

OCCUPATIONAL  
TOOLS AND EQUIPMENT LIST

**Oil Heat System Technician**



Government of Newfoundland Labrador  
Department of Education  
Institutional and Industrial Education Division

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## **Preface**

This document is intended as a companion to the 2009 Plan of Training for the Oil Heat System Technician occupation. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeships.

## **Acknowledgements**

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We offer you a sincere thank you.

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### **Note:**

The numbers suggested in the following Tools and Equipment List represent the required minimum. Please verify this list with your selected training institution.

**Tools and Equipment List  
Oil Heat System Technician**

<b>SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT</b>			
<b>Item</b>	<b>Units for Individual Students</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
<b>Personal Protective Equipment</b>			
Safety Boots, pair	1	B	
Gloves, pair	1	B	
Hardhat	1	B	
Safety Glasses, pair	1	B	

<b>SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION</b>				
<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
Drill Press	1	15	B	
Squaring Shear 4 Ft.	1	15	E	
4 Ft. Bending Break	1	15	E	
Spot Welder	1	15	E	
Bench Grinder	1	15	E	
Oil Fired Hot Water Heater	2	8	B	
Oil Fired Warm Air Furnace (various models)	6	3	B	
Duct Pipe Seamer	1	15	E	
Circle Shear Sheet Metal	1	15	E	
Sheet Metal Lock Former	1	15	E	
Oil Storage Tank (100 Gal.)	1	15	B	
Oil Storage Boss (200 Gal.)	1	15	B	
Oil Storage Tank End Outlet (200 Gal.)	1	15	B	
Oil Fired Hot Water Furnace	3	5	B	
Steam Furnace (Boiler)	1	15	B	
Wood Fired Hot Water Furnace	1	15	B	
Wood/Oil W. A. Furnace	1	15		
Wood W. A. Furnace	2	8	B	
Wood Stove	1	15		
Wood Pre Fab Chimney S620	2	8	B	
Oil Pre Fab Chimney	1	15	B	

**SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION**

<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
Set Power Pipe Threaders	1	15	B	
Hand Adj. Pipe Threaders (1" - 2")	2	8	B	
Set Pipe Threaders (c" - 2")	1	15	B	
Pipe Cutters (c" - 2")	2	8	B	
Fire Pots	4	4	E	
Electrical Test Meters	6	3	B	
Ampmeter	2 (B)	1 (A)	A	
Multimeter	2	8	B	
Pump Pressure Gauges	4	4	B	
Vacuum Gauges	2	8	B	
Circulators	2	8	E	
Vacuum Cleaner	2	8	E	
Riella Test Kits	2	8	B	
Tube Cutter	3	5	B	
Flaring Tools (Double Flare)	1 Set	15	B	
Flaring Tools (Single Flare)	1 Set	15	B	
RPM Tester	1	15	E	
Humidity Sling Pyscorometer	1	15	B	
Enerrol Hot Water Energy	2	8	B	
Savers	1	15	B	
B. Vent Chimney	1	15	B	
Stainless Steel Linner	1	15	B	
Electronic Air Cleaners	2	8	E	
Electric Soldering Irons	1	15	E	

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Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Electric Soldering Gun	1	15	E	
Propane Soldering Kit	3	5	E	
Reillo Burner Repair Kits	2	8	B	
Hacksaws	6	3	E	
Chisels (4 Types)	1 Set	15	E	
Drive Punch Sets	2	8	E	
Oil Burners (Various Types)	30	1	B	
Cut Away Hot Water Maker	1	15	E	
Bench Vices	6	3	E	
Work Benches	6	3	E	
d Electric Hand Drill	2	8	E	
Pipe Wrenches ( 12" )	2	8	B	
Pipe Wrenches ( 18" )	2	8	B	
Pipe Wrenches ( 24" )	2	8	B	
Open Box End Wrenches (Metric)	2 Set	8 Set	B	
Open Box End Wrenches (Standard)	2 Set	8 Set	B	
Pipe Hickeys	4	4	B	
Hand Tube Bender	1	15	E	
Side Wall Venters	2	8	E	
Taps And Dies	1 Set	15	B	
Drill Bits	1 Set	15	B	
Sheet Metal Shears (Various Types)	10	2	E	
Hand Benders Sheet Metal	1	15	E	

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<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
Hand Metal Punch	1	15	E	
Pop Rivet Guns	2	8	E	
Bachrach CO <sub>2</sub> Test Kit	2	8	B	
Electronic CO <sub>2</sub> Test Kit	1	15	B	
Power Humidifier	2	8	E	
Reciprocating Saw	1	15	B	
Oil Line	As required		B	Consumable
Copper Tubing	As required		B	Consumable
Oil Valve	As required		B	Consumable
Tank Gauges	As required		B	Consumable
Inside Tank	As required		B	Consumable
Alarms	As required		E	Consumable
Oil Line Fittings	As required		E	Consumable
Flared Fittings	As required		E	Consumable
Compressions	As required		E	Consumable
Cast Iron Radiator	10		E	
Fin Type Radiation	As required		E	Consumable
In Floor Hot Water Heating Pipe	As required		B	Consumable
Zone Valves	As required		B	Consumable
<b>Sheet Metal Warm Air:</b> Ducts & Fittings, Filters, Registers, Diffusers, Grills, Nozzel, Fuel Pumps, Electric Motor, Transformer	As required		B	Consumable

**SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION**

<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
<b>Hot Water:</b> Copper Tubing & Fittings, Black Iron Pipe & Fittings, Valve Circulators, Pumps, Valves	As required		E	Consumable
<b>Steam:</b> Pipe, Fittings, Valves	As required		E	Consumable
<b>Heating:</b> Aquastats, Warm Air Thermostats: - Line Voltage - Low Voltage Programmable, Primary Lentiol, Cad Cell, Stack Switch, Photocell	As required		B	Consumable
Computers	3	5	B	
Trailer Furnace	1	15	E	
Direct Vent - Kit & Burner/Furnace	1	15	E	
Adjustable Wrench 6"	2	8	B	
Adjustable Wrench 8"	2	8	B	
Alignment Bar	1	15	B	
Allen Wrench - Metric	2	8	B	
Allen Wrench - Standard	2	8	B	
Air Velocity Meter	1	15	B	
Aviation - Left	2	8	B	
Aviation - Right	2	8	B	
Aviation - Straight	2	8	B	
Ball Pien	5 (Various)	3		
Burner Brush	2	1	B	



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<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
Caliper Gauge	2	8	B	
Calipers	4	4	B	
Caulking Gun	2	8	B	
Chain Falls	2	8	B	
Crimper	2	8	B	
Cut-Off (Saw All)	1	15	B	
Flame Mirror	2	8	A	
Duck Bill	3	5	A	
Flash Light	15	1	B	
Flow Meter	1	15	B	
Hack Saw	2	8	B	
Hammer Drill	1	15	B	
Ladder	1	15	B	
Level	2	8	A	
Pliers	2	8	B	
Manometer	1	15	B	
Measuring Tape	2	8	B	
Pipe Threaders - Electric	1	15	B	
Pipe Threaders - Manual	1	15	B	
Plumb Bob	1	15	B	
Porcelain Cutter	1	15	B	
Grinder	1	15	B	
Power Saw (Electric)	1	15	B	
Pressure Riello	2	8	A	

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Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Pry Bar	1	15	E	
Pullers	1	15	A	
Scraper	1	15	A	
Side Cutters	2	8	B	
Socket Wrench - Metric	1	15	B	
Socket Wrench - Standard	1	15	B	
Soldering Torch	6	3	B	
Tachometer	1	15	B	
Trouble Light	2	8	B	
Tube Bender	1	15	A	
Tube Reamer	1	15	A	
Vacuum Gauges Riello	2	8	A	
Wire Strippers	2	8	B	
Dust Mask	As Required		B	Consumable
Face Shield	2	8	B	
Ear Plugs	As Required		B	Consumable
Fire Blanket	1	15	B	
Fire Extinguisher	As required by OHS Regulations		B	
First Aid	1 Kit	15	B	
Gloves	3	5	B	
Hard Hats	3	5	B	
Extension Ladder (20 ft. when extended)	1	15	B	

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<b>Item</b>	<b>Units per 15 Students</b>	<b>Maximum Students per Unit</b>	<b>Required for Entry (E) Advanced (A) Both (B)</b>	<b>Comments</b>
Scaffolding, c/w bracing, wheels, rails, etc.	4 Ends	n/a	B	

Note: If identifying sets, please include specific information.