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# FLUID POWER COURSES

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## HYDRAULIC SYSTEMS REPAIR



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### DESCRIPTION

This class will be a follow-up to the Hydraulic Troubleshooting class. It will teach the participant how to repair the various hydraulic components using standard repair kits. This course will be a hands-on, instructor-led course, taking apart directional control valves, cylinders, pumps, actuators, flow control valves, hydraulic motors, and other hydraulic controls.

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### OUTLINE

- Review of Hydraulic Principles
- Repair of Directional Control Valves
- End Actuator Repair
- Positive Displacement Pump Repair
- Hydraulic Motor Repair
- Hydraulic Cylinder Repair
- Electric Testing of DC Valves
- Troubleshooting Flow Control Valves
- Centrifugal Pump Repair
- Pilot Operated Valve Repair

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### PREREQUISITES

The participant must have successfully completed the Hydraulic Troubleshooting class. This class is designed to take the hydraulic troubleshooter to the next level and prepare him to be a hydraulic repair person. This class is an excellent class for the experienced Mechanical or Electrical Tech who has completed a course in Hydraulic Troubleshooting.

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### COURSE LENGTH

40 hours.

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### PERFORMANCE OBJECTIVES

At the completion of this course, the participant will be able to:

- Demonstrate the ability to install a standard rebuild kit.
- Successfully rebuild a cylinder.
- Properly troubleshoot a hydraulic valve.
- Correctly test the electrical circuits on a directional control or flow control valve.
- Identify the failed component and repair the hydraulic system.
- Successfully install a standard rebuild kit in a hydraulic pump or motor.
- Correctly identify and fix the problem on a hydraulic control.