

OCCUPATIONAL
TOOLS AND EQUIPMENT LIST

Oil Heat System Technician



Government of Newfoundland Labrador
Department of Immigration, Population Growth and Skills
Apprenticeship and Trades Certification Division

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Preface

This document is intended as a companion to the 2023 Atlantic Apprenticeship Curriculum Standard (AACS) for the Oil Heat System Technician trade. 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 Tool and Equipment list represent the required minimum. Please verify this list with your selected training institution.

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

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT			
Item	Units for Individual Students	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Gloves	1	B	
Hard Hat	1	B	CSA Type 2, Class E
Linesman Pliers	1	B	
Multimeter	1	B	
Reflective Safety Vest	1	B	CSA approved
Safety Glasses	1	B	CSA approved
Safety Boots	1	B	CSA Grade 1 - electric shock resistant
Screwdriver Set	1	B	
Wire Strippers	1	B	
Wrench Set (Standard and Metric)	1	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Fall Arrest Equipment				
Fall Arrest Kit (includes harness, lanyard, anchors)	1 kit	15 per kit	E	For demonstration
Safety Equipment				
CO Detector	--	--	B	As required by OHS regulations
Dust Mask	15+	1+	B	Disposable – replenish as required
Ear Plugs	15+	1+	B	Disposable – replenish as required
Eye Wash Station	--	--	B	As required by OHS regulations
Face Shield	5	3	B	
First Aid Station (including a First Aid Kit)	--	--	B	As required by OHS regulations
Fire Blanket	--	--	B	As required by OHS regulations
Fire Extinguisher	--	--	B	As required by OHS regulations
Gloves	3	5	B	
Hard Hat	3	5	B	
Hand Tools				
Alignment Bar	1	15	B	
Aviation Snips: <ul style="list-style-type: none"> • Left Cut • Right Cut • Straight Cut 	3 of each	5 per each	B	
Burner Brush	2	8	B	
Calipers	4	4	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Caliper Gauge	2	8	B	
Caulking Gun	2	8	B	
Chisel	1 set	15 per set	E	
Crimper	2	8	B	
Drill Bits	1 set	15 per set	B	
Drive Punch	2 sets	8 per set	E	
Duck Bill Snips	3	5	B	
Easy Out	1	15	E	
Electric Soldering Gun	1	15	E	
Electric Soldering Iron	1	15	E	
Flaring Tool - Single Flare	1 set	15 per set	B	
Flame Mirror	2	8	B	
Flashlight	15	1	B	
Hacksaw	5	3	B	
Hammer: <ul style="list-style-type: none"> • Ball Peen • Claw • Tinner's 	5 of each	3 per each	B	
Hand Metal Punch	1	15	E	
Hand Tube Bender	1	15	B	
Humidity Sling Psychrometer	1	15	B	
Hand Bender Sheet Metal	2	8	E	
Level	2	8	B	
Measuring Tape	2	8	B	
Pipe Hickey	4	4	B	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Pipe Threader – Manual: <ul style="list-style-type: none"> • Power Pipe • Electric Pipe • Hand Adjustable Pipe – 1 in. • Hand Adjustable Pipe – 2 in. 	2	8	B	
Pliers: <ul style="list-style-type: none"> • Needle Nose • Linesman • Side Cutter 	2 of each	8 per each	B	
Plumb Bob	1	15	B	
Pop Rivet Gun	2	8	E	
Porcelain Cutter	1	15	B	
Propane Soldering Kit	3	5	E	
Pry Bar	1	15	E	
Puller	1	15	B	
RPM Tester	1	15	E	
Scraper	1	15	B	
Square	2	8	E	
Swaging Tool	1	15	E	
Tap and Die	1 set	15 per set	B	
Try Square	4	4	E	
Trouble Light	2	8	B	
Tube Cutter	3	5	B	
Tube Reamer	1	15	B	
Wire Stripper	2	8	B	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Wrench: <ul style="list-style-type: none"> • Adjustable – 6 in. • Adjustable – 8 in. • Pipe – 12 in. • Pipe – 18 in. • Pipe – 24 in. • Allen – Metric • Allen – Standard • Open Box End – Metric • Open Box End – Standard • Socket – Metric • Socket - Standard 	2 of each	8 per each	B	
Power Tools				
Cut-Off (Saw All)	1	15	B	
Electric Drill	2	8	E	
Grinder	1	15	B	
Hammer Drill	1	15	B	
Heat Gun	1	15	B	
Pipe Threader - Electric	1	15	B	
Powder-Actuated Tool	1	15	E	
Power Nibbler	1	15	E	
Power Saw	1	15	B	
Reciprocating Saw	1	15	B	
Shop Tools and Equipment				
Bench Grinder	2	8	E	
Bench Vice	5	3	B	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Bending Break - 4 ft.	1	15	E	
Circle Shear Sheet Metal	1	15	E	
Computer	1	15	B	
Drill Press	1	15	B	
Duct Pipe Seamer	1	15	E	
Pipe Cutter: <ul style="list-style-type: none"> • 1/8 in. • 2 in. 	2 of each	8 per each	B	
Sheet Metal Shear	1	15	E	
Sheet Metal Lock Former	1	15	E	
Squaring Shear - 4 ft.	1	15	E	
Spot Welder	1	15	E	
Vacuum Cleaner	1	15	E	
Work Bench	8	2	E	
Appliance Equipment				
Automatic De-Aerator – Tiger Loop	2	8	B	
Cast Iron Radiator	1	15	E	
Chimney: <ul style="list-style-type: none"> • B-Vent • L-Vent • Oil Pre-Fab • Wood Pre-Fab S620 	1 of each	15 per each	B	
Direct Vent (Kit and Burner/Furnace)	1	15	E	
Electronic Air Cleaner	2	8	E	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Fin-Type Heat Emitter	6	3	E	
Fuel Delivery System Alarm	2	8	E	
Fire Pot	4	4	E	
Oil Burner (various models)	20	1	B	
Oil Fired Hot Water Boiler (various models)	3	5	B	
Oil Fired Hot Water Heater	2	8	B	
Oil Fired Warm Air Furnace (various models)	6	3	B	
Oil Storage Tank - 100 Gal.	1	15	B	
Power Humidifier	2	8	E	
Reillo Burner Repair Kit	2	8	B	
Side Wall Venter	2	8	E	
Stainless Steel Liner	1	15	E	
Steam Boiler	1	15	B	
Tank Gauge	2	8	B	
Trailer Furnace	1	15	E	
Wood Fired Hot Water Furnace	1	15	B	
Wood/Oil Warm Air Furnace	1	15	B	
Wood Warm Air Furnace	1	15	B	
Wood Stove	1	15	B	
Zone Valve	6	3	B	
Measuring and Testing Equipment				
Air Velocity Meter	1	15	B	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Calipers: <ul style="list-style-type: none"> • Inside • Outside 	2 of each	8 per each	E	
Clamp-on Ammeter	2	8	B	
CO ₂ Test Kit: <ul style="list-style-type: none"> • Electronic • Bachrach 	1 of each	15 per each kit	B	
Flame Signal Meter	1	15	B	
Flow Meter	1	15	B	
Hygrometer	1	15	E	
Manometer	1	15	B	
Megohmmeter	1	15	E	
Multimeter	3	5	B	
Pressure Gauge Riello	2	8	B	
Pump Pressure Gauge	4	4	B	
Riello Test Kit	2	8	B	
Tachometer	1	15	B	
Vacuum Gauge Riello	2	8	B	
Pump Vacuum Gauge	2	8	B	
Lifting and Hoisting Equipment				
Extension Ladder - 20 ft. when extended	1	15	B	
Chain Fall	1	15	E	
Warm Air Heating Components				
Diffuser (various sizes)	15	1	E	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Duct Fittings (various types and sizes)	10 of each	--	E	
Ductwork: <ul style="list-style-type: none"> • Round (various sizes) • Rectangular (various sizes) 	50 ft. of each	--	E	
Fan Motor	2	8	B	
Filter (various types)	6	3	E	
Grill (various sizes)	6	3	E	
Register (various sizes)	15	1	E	
Hot Water Heating Components				
Circulator	4	4	E	
Pipe Fittings: <ul style="list-style-type: none"> • Copper (various sizes) • Black Iron (various sizes) • Brass (various sizes) 	10 of each	--	B	
Pipe: <ul style="list-style-type: none"> • Copper (various sizes) • Black Iron (various sizes) 	3 lengths each	--	B	
Steam Heating Components				
Pipe Fittings (various sizes)	5 of each	--	E	
Valves (various sizes and types)	1 of each	--	E	
Heating Components				
Aquastat (various makes and models)	2 of each	--	B	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Cad Cell	10	2	B	
Electronic Energy Saver	2	8	B	
Fuel Pump (various makes and models)	1 of each	15	B	
Igniter	4	4	B	
Nozzles (various makes and sizes)	50	--	B	
Photocell	1	15	B	
Primary Control (various makes and models)	2 of each	8	B	
Stack Switch	2	8	B	
Thermostat: <ul style="list-style-type: none"> • Line Voltage • Low Voltage • Programmable 	2 of each	8	B	
Transformer	4	4	B	
Warm Air Control (various makes and models)	2 of each	8	B	
Consumables				
Copper Tubing: <ul style="list-style-type: none"> • 3/8 in. • 1/2 in. 	50 ft. of each	--	B	
In-Floor Hot Water Heating Pipe	50 ft.	--	B	
Oil Line: <ul style="list-style-type: none"> • 3/8 in. • 1/2 in. 	50 ft. of each	--	B	
Oil Line Fitting (various sizes and types)	100	--	E	

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Item	Units Per 15 Students	Maximum Students per Unit	Required for Level 1 & PE (E) Advanced (A) Both (B)	Comments
Oil Valve: <ul style="list-style-type: none"> • fusible link • ball • OSV 	10 of each	--	B	

Note: If identifying sets, please include specific information.