



## Manufacturing Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
<b>Certification Areas Completed:          Required Skills - For EACH Pathway          Check ✓ completed areas</b>	<b>Level One Requirements:</b> <i>Students must complete ALL listed below</i> <b>Check ✓ completed areas</b>
<input type="checkbox"/> Core Skills	<input type="checkbox"/> Required Skills
<input type="checkbox"/> Safety	<input type="checkbox"/> Minimum of <b>ONE Unit</b>
<input type="checkbox"/> Manufacturing Fundamentals	<input type="checkbox"/> Minimum of 2 semesters related instruction
<input type="checkbox"/>	<input type="checkbox"/> Minimum of 450 work hours
<b>Production Pathway</b>	<b>Level Two Requirements:</b> <i>Students must complete ALL listed below</i> <b>Check ✓ completed areas</b>
<input type="checkbox"/> Assembly and Packaging Unit	<input type="checkbox"/> Required Skills for EACH pathway
<input type="checkbox"/> Manufacturing Processes Unit*	<input type="checkbox"/> Minimum of <b>TWO Units</b>
<input type="checkbox"/> Machining Unit*	<input type="checkbox"/> Minimum of 4 semesters related instruction
<input type="checkbox"/> Welding Unit*	<input type="checkbox"/> Minimum of 900 work hours
<input type="checkbox"/>	<i>* Unit can be completed two times IF different processes are learned</i>
<b>Production Operations Management Pathway</b>	
<input type="checkbox"/> Production Operations Management Unit	
<input type="checkbox"/>	
<b>Maintenance, Installation, and Repair Pathway</b>	
<input type="checkbox"/> Basic Industrial Equipment Unit	
<input type="checkbox"/> Advanced Industrial Equipment Unit	
<input type="checkbox"/>	

Total Hours Employed	Company Name	Telephone Number
		( )
		( )

## Instructions for the Worksite Mentor(s) and Instructor(s)

The Skill Standards Checklist is a list of the competencies (tasks) to be achieved through mentoring and training at the worksite.

- The worksite mentor should rate each competency as the student acquires and demonstrates the skill **according to the performance standards criteria**.
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and student should go over this checklist together on a regular basis to record progress and plan future steps to complete the required competencies.

**I certify** that this student has successfully completed the competencies required in my department. Circle your YA role, sign and print your name, and complete with the date signed and the department name.

***SIGN this page IF you have been a mentor, trainer, or instructor of this student***

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

Mentor/Trainer/Instructor Signature	Mentor/Trainer/Instructor Signature
Printed Name	Printed Name
Department	Department
Date Signed	Date Signed

## Operational Program Notes for Skill Standards Checklist

## 1. Manufacturing Youth Apprenticeship Curriculum

- Definitions:
  - Competency- The worksite skill to be performed
  - Performance Standards- How to assess skill performance as applicable to worksite.
  - Learning Objectives- Content knowledge recommended to learn these skills; may be taught by the employer, school district, and/or technical college.
  - Skill Standards Checklist- The documented list of competencies completed by the YA student.
  - **W/S**- Listed after a skill indicates that skill performance may be learned and assessed at the worksite OR in the classroom in a simulated setting. However, a simulated setting should **ONLY** be used IF there is no possibility of skill performance at the worksite.
- Performance Standards and Learning Objectives are located in the applicable Appendices of the **Program Guide for this Youth Apprenticeship**.

## 2. ALL Youth Apprentices **MUST** complete the Required Skills (Core Skills, Safety, and Manufacturing Fundamentals) competencies for **EACH Pathway** they are enrolled in.

- The Required Skills competencies may be completed concurrently with the Technical Skills competencies.
- The Required Skills are common skills specific to all manufacturing industry sub-sectors. These skills are *aligned with* the National States' Career Clusters standards for Manufacturing and the Manufacturing Skill Standards Council (MSSC).

## 3. Youth Apprenticeship choices (depending on job placement)

- Worksites can be chosen from any number of the manufacturing SUB-INDUSTRIES such as:  
Chemical, Computers and Electronic, Electrical Equipment and Appliances, Food and Beverage, Furniture, Machine, Non-Metallic Minerals, Plastic and Rubber Production, Primary and Fabricated Metals, Printing, Textiles, Apparel and Leather, Transportation, Wood; or  
PROCESSING any variety of manufacturing MATERIALS such as:  
Metals (Ferrous, Non-Ferrous, Powdered), Polymers (Wood, Textiles, Leather, Plastic, Elastomer), Chemicals, Finishes (Wood Finishes, Metal Finishes), and Food and Beverage  
AS LONG AS the competencies related to that SUB-INDUSTRY and MATERIAL are allowable by DWD Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws.
- Competencies have been reviewed by the Department of Workforce Development for Child Labor Laws. Contact the Department of Workforce Development's Equal Rights Division/Labor Standards Bureau at 608-266-6860 for questions regarding child labor laws. SEE Appendix A for special Child Labor Law considerations in this YA Program.
- Students will complete a MINIMUM of one Manufacturing unit for a Level ONE Manufacturing YA and a MINIMUM of two Manufacturing units for a Level TWO Manufacturing YA. The Manufacturing Processes, Machining, or Welding units may be completed two times for a Level TWO program; however different processes must be taught and learned.
- The Department of Workforce Development Occupational Certificate will indicate "Manufacturing" attained when the program is completed.

## 4. Competency Ratings

- Rate the student on the competencies regularly and revisit the competencies with the student periodically to offer the opportunity for an improved rating.
- Arrangements must be made to ensure that the student learns, practices, AND performs each competency **even if** that competency is not part of their regular job function.
- "Entry Level" criteria should be interpreted to mean "able to do the task satisfactorily."
- "Assist" in front of a skill indicates that the student should perform the skill *as indicated in the curriculum* "while assisting a worksite professional." Training should go beyond "observation only" for these skills. It will be up to the employer to determine the criticality of each specific task, training completed, and the actual level of supervision required. See curriculum details for requirements.

## Required Skills

Required of ALL Manufacturing YA Students

Copy this page FOR EACH unit to be completed

CORE SKILLS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply academic knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Apply career knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Apply manufacturing industry knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Communicate effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Act professionally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Cooperate with others in a team setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Think critically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Exhibit regulatory and ethical responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Use resources wisely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Use basic technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAFETY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Maintain a safe work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Demonstrate professional role to be used in an emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MANUFACTURING FUNDAMENTALS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Focus on customer needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Measure using various instruments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Operate tools and equipment safely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Practice quality assurance principles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Rating Scale:

3 = Exceeds entry level criteria/Requires minimal supervision/Consistently displays this behavior

2 = Meets entry level criteria/Requires some supervision/Often displays this behavior

1 = Needs improvement/Requires much assistance and supervision/Rarely displays behavior

### Additional Comments -

# Production Pathway

Assembly and Packaging Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read technical drawings and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret assembly and packaging symbols and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify set up for assembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Select tools and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform safety checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform assembly set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Verify assembly set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform assembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform quality checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Build packaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Package product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Process packaging documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Clean up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Monitor equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Document equipment use and/or operational problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Additional Comments -**

# Production Pathway

## Manufacturing Processes Unit

Check the appropriate Process.

Copy pages 6-7 if unit is repeated for a Level TWO.

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> Casting      | <input type="checkbox"/> Forming           |
| <input type="checkbox"/> Conditioning | <input type="checkbox"/> Joining/Combining |
| <input type="checkbox"/> Filling      | <input type="checkbox"/> Molding           |
| <input type="checkbox"/> Finishing    | <input type="checkbox"/> Separating        |

## Manufacturing Processes Examples

- 1. Casting**  
Examples: Metal, Sand, Die, Plaster, Slush, Static, Centrifugal, Continuous
- 2. Conditioning**  
Examples: Heat Treating, Annealing, Hardening, Tempering
- 3. Filling**  
Examples: Aseptic, Canning, Bottling
- 4. Finishing**  
Examples: Barrel, Sanding, Deburring, Buffing, Brushing, Polishing, Electropolishing, Chemical cleaning, Ultrasonic cleaning, Vapor degreasing, Painting, Coating, Dipping, Electroplating, Engraving, Plating
- 5. Forming**  
Examples: Forging, Open/Closed Die, Extrusion, Pressing, Punching, Blanking, Drawing, Piercing
- 6. Joining/Combining**  
Examples: Welding, Brazing, Soldering, Sintering, Adhesive Bonding, Thermosetting, Fastening, Stitching, Stapling, Press-Fitting, Chemical
- 7. Molding**  
Examples: Powder Compaction, Sintering, Injection, Blow, Liquid Resin, Thermoforming, Extrusion, Foam, Vacuum forming, Compression, Shrink filling
- 8. Separating**  
Examples: Cutting, Sawing, Centrifuging, Filtration, Pressing, Distillation, Evaporation, Fractionalization, Chemical

# Production Pathway

Manufacturing Processes Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read technical drawings and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret symbols and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Select tools and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform safety checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Assist to perform set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Verify set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform start up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Operate equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Monitor product and process specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Process production documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Shutdown process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Clean up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Monitor equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Document equipment use and/or operational problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Additional Comments -**

# Production Pathway

Check the appropriate Process.

Copy this page if unit is repeated for a Level TWO.

- Grinder  
 Machine Center

- Lathe  
 Other: \_\_\_\_\_

Machining Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read machining technical drawings and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret machining symbols and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Select tools and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform safety checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Assist to perform set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Verify set up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform start up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Operate machining equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Monitor machining product and process specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Process production documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Shutdown machining process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Clean up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Use hand tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Use CNC equipment (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Monitor equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Document equipment use and/or operational problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

W/S = Worksite Experience or In Simulation

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### Additional Comments -



# Production Pathway

Check the appropriate Processes.

Copy this page if unit is repeated for a Level TWO.

## Welding Processes

- Flux-cored arc welding (FCAW)
- Gas metal arc welding (GMAW (MIG))
- Gas tungsten arc welding (GTAW (TIG))
- Submerged arc welding (SAW)
- Shielded metal arc welding (SMAW (Stick))
- Other: \_\_\_\_\_

## Thermal/Chemical Cutting Processes

- Air Carbon Arc
- Laser
- Oxy-fuel Manual
- Oxy-fuel Machine
- Plasma Manual
- Plasma Machine
- Other: \_\_\_\_\_

Welding Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read welding technical drawings and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret welding symbols and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Layout and plan work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform safety checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Prepare base metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Set up to fabricate base metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Fabricate base metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Thermally/chemically cut metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Tack work pieces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Weld metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Monitor product and process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Assist to inspect, measure, and/or test completed metal pieces <i>Welding Standard or Code Used:</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Process production documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Clean up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Monitor equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Perform routine preventive maintenance (PM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Document equipment use, PM, and/or operational problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### Additional Comments -

# Production Operations Management Pathway

Production Operations Management Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
<b>Inventory</b>			
1. Assist to purchase materials and supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Receive inventory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Manage inventory levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Distribute materials and products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Assist to develop inventory forecasts (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Maintain inventory records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Resources</b>			
7. Assist to develop a production plan for customer order (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Assist to record and summarize financial data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Assist to coordinate work schedules and duty assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Quality Management</b>			
10. Use quality tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Calibrate tools and equipment (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Assist to analyze production process for productivity (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Monitor operations for product and process quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Assist to investigate root causes of product and/or process failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Take corrective action to restore or maintain quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Participate in quality improvement processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Additional Comments -**

## Maintenance, Installation, and Repair Pathway

Basic Industrial Equipment Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Read technical drawings and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret equipment symbols and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Maintain schedules, communication, and documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Monitor equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Identify maintenance requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Layout and plan work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform safety checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Use hand tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform preventive maintenance (PM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform lubrication procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Assist with basic equipment problem identification and diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Assist with basic equipment repair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Assist to re-qualify equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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1 = Needs improvement | Requires much assistance and supervision | Rarely displays behavior

### Additional Comments –

## Maintenance, Installation, and Repair Pathway

Advanced Industrial Equipment Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Calibrate tools and equipment (W/S)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Set up and fabricate metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mount a bearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Install mechanical fasteners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Assist with electrical circuit problem identification and diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Assist with motor control problem identification and diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Assist with hydraulic and/or pneumatic problem identification and diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Maintain and repair mechanical drive system components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Maintain and repair electrical control system components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Maintain and repair hydraulic and/or pneumatic system components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Assist to install and qualify equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### Rating Scale:

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**Additional Comments –**

## Additional Certifications, Training, Seminars and Projects

Please list in detail any additional certifications earned, any training and seminars attended, and/or any projects completed during the course of the Manufacturing Youth Apprenticeship.

Description		
Notes/Comments		
Date Completed	Signature	Date Signed

Description		
Notes/Comments		
Date Completed	Signature	Date Signed

Description		
Notes/Comments		
Date Completed	Signature	Date Signed

Other Notes or Comments		
-------------------------	--	--

