



Industrial Equipment Mechanics Competency Profile

SAFETY

- Practiced shop, tool and equipment safety.
- Identify safety signs and symbols
- Demonstrate First Aid Procedures
- Operate equipment safely
 - Skid Steer
 - Forklift
 - Tractors

GENERAL EQUIPMENT SERVICES

- Lubricate equipment
- Service basic electrical
- Perform Adjustments
- Service filter systems
- Check and maintain fluid levels
- Perform preventive maintenance

GASOLINE ENGINE MAINTENANCE

- Service gasoline fuel systems
- Service air intake systems
- Service cooling systems
- Repair and service lubrication systems
- Service ignition systems
- Rebuild gasoline engines
- Replace internal and external engine components
- Maintain engine emission systems
- Troubleshoot gasoline engines

DIESEL ENGINE MAINTENANCE

- Service diesel fuel systems
- Service air intake systems
- Service cooling systems
- Repair and service lubrication systems
- Test and service fuel injectors
- Rebuild diesel engines
- Replace internal and external engine components
- Maintain engine emission systems
- Troubleshoot diesel engines

POWER TRANSMISSION

- Analyze and repair gear transmissions
- Analyze and repair differentials and final drives
- Analyze and repair clutches and brakes
- Analyze and repair auxiliary drives

HYDRAULIC SYSTEMS

- Analyze hydraulic systems problems
- Repair hydraulic cylinders
- Repair hydraulic pumps
- Repair hydraulic lines
- Identify hydraulic fittings

- Measure flow rate, pressure and temperature of system
- Read system schematics
- Troubleshoot hydraulic system problems

ELECTRICAL SYSTEMS

- Read and interpret symbols and wiring diagrams
- Analyze charging system problems
- Analyze starting system problems
- Analyze ignition system problems
- Analyze safety interlock system components

HEATING AND AIR CONDITIONING SYSTEMS

- Identify components of heating systems
- Identify components of air conditioning systems
- Replace components of heating and air conditioning systems.
- Diagnose heating and air conditioning system problems

STEERING AND SUSPENSION SYSTEMS

- Analyze suspension system components
- Remove and replace suspension system components
- Analyze steering system components
- Remove and replace steering system components
- Align steering system
- Test and diagnose braking systems
- Repair braking systems
- Analyze tires and tracks
- Repair tires and tracks

FABRICATING HOT METAL

- Weld metal in varies positions
- Arc weld metal
- Mig weld metal
- Gas weld
- Braze metal
- Solder metal
- Cut metal with oxyacetylene
- Cut metal with plasma

FABRICATE COLD METAL

- Lay out, cut and square metal
- Drill and tap metal
- Fasten metal with rivets, screws and bolts
- Select and use abrasives to finish metal

CONTAMINANTS

- Identify contaminants
- Dispose of contaminants
- Maintain and access MSDS sheets

Instructor _____

Date _____