am - 5:00 pm  
Breakfast available at 8:30 am

Cost includes take home training manual, breakfast and lunch.

**Location**
Oasis Hotel & Convention Center  
2546 N. Glenstone Ave  
Springfield, MO 65803

**For information**
Ashley Conrad  
(217) 779-3428  
aconrad@jhf.com

**Nearby Overnight Accommodations**
Oasis Hotel  
2546 N. Glenstone  
Springfield, MO  
(417) 866-5253
- Load Holding Valves
- Check and Flow Controls
- Screw In Cartridge Valves
- Proportional and Servo Valves
- DIN Poppet Valves
- Accumulators