## Machine Repairer - 626.281.014

The following schedule of work experience is intended as a guide. It need not be followed in any particular sequence, and it is understood that some adjustments may be necessary in the hours allotted for different work experience. In all cases, the apprentice is to receive sufficient experience to become fully competent and use good workmanship in all work processes which are part of the trade. The apprentice will be fully instructed in safety and OSHA requirements.

- A. MACHINE TOOLS (1500 Hours)
  - 1. MILLING MACHINES
    - Milling Machine set-up and operation-including vertical angle and plain milling, vise and table work and dividing head work.
  - DRILL PRESSES Drill Press set-up and operation - including layout grinding of drills, use of drill jigs and stamping of component parts.
  - 3. LATHES

Lathe set-up and operation - including simple turning on centers, boring holes, eccentric turning, chuck work and thread cutting.

4. GRINDERS

Plain surface grinding, external cylindrical grinding, internal Grinding and face plate work.

5. TOOLMAKING

To work from blueprint on jigs - fixtures and general tool work including bench and assembly work under close supervision of the Foreman or Journeyman Toolmaker. (Sufficient time will be provided as part of the Machine Repair operations for the apprentice to become familiar with the operation of standard machine tools used in the fabrication or replacement of parts).

- B. MACHINE TOOLS (4,000 Hours)
  - 1. Install and maintain standard machine tools such as Lathes, Drill Presses, Milling Machines, Grinders, and Screw Machines and in addition any specialized machines and tools utilized in the Fabricating and Machining processes.
  - 2. Disassemble units and determine cause of trouble and repair or Replace defective parts and re-assemble.
  - 3. Make or repair defective parts with machine shop tools including machining and welding.
  - 4. Fabricate guards and shields or containers necessary for the safe and efficient operation of machine tools.
  - 5. Perform hand operations such as scraping ways, fitting bearings and other precision parts.
  - 6. Level and align machinery and component parts such as spindles and bearings for proper operation.
  - 7. Install auxiliary equipment such as pumps and exhaust systems as required.

- 8. Lubricate and/or maintain hydraulic systems on all equipment.
- 9. Repair grinding wheel spindles (hi-frequency, belt drive, etc.).
- 10. Repair work head spindles of all types.
- 11. Hydraulics
- 12. Pneumatics
- C. PARTS FABRICATING (1,000 Hours)
  - 1. Fabricate various parts from sketches on verbal instruction
  - 2. Familiarization of various machines to be repaired such as screw machines, lathes, grinders etc.
- D. SERVICE (500 Hours)
  - 1. Service calls to customers plant, inspect machines, trouble shoot, evaluate the problems and make repairs
- E. RIGGING (300 Hours)
  - 1. Proper movement of equipment
  - 2. Use of proper tools and equipment
- F. SERVICE MANUALS AND WARRANTIES (100 Hours)
  - 1. Knowledge of service manuals
  - 2. Ordering of repair parts
  - 3. Interpretation of warranties
- G. RELATED INSTRUCTION (600 Hours)

TOTAL - 8000 Hours

## WAGE SCHEDULE

0 - 1000	Hours	
1001 - 2000	Hours	
2001 - 3000	Hours	
3001 - 4000	Hours	
4001 - 5000	Hours	
5001 - 6000	Hours	
6001 - 7000	Hours	
7001 - 8000	Hours	
Journeyperso	n Rate	