One of a series of curriculum guides prepared for the electricity/electronics occupations cluster, this guide identifies the essentials of the communication and industrial electronics trade as recommended by the successful electrical servicemen. An instructional program based upon the implementation of the guide is expected to prepare a student to adequately perform entry level tasks required of a serviceman or to enter a post-secondary technical or apprenticeship program in electronics where additional depth can be realized. Trade tasks or information are listed in chart form in two sections: Communications Electronics and Industrial Electronics. Typical section subheadings are safety, communication skills, job relations, mathematics, electromechanical, basic electricity, test and measuring equipment, basic thermodynamics, magnetic controls, special tools and materials, and general competencies. Space is provided on the charts to record for each item the date completed, teaching methods used, and teaching materials used. Also included are a list of teacher responsibilities, sources of occupational information, recommended tests and references, and a chart depicting the total electricity/electronics occupational curriculum. A typical application for employment and a sample trade and industrial education injury report are appended. (HD)
TRADE AND INDUSTRIAL EDUCATION

TRADE PREPARATORY TRAINING GUIDE

COMMUNICATION AND INDUSTRIAL ELECTRONICS

NEBRASKA DEPARTMENT OF EDUCATION
Cecil E. Stanley, Commissioner
Glen H. Strain, Assistant Commissioner
Division of Vocational Education
233 South Tenth Street
Lincoln, Nebraska 68508
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NEBRASKA STATE BOARD
OF VOCATIONAL EDUCATION:

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Industrial Electric Service
Kearney, NE

Western Electric
Omaha, NE

Western TV
Kearney, NE

Components Concepts Corporation
Omaha, NE
DEFINITIONS USED IN THIS GUIDE

Major Occupational Group
A grouping of similar and related occupational area clusters. These groups include occupations that have been determined to be the most relevant and pertinent for inclusion in vocational education in Nebraska.

Occupational Area Clusters
These clusters are distinguishable in terms of similar work performed, materials used, products produced, and/or services rendered. They include a wide variety of common occupational skills and knowledge.

Occupation
The career or employment engaged in by an individual for remuneration. This activity includes technical competencies and related technical information often referred to as one's vocation.

Technical Competency
The specific tasks required for a vocational trade and industrial graduate to perform successfully at the entry level in an occupational area. These technical competencies apply to the psychomotor domain and include elements which emphasize motor skills such as: operate a machine; measure; etc.

Related Technical Information
The information the entry level worker must know in order to make appropriate trade decisions which will allow him to adequately perform the tasks or technical competencies of his occupation. This information applies to the cognitive domain and includes elements which are intellectual outcomes such as: knowledge and understanding.

Related General Information
Information which is desirable and good for the tradesman to know but which is not necessary to do his work properly; information that is nice to know, such as the history and development of his trade.

Related Guidance Information
Information that helps the student choose, prepare for, secure, hold, and make progress in an occupation.

Entry Level
The technical competencies and related technical information deemed necessary by industry for obtaining and holding a job in a specific occupational area. This level of employment includes the technical competencies and related technical information that will be utilized by the employee within the first year of employment.
The chart on this page shows Communication Electronics and Industrial Electronics as they relate to other occupations within the Electricity/Electronics cluster. This guide is concerned with Communication Electronics and Industrial Electronics only. Other guides have been prepared for each of the occupations found in this chart and are available through the Nebraska State Department of Education.
INTRODUCTION

This curriculum guide has been prepared with the help of competent craftsmen in the electricity/electronics trades. The funds that make this guide a reality were provided through a federal research grant in cooperation with the Nebraska State Board for Vocational Education and sponsored by the Nebraska Research Coordinating Unit.

Curriculum guides have been prepared for several trade and industrial occupational clusters from which high school teachers can develop appropriate occupational related experiences for their students. The major occupational groups, occupational area clusters, and occupations are shown in graphic form on pages of this guide.

Selection of trades within four major occupational groups have been made based on a three year survey by the Nebraska Research Coordinating Unit on needs of Nebraska business and industry. This study has identified the occupations with the greatest need for employees. A related set of curriculum guides have been prepared for those occupations.

Guidance Information

The U.S. Department of Labor has developed an extremely helpful book entitled, "Occupational Outlook Handbook." This annual publication provides a very complete description of the activities of the persons employed in the occupations represented in the Nebraska trade and industrial curriculum guides. Information concerning current and future opportunities is a major portion of this publication. Inexpensive reprints in booklet form that describe individual occupations are available through the Department of Labor. These booklets should be used by trade and industrial teachers and school guidance counselors for the most up-to-date guidance information about a particular occupation.

A listing of these reprints from the "Occupational Outlook Handbook", the order number, and price per copy is listed below for those occupations in the occupational area cluster of "Electricity/Electronics Occupations."

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>1700-86</td>
<td>Appliance Servicemen</td>
<td>.10</td>
</tr>
<tr>
<td>1700-90</td>
<td>Television &amp; Radio Service Technicians</td>
<td>.10</td>
</tr>
<tr>
<td>1700-91</td>
<td>Maintenance Electricians</td>
<td>.15</td>
</tr>
<tr>
<td>1700-130</td>
<td>Electric Power Industry Power Plant Occupations, Transmissions and Distribution Occupations, Customer Service Occupation</td>
<td>.15</td>
</tr>
<tr>
<td>1700-134</td>
<td>Telephone Industry, Central Office Craftsmen, Central Office Equipment Installers, Linemen &amp; Cable Splicers, Telephone &amp; PBX Installers, and Repairmen</td>
<td>.15</td>
</tr>
</tbody>
</table>
This guide uses the title Communication and Industrial Electronics as the most logical descriptive term for identifying a particular related group of workers. Identification of specific job titles within this group should be determined by referring to the "Dictionary of Occupational Titles." The USOE classification system for coding instructional programs has assigned 822.281 to the instructional program, Communication Electronics and 825.281 and 829.134 to Industrial Electronics.

The information within this guide identifies the essentials of the communication and industrial electronics trade as recommended by the successful electrical servicemen. An instructional program based upon implementation of this guide will prepare a student to adequately perform entry level tasks required of a serviceman or to enter a postsecondary technical or apprenticeship program in electronics where additional depth can be realized.

The tasks and/or competencies identified within these covers are those agreed upon by a jury of reputable Nebraska electrical servicemen. A separate group of persons directly employed within this trade in Nebraska have further verified these tasks and/or competencies. Jury members, tradesmen, and educators who contributed toward the development of content for this guide are listed in the front.

Course offerings in trade and industrial education in Nebraska are to be organized within two period blocks of time each day, five days a week. Time is to be set aside for classroom instruction directly related to manipulative laboratory instruction. The remainder of the student's school day is to be utilized for general education subjects.
USE OF THIS GUIDE

The use of curriculum guides for trade and industrial education in Nebraska secondary schools may vary greatly, depending upon the depth and breadth of each school district's vocational program. Large school districts, for example, may utilize one particular curriculum guide to develop a course in a trade area such as communication and industrial electronics. A small school district may, on the other hand, incorporate several curriculum guides to develop a course in the electricity/electronics occupational cluster.

The manipulative content identified in this guide is deemed necessary for inclusion in a course that is designed to prepare entry level communications and industrial electronic workers. While not all secondary school facilities in Nebraska are equipped to expose students to all of this content through hands-on experience, it is assumed that this content will through some media become related technical information. This will insure inclusion of all content and provide at least discussion level understanding.

This guide is written with the assumption and expectation that the related technical information necessary to perform technical competencies will be an integral part of instruction. Thus, occupational decisions that must be made by an entry level worker will be developed along with each related manipulative activity.

The communication and industrial electronics instructor who uses this guide is responsible for including the identified related technical information as well as the identified manipulative tasks. He is also responsible for the identification of competencies pertaining to general and guidance information, even though this information is not specifically identified for him.

Definitions for various terms used in this guide are presented in the front.

2. Use safety check list to assure safe factors exist.

3. Require students to report ALL accidents to instructor.


5. Report ALL accidents to the school administrator.

6. Develop safety consciousness in the students through teacher example--always doing things in the safe way.

7. Give shop demonstrations stressing safe use of machines.

8. Give shop demonstrations stressing safe use of hand tools.


10. Develop information sheets dealing with the safe use of specific machines.

11. Give demonstrations on the proper use and care of personal protective devices.

*These responsibilities are necessary for inclusion in all trade and industry programs in the State of Nebraska.
12. Develop information sheets dealing with the general safety rules for the trade.

13. Enclose all gears, moving belts, and other power transmission devices with permanent guards.

14. Prohibit students from operating machines when instructor is not present.

15. Prohibit the removal of guards and safety devices, even for a brief period, without the approval of the instructor.

16. Prohibit more than one operator from using a machine at one time.

17. Determine personal liability factors and liability coverage afforded through your school.

18. Provide for the bulk storage of flammable materials.

19. Mark the location of fire-fighting equipment.

20. Post instructions and inform students of building evacuation procedures.

21. Require the wearing of appropriate eye protection as specified by the State of Nebraska eye safety regulations.

22. Keep tools sharp, clean and in good working condition.

23. All shop personnel should be thoroughly familiar with the location of fire extinguishers and the type fire for which each extinguisher is designed.
COMMUNICATION ELECTRONICS CONTENT

(Identified Trade Tasks or Information)
SAFETY

Provide first aid to victims of electrical shock, chemical burns, electrical burns, poisoning, etc.

Exercise care in handling and storing inflammables and combustibles.

Provide appropriate precautions to protect oneself and others as equipment undergoes operational testing, and main...
<table>
<thead>
<tr>
<th>OCCURRENCE</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
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</table>

13
Identify fire extinguishers and their use.

Operate fire extinguishers.

Recognize safe and unsafe areas--avoid areas of possible danger.

Recognize safe and unsafe methods or practices--avoid those which may be dangerous.

Select appropriate clothing and safety apparel.

Exercise care in handling
and using test/measuring instruments.

Exercise care in handling and using hand and power tools.

Recognize and report unsafe conditions to immediate supervisor.

Follow Federal Occupational Safety Laws relating to communications occupations.

COMMUNICATION SKILLS

Exercise competent communication skills with supervisor and fellow workers.
Locate defective components.

Replace defective components.

Repair defective components.

Clean parts or equipment.

Inspect and install grounding devices on equipment.

Inspect equipment for wear/malfunctioning.

Adjust and calibrate equipment.

Analyze test data.
<table>
<thead>
<tr>
<th>TRADE TASK OR INFORMATION</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
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</thead>
<tbody>
<tr>
<td>Follow manufacturer's specifications.</td>
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<tr>
<td>Apply electrical theory.</td>
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<td></td>
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<tr>
<td>Apply electron theory.</td>
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<tr>
<td>Observe functioning equipment for defects.</td>
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</table>
INDUSTRIAL ELECTRONICS

(Identified Trade Tasks or Information)
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<th>TRADE TASK OR INFORMATION</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
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<tbody>
<tr>
<td>SAFETY</td>
<td></td>
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<tr>
<td>Provide first aid to</td>
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<tr>
<td>victims of electrical</td>
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<tr>
<td>shock, chemical and</td>
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<tr>
<td>electrical burns, solvent</td>
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<tr>
<td>poisoning, etc.</td>
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<tr>
<td>Exercise care in using</td>
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<td></td>
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<tr>
<td>and storing inflammables</td>
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<tr>
<td>and combustibles.</td>
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<tr>
<td>Provide adequate venti-</td>
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<tr>
<td>lation when using</td>
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<td></td>
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<tr>
<td>solvents.</td>
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</tbody>
</table>
Recognize safe and unsafe methods or practices—avoid those
of possible danger.

Operate fire extinguishers.

Identify fire extinguishers and their use.

Provide appropriate safety precautions to prevent injury to one-self and others as equipment undergoes operations, testing, and maintenance.

Recognize safe and unsafe areas—avoid areas of possible danger.

Identify fire extinguishers and their use.
which may be dangerous.

Select appropriate clothing and safety apparel.

Exercise care in handling and using testing/measuring instruments.

Exercise care in handling and using hand and power tools.

Recognize and report unsafe conditions to immediate supervisor.

Correct unsafe conditions of tools and test/measuring instruments.
Follow federal occupational safety laws relating to industrial electronics occupations.

COMMUNICATION SKILLS

Exercise competent communication skill with supervisors and fellow workers.

Exercise proper use of telephone communications.

Prepare equipment operation reports.

Prepare equipment documentation.
fect/repair reports.

Keep records specified by employer.

JOB RELATIONS

Establish and maintain a high quality of personal workmanship.

Practice a pleasant attitude toward supervisors and fellow workers.

Apply concepts of good dress and grooming.

Be punctual.
<table>
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<th>TRADE TASK OR INFORMATION</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
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<tbody>
<tr>
<td>Work with minimum immediate supervision.</td>
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<tr>
<td>Keep facilities clean and orderly.</td>
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<tr>
<td>Develop and follow work plans or schedules.</td>
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<tr>
<td>Understand and follow through on instructions or directions.</td>
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</tr>
<tr>
<td>LABOR AND REPLACEMENT/REPAIR ESTIMATING</td>
<td></td>
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<tr>
<td>Question equipment operator about performance of equipment.</td>
<td></td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>
Estimate time and personnel needed to complete job.

Estimate replacement/repair costs.

Estimate total costs of job.

ELECTRICAL & ELECTRONIC
DRAWINGS, SYMBOLS, &
DIAGRAMS

Possess and utilize fundamentals of orthographic projections and pictorial drawings.

Make simple free-hand sketches.
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<th>TRADE TASK OR INFORMATION</th>
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<th>TEACHING METHODS USED</th>
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</thead>
<tbody>
<tr>
<td>Draw electrical and electronic symbols.</td>
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<tr>
<td>Identify electrical and electronic symbols.</td>
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<td></td>
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<tr>
<td>Interpret wiring and schematic diagrams.</td>
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<tr>
<td>MATHEMATICS</td>
<td></td>
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<tr>
<td>Solve problems using basic mathematics.</td>
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<tr>
<td>Apply algebraic functions.</td>
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<tr>
<td>Utilize basic trigonometry.</td>
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<tr>
<td>BASIC CHEMISTRY</td>
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</table>

37
Recognize types of corrosion.

Identify causes of corrosion.

Eliminate sources of corrosion.

Know and utilize laws of combustion.

BASIC PHYSICS

Apply principles of mechanical advantage.

Apply principles relating to specific heat.
Apply principles relating to latent heat.

BASIC THERMODYNAMICS

Analyze effects of temperature in and around equipment.

Analyze effects of various collants on circuit parts and components.

Analyze effects of induction heating on circuit/equipment parts.

ELECTRICITY

Understand and use fund-
amentals of electricity—their practical application and use including:

- DC circuits
- AC circuits
- DC machines
- AC machines
- Polyphase transformers
- Synchronous machines
- Magnetic circuits
- Ohm's Law
Kirchoff's Law

ELECTRONICS

Understand and use fundamentals of electronics—
their practical application and use including:

- vacuum tubes
- gas filled tubes
- semi-conductors
- filter circuits
- power supplies

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<tr>
<td>Kirchoff's Law</td>
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</tbody>
</table>
amplifiers
magnetic amplifiers
feed-back controls
oscillator circuits

MECHANICAL

Select proper lubricants.

ELECTROMECHANICAL

Understand and use the theory and structure of equipment mechanisms including:

motors
timers
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<td>solenoids</td>
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<td>heating elements and burners</td>
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<tr>
<td>fans and blowers</td>
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<td>Know and utilize the</td>
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<td>theory and operation of</td>
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<tr>
<td>equipment controls including:</td>
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<tr>
<td>timers</td>
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<td>motor speed controls</td>
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<tr>
<td>switches</td>
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section

control

controls

valves

valves

LS

use fund-

magnetic

practical

and use in-
DC contactors and relays

DC contactors and relays

DC control circuits

AC control circuits

Construction of control panels.

Electronic Controls

Understand and use fundamentals of electronic controls, their practical application, and
use including:

timing circuits

photoelectric devices

electronic control of resistance welders

electronic control of motors and generators

thyatron motor controls

SCR motor controls

saturable reactors

sequential operations

error correction devices
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<th>TRADE TASK OR INFORMATION</th>
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<th>TEACHING MATERIALS USED</th>
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<td>switching circuits</td>
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<tr>
<td>TEST AND MEASURING EQUIPMENT</td>
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<tr>
<td>Use and maintain:</td>
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<tr>
<td>VOM</td>
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<td>VTVM</td>
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<td>amprobe</td>
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<td>wattmeter</td>
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<td>continuity checker</td>
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<td>test lamp</td>
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</tbody>
</table>
pyrometer

grid-dip meter

temperature recorder

digital multimeter

battery tester

oscilloscope

capacitance checker

resistance decade box

transistor analyzer

tube tester

RF signal generator

audio signal generator
<table>
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<tr>
<th>TRADE TASK OR INFORMATION</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
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<td>signal tracer</td>
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<td>PC bridge and RCL</td>
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<tr>
<td>comparator</td>
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<td>sine/square wave generator</td>
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<td>fet tester</td>
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<tr>
<td>hi-voltage test probe</td>
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<td>combination audio and RF signal generator</td>
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<td>power supplies</td>
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<tr>
<td>coil shorted-turns tester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>49</td>
</tr>
</tbody>
</table>
frequency meter
megohmmeter
electronic tac
SPECIAL TOOLS AND MATERIALS
Identify and procure:
fuse puller
soldering aids
de-soldering aid
soldering heat
electronic pliers
relay service
<table>
<thead>
<tr>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

51
<table>
<thead>
<tr>
<th>TRADE TASK OR INFORMATION</th>
<th>DATE COMPLETED</th>
<th>TEACHING METHODS USED</th>
<th>TEACHING MATERIALS USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze test data.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow manufacturer's specification.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply electrical theory.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply electron theory.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observe functioning equipment for defects.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpret and utilize drawing, specifications, manufacturer's catalogues, service manuals,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
scematic and handbooks.

Perform maintenance according to Federal, State, and Local electrical codes.

Install conduit and related hardware.

Pull electrical wiring.

Use and maintain stripping table.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>OWN HOME</th>
<th>RENT</th>
<th>MORTG</th>
<th>MOWED</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPINION</td>
<td>WEIGHT</td>
<td>WEIGHT</td>
<td>COLOR OF HAIR</td>
<td>COLOR OF EYES</td>
</tr>
<tr>
<td>SEX</td>
<td>SINGLE</td>
<td>MARRIED</td>
<td>DIVORCED</td>
<td>SEPARATED</td>
</tr>
<tr>
<td>BORROWER'S CHILDREN</td>
<td>DEPENDENT</td>
<td>OTHER</td>
<td>THIS WIFE OR CHILDREN</td>
<td>CITIZEN</td>
</tr>
<tr>
<td>TITLED</td>
<td>TO ANYONE IN OUR EMPLOY</td>
<td>TO SAME DEPARTMENT</td>
<td>DEPARTMENT</td>
<td>DEPARTMENT</td>
</tr>
<tr>
<td>EMPLOYMENT DESIRED</td>
<td>DATE YOU CAN START</td>
<td>SALARY DESIRED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOU EMPLOYED HERE</td>
<td>IF DO NOT INCLUDE</td>
<td>OF YOUR PRESENT EMPLOYER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPLIED TO THIS COMPANY REPORT</td>
<td>WHERE</td>
<td>WHEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td>NAME AND LOCATION OF SCHOOL</td>
<td>YEARS ATTENDED</td>
<td>DATE GRADUATED</td>
<td>SUBJECTS STUDIED</td>
</tr>
<tr>
<td>ATTAIN SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGHER SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLEGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTILLERY OR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPERTY.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITY OF SPECIAL STUDY OR RESEARCH WORK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOREIGN LANGUAGES OTHER THAN ENGLISH</td>
<td>READ</td>
<td>WRITE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MILITARY OR SERVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONTINUED ON OTHER SIDE
### FORMER EMPLOYERS

<table>
<thead>
<tr>
<th>DATE</th>
<th>MONTH AND YEAR</th>
<th>NAME AND ADDRESS OF EMPLOYER</th>
<th>SALARY</th>
<th>POSITION</th>
<th>REASON FOR LEAVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>From</td>
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<td>To</td>
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<td>From</td>
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<tr>
<td>To</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REFERENCES

Give below the names of three persons not related to you whom you have known at least one year.

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>BUSINESS</th>
<th>ACQUAINTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PHYSICAL RECORD

List any physical defects.

- Were you ever injured? _Give details._
- Have you any defects in hearing? _Give details._
- In the case of emergency notify _name_ _address_ (in emergency). _Copy to_ _name_ _address_.

I authorize investigation of all statements contained in this application. I understand that misrepresentation or omission of facts called for is cause for dismissal. Further, I understand any entry that my employment is for no definite period and may, regardless of the date of payment of my wages and salary be terminated at any time without any previous notice.

Date _signature_.

DO NOT WRITE BELOW THIS LINE

### REMARKS

**IDENTITY**

- Name: _
- Address: _
- Age: _
- Sex: _
- Marital status: _

**HISTORICAL**

- For what purpose were you discharged? _
- Did you resign? _
- If yes, date: _

**PERSONALITY**

- General: _

**HIRED**

- For what position? _
- Will report: _
- Date hired: _
- Salary: _

**APPOINTED**

- By: _
- Date: _
- Position: _
- Left West: _
- Current position: _
Appendix B

One of the most important parts of any trade and industrial education course is a safety program. The following form is recommended for use in courses of this type.

SAMPLE
TRADE AND INDUSTRIAL EDUCATION
INJURY REPORT* **

Student injured __________________________ Date ________________

Shop in which accident occurred ________________ Time ________________

Instructor in charge __________________________________________

Nature of injury __________________________________________

First aid administered __________________________________________

__________________________________ By whom? ________________

Cause of injury __________________________________________

Could injury have been prevented? ________________ How? ________________

Action taken or recommendations made to prevent recurrence ________________

Remarks: __________________________________________

__________________________________

Signed ____________________________ (Person making report)

Witnesses: __________________________________________

Names ____________________________ and
Addresses ____________________________

*Complete in Duplicate
**File one copy in office
RECOMMENDED TEXTS AND REFERENCES

Communication Electronics

Bibliography


Van Valkenburgh, Nooger and Neville Basic Electricity. New York: John F. Rider Publisher, Inc.


----- Communication. New York: RCA Institute Inc.


Industrial Electronics


Van Valkenburgh, Nooger & Neville Inc. Basic Electricity. New York: John F. Rider Publisher, Inc.