Apprenticeship Manitoba

Gasfitter A POA (2010) Subtask to Unit Comparison Note: Tasks 15 through 17 relate to The Gasfitter A Program

	NOA Subtask	Manitoba Unit(s)
Task	1 – Participates in workplace health and	
1.01	Demonstrates basic safety awareness.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
1.02	Uses safety gear and personal	A1 Introduction to Your Apprenticeship
	protective equipment.	A2 Trada Safaty Awaranasa
		A2 Trade Safety Awareness A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
1.03	Maintains a safe workplace	A1 Introduction to Your Apprenticeship
1.05	environment.	AT introduction to Tour Apprenticeship
		A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
1.04	Installs and Maintains Liquid Petroleum	A6 Gas Code (includes Propane)
	(LP) Storage and Handling Facilities.	
		A8 Sciences I (includes heat load calculations, fan laws, and
		pumps)
		B9 Alternate Fuel Systems
1.05	Follows Safety/Health Acts and regulations.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
Task	2 – Uses equipment, hand/power tools, i	nstruments, and wiring methods.
2.01	Uses hand tools.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
0.00		A2 Trada Cafaty Awaranaaa
2.02	Uses power tools.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
2.03	Uses powder-actuated tools.	A2 Trade Safety Awareness
2.00		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
2.04	Uses technical instruments, and testers.	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
2.05	Operates aerial platforms and other lift-	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
2.00	trucks.	and Steel Welding-6 hrs)
2.06	Follow approved wiring methods.	A2 Trade Safety Awareness
		A5 Electrical Fundamentals and CE Code
2.07	Solders wire.	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)

	3 – Reads and interprets prints, and man	
3.01	Reads and interprets codes, company policies, company maintenance manuals, and manufacturer manuals.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
3.02	Reads and interprets drawings (e.g., electrical, structural, architectural, mechanical and civil, block diagrams, and PLC logic drawings).	A4 Drawings and Blueprints
3.03	Reads and interprets Canadian Gas Codes, and the Manitoba Regulation	A2 Trade Safety Awareness
		A6 Gas Code (includes Propane)
		A10 Communications with Co-workers and Others
Teels	A Communicator on the isk	
4.01	4 Communicates on the job. Establishes and maintains effective communications with co-workers and others.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
4.02	Uses computers.	A9 Computers
4.03	Uses telephone and fax.	A10 Communications with Co-workers and Others
4.04	Demonstrates use of hand signals and two-way radios.	A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
4.05	Uses diagrams, schedules, and charts to communicate.	A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
4.06	Completes documentation, and reports.	A10 Communications with Co-workers and Others
Task !	5 – Trains personnel.	
5.01	Conducts orientation.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
5.02	Assesses capabilities.	A1 Introduction to Your Apprenticeship
0.02		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
5.03	Provides direction, guidance.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
5.04	Supervises, monitors.	A1 Introduction to Your Apprenticeship
0.0 1		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others

		B7 Mentoring/Coaching
5.05	Evaluates performance.	A1 Introduction to Your Apprenticeship
		A2 Trade Safety Awareness
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
Task 6	Orden in the second secon	ethods fundamental to the gasfitter trade.
6.01	Performs mathematical operations	A7 Mathematics
	required to solve technical problems.	
		A8 Sciences I (includes heat load calculations, fan laws, and pumps)
6.02	Applies scientific principles to the solution of technical problems.	A8 Sciences I (includes heat load calculations, fan laws, and pumps)
Task 7	│ 7 – Uses basic electrical, electronic, an	d digital devices and circuits.
7.01	Applies electrical concepts to job- related tasks.	A5 Electrical Fundamentals and CE Code
		B6 Electrical Requirements
7.02	Applies electronic concepts to job- related tasks.	A5 Electrical Fundamentals and CE Code
		B6 Electrical Requirements
7.03	Applies digital logic concepts to job-	A5 Electrical Fundamentals and CE Code
7.03	related tasks.	
		B6 Electrical Requirements
7.04	Analyzes single and three-phase systems.	A5 Electrical Fundamentals and CE Code
		B6 Electrical Requirements
Task 8	B - Maintains and Services Gas-fired Ec	
8.01	Maintains Gas-fired Equipment.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B.5 Tests/Inspects Piping and Gas Appliance Efficiency
8.02	Services Gas-fired Equipment.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
Task 9	│ 9 – Joins copper tube and tubing for G	as systems.
9.01	Cuts copper tube and tubing for gas systems.	B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements

	systems.	Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
9.03	Joins copper tube and tubing for gas systems.	B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
	10 – Joins plastic pipe for gas systems	
10.01	Cuts plastic pipe for gas systems.	B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
10.02	Joins plastic pipe for gas systems.	B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
11.01	1 – Joins steel pipe for gas systems. Cuts steel pipe for gas systems.	B3 Gas Burning Equip. and Materials Determination/Burner
11.01		Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
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		B5 Tests/Inspects Piping and Gas Appliance Efficiency
Task 1	 2 – Performs Layouts and Pipesizing o	of 'B' Gas-Fired Equipment
12.01	Performs 'B' Gas-Fired Equipment Layouts.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and
		Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency
12.02	Pipesizes Gas-Fired Equipment.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements B3 Gas Burning Equip and Materials Determination/Burner
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		B5 Tests/Inspects Piping and Gas Appliance Efficiency
12.03	Sizes venting and air supply systems.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
Teels	2. Installe (D' Cos Fired Fauinment	
<u>таѕк</u> 1 13.01	I3 – Installs 'B' Gas-Fired Equipment. Installs piping.	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
13.01		and Steel Welding-6 hrs)
		A6 Gas Code (includes Propane)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
13.02	Installs equipment.	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A6 Gas Code (includes Propane)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
13.03	Installs electrical and controls.	A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B6 Electrical Requirements
		·
13.04	Installs venting and air supply systems.	A5 Electrical Fundamentals and CE Code
		D1 Coo/Cofety Control Deguirements
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
Tack 1	A - Tosts and Inspects (B' Gas-Eirod E	B2 Supply Air/Venting Permit Requirements A6 Gas Code (includes Propane)
	I4 – Tests and Inspects 'B' Gas-Fired Ed Tests and Inspects gas-piping system.	B2 Supply Air/Venting Permit Requirements A6 Gas Code (includes Propane) uipment.
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		B5 Tests/Inspects Piping and Gas Appliance Efficiency
Teek	5 Derforme Loveute and Dinesising of	"A" Coo Fired Equipment
15.01	5 – Performs Layouts and Pipesizing of Performs "A" Gas-Fired Equipment	A Tools and Equipment (includes Piping, Soldering-2hrs,
10.01	layouts.	and Steel Welding-6 hrs)
		A6 Gas Code (includes Propane)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		C5 B149.3 Gas Codes and MB Gas Notices
		C9 Liquid Propane
15.02	Pipesizes "A" Gas-Fired Equipment.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner
		Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		C4 Electrical (Controls, Phasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C10 Combustion Analysis
		C11 Other Gas Fired Equip. (e.g. Mine shaft heaters, grain
		dryers)
15.03	Sizes venting and air supply systems.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
Task 1	6 – Installs 'A' Gas-Fired Equipment.	
16.01	Installs piping.	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A6 Gas Code (includes Propane)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
16.02	Installs equipment.	
16.02	Installs equipment.	A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)

		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and Measurement Requirements
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D6 Industrial Burner Installations (as per Manufacturer Specs)
16.03	Installs electrical equipment and controls.	A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B 6 Electrical Requirements
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D3 Electrical Controls (Bldg Systems)
		D6 Industrial Burner Installations (as per Manufacturer
		Specs)
16.04	Installs venting and air supply systems.	A5 Electrical Fundamentals and CE Code
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
		A6 Gas Code (includes Propane)
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D6 Industrial Burner Installations (as per Manufacturer Specs)
	7 – Tests and Inspects A Gas-Fired Equ	lipment.
17.01	Tests gas piping system.	
		A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
		A6 Gas Code (includes Propane)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D6 Industrial Burner Installations (as per Manufacturer
		Specs)
		D7 Troubleshooting

17.02	Performs manufacturer's start-up procedure.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner
		Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D2 Commissioning (Gas Notices)
		D6 Industrial Burner Installations (as per Manufacturer
		Specs)
17.03	Inspects gas piping system.	A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner
		Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		C2 Maths (includes gas trade formulas)
		C4 Electrical (Controls, Phjasing, CE, Flame Safeguard
		Systems)
		C5 B149.3 Gas Codes and MB Gas Notices
		C6 'A' Gas Fired Equipment Layout
		C8 Air Make ups
		D2 Commissioning (Gas Notices)
		D6 Industrial Burner Installations (as per Manufacturer Specs)
17.04	Completes start-up procedure.	A6 Gas Code (includes Propane)
17.04		
		B1 Gas/Safety Control Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner
		Orifice Sizing/Conversion Work
		R/Longest Run/(-se Running Equip RITH Input Demand
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Systems/Pipe Size Determination/Pressure and Measurement Requirements
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas)
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems)
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices)
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices) D6 Industrial Burner Installations (as per Manufacturer
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices) D6 Industrial Burner Installations (as per Manufacturer Specs)
		Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices) D6 Industrial Burner Installations (as per Manufacturer
	8 – Troubleshoots das equinment	Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices) D6 Industrial Burner Installations (as per Manufacturer Specs)
Task 1 18.01	8 – Troubleshoots gas equipment. Recognizes and analyzes problem.	Systems/Pipe Size Determination/Pressure and Measurement Requirements B5 Tests/Inspects Piping and Gas Appliance Efficiency B5 Tests/Inspects Piping and Gas Appliance Efficiency C2 Maths (includes gas trade formulas) C4 Electrical (Controls, Phjasing, CE, Flame Safeguard Systems) C5 B149.3 Gas Codes and MB Gas Notices C6 'A' Gas Fired Equipment Layout C8 Air Make ups D2 Commissioning (Gas Notices) D6 Industrial Burner Installations (as per Manufacturer Specs)

		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		B 6 Electrical Requirements
		B8 Applied Trade Projects
		B9 Alternate Fuel Systems
18.02	Selects tools, equipment, and personnel to address problem.	A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand, Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B7 Mentoring/Coaching
		B8 Applied Trade Projects
Took 4	0 Banaira Cao Equipment	
19.01	 9 – Repairs Gas Equipment. Resolves problem. 	A3 Tools and Equipment (includes Piping, Soldering-2hrs,
10.01		and Steel Welding-6 hrs) A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		B 6 Electrical Requirements
		B8 Applied Trade Projects B9 Alternate Fuel Systems
		De Alternate Fuer Systems
19.02	Verifies problem has been resolved.	A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
		A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane)
		B1 Gas/Safety Control Requirements
		B2 Supply Air/Venting Permit Requirements
		B3 Gas Burning Equip. and Materials Determination/Burner
		Orifice Sizing/Conversion Work
		B4 Longest Run/Gas Burning Equip. BTUH Input Demand,
		Systems/Pipe Size Determination/Pressure and
		Measurement Requirements
		B5 Tests/Inspects Piping and Gas Appliance Efficiency
		B6 Electrical Requirements
		B8 Applied Trade Projects
		B9 Alternate Fuel Systems
Task 2	0 – Plans project requirements.	
20.01	Plans project requirements.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane) A10 Communications with Co-workers and Others

		B2 Supply Air/Venting Permit Requirements
		B7 Mentoring/Coaching
		B8 Applied Trade Projects
20.02	Estimates budget and cost-control.	A2 Trade Safety Awareness
20102		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A5 Electrical Fundamentals and CE Code
		A6 Gas Code (includes Propane)
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
		B8 Applied Trade Projects
20.03	Schedules activities.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
		B8 Applied Trade Projects
00.04		
20.04	Organizes materials and tools.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs, and Steel Welding-6 hrs)
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
		B8 Applied Trade Projects
20.05	Coordinates Johan and other trade	A2 Trada Cafatr Awaranaa
20.05	Coordinates labor and other trade requirements.	A2 Trade Safety Awareness
		A3 Tools and Equipment (includes Piping, Soldering-2hrs,
		and Steel Welding-6 hrs)
		A10 Communications with Co-workers and Others
		B7 Mentoring/Coaching
		B8 Applied Trade Projects

