

Trade Profile

Transport Trailer Technician



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Structure of the Trade Profile

This profile has two sections that provide a snapshot of the trade's description, and all trade activities as they are organized in the Red Seal Occupational Standard:

Description of the Transport Trailer Technician trade: an overview of the trade's duties, work environment, job requirements, similar occupations and career progression

Task Matrix: a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard

Major Work Activity (MWA): the largest division within the standard that is comprised of a distinct set of trade activities

Task: distinct actions that describe the activities within a major work activity

Sub-task: distinct actions that describe the activities within a task

Description of the Transport Trailer Technician Trade

“Transport Trailer Technician” is this trade’s official Red Seal occupational title approved by the CCDA. This standard covers tasks performed by transport trailer technicians.

Transport trailer technicians inspect, diagnose, maintain, rebuild, assemble and repair transport trailers connected to or moved by a power unit. Trailers include flat decks, dry freight vans, refrigerated vans, tankers, converters, boosters, jeeps, pole trailers, steering dollies, dump trailers and any other commercial pull-type units. Transport trailer technicians inspect, service and repair parts and components of systems such as suspension and brake systems, chassis, mechanical and electrical components, flooring, hydraulic systems, axles, wheel assemblies and coupling devices. Technicians may specialize in refrigeration units, sheet metal work, frame repair or replacement.

Transport trailer technicians are employed at trailer manufacturers, sales and repair facilities, as well as at construction or industrial sites and fleet repair shops. They may work in a shop or out of a mobile service vehicle.

To meet government standards and regulations, transport trailer technicians may have to attain specialty certifications in order to perform work-related tasks. A propane license, refrigeration certificate, tanker inspection certificate, specialized pressure vessel welding license, welding certificates, wheel and tire certification, and government inspector certificate are examples of additional certification that may be required by certain jurisdictions.

Technicians must practice safe operating procedures and be conscious of the impact on people, equipment, work area and environment when performing their work. Due to the size and complexity of the equipment, safety is of prime importance. There is an inherent risk of injury when working with heavy equipment, power tools and welding equipment. There are also risks associated with working around loud noises, grease, oil, fuels, various exhaust fumes and high voltages. Hazardous cargo or residue contained within trailers can pose a risk to technicians. Technicians work on tankers which includes taking appropriate safety precautions when working in confined spaces.

The work requires considerable standing, climbing, crouching, kneeling and heavy lifting. Good vision, hearing and sense of smell, as well as the ability to think logically, allow transport trailer technicians to identify and isolate problems. Technicians must also be able to diagnose complex problems and interpret technical manuals and schematics. Building and fabrication skills are also an asset.

This standard recognizes similarities or overlaps with the work of truck and transport mechanics, refrigeration and air conditioning mechanics, welders, auto body and collision technicians, parts technicians and heavy duty equipment technicians.

With experience, transport trailer technicians act as mentors and trainers to apprentices in the trade. They may also advance to supervisory, service management and training positions.

Transport Trailer Technician

Task Matrix

A – Performs common occupational skills

6%

Task A-1 Performs safety-related functions 27%	A-1.01 Maintains safe work environment	A-1.02 Uses personal protective equipment (PPE) and safety equipment	
Task A-2 Uses and maintains tools and equipment 25%	A-2.01 Uses hand, electric and pneumatic tools	A-2.02 Uses measuring, testing and diagnostic equipment	A-2.03 Uses hoisting, lifting, staging and access equipment
Task A-3 Performs routine work practices 22%	A-2.04 Uses welding equipment	A-2.05 Uses gas, plasma and arc air cutting equipment	A-2.06 Uses electronic devices and systems for diagnostics and programming
Task A-4 Organizes work 11%	A-3.01 Maintains fluids and lubricants	A-3.02 Lubricates parts and components	A-3.03 Cleans parts and components
Task A-5 Uses communication and mentoring techniques 15%	A-3.04 Uses fasteners, sealants, adhesives and gaskets	A-3.05 Maintains hoses, tubing and fittings	A-4.01 Uses documentation
	A-4.02 Plans daily tasks	A-5.01 Uses communication techniques	A-5.02 Uses mentoring techniques

B – Diagnoses and services suspension systems

14%

Task B-6 Diagnoses suspension systems 52%	B-6.01 Diagnoses air suspension systems	B-6.02 Diagnoses spring suspension systems	B-6.03 Diagnoses rubber suspension systems
	B-7.01 Maintains suspension systems	B-7.02 Repairs air suspension systems	B-7.03 Repairs spring suspension systems
Task B-7 Services suspension systems 48%	B-7.04 Repairs rubber suspension systems		

C – Diagnoses and services brake systems

18%

Task C-8 Diagnoses brake systems 52%	C-8.01 Diagnoses disc brake systems	C-8.02 Diagnoses drum brake systems	C-8.03 Diagnoses air brake systems
	C-8.04 Diagnoses hydraulic brake systems	C-8.05 Diagnoses electric brake systems	C-8.06 Diagnoses electronic braking control systems
Task C-9 Services brake systems 48%	C-9.01 Maintains brake systems	C-9.02 Repairs disc brake systems	C-9.03 Repairs drum brake systems
	C-9.04 Repairs air brake systems	C-9.05 Repairs hydraulic brake systems	C-9.06 Repairs electric brake systems
	C-9.07 Repairs electronic braking control systems		

D – Diagnoses and services axles and wheel end assemblies

15%

Task D-10 Diagnoses axles and wheel end assemblies 52%	D-10.01 Diagnoses fixed, self-steering and lift axles	D-10.02 Diagnoses hubs and bearings	D-10.03 Diagnoses tires and rims
Task D-11 Services axles and wheel end assemblies 48%	D-11.01 Maintains axles and wheel end assemblies	D-11.02 Repairs fixed axles, hubs and bearings	D-11.03 Repairs self-steering and lift axles
	D-11.04 Replaces tires and rims	D-11.05 Repairs tires	

E – Diagnoses and services trailer chassis, bodies and coupling devices

17%

Task E-12 Diagnoses trailer chassis and trailer bodies 28%	E-12.01 Diagnoses trailer chassis	E-12.02 Diagnoses trailer bodies	
Task E-13 Services trailer chassis and trailer bodies 28%	E-13.01 Maintains trailer chassis	E-13.02 Repairs trailer chassis	E-13.03 Maintains trailer bodies
	E-13.04 Repairs trailer bodies		
Task E-14 Diagnoses coupling devices and landing gear 22%	E-14.01 Diagnoses coupling devices	E-14.02 Diagnoses landing gear	
Task E-15 Services coupling devices and landing gear 22%	E-15.01 Maintains coupling devices	E-15.02 Repairs coupling devices	E-15.03 Maintains landing gear
	E-15.04 Repairs landing gear		

F – Diagnoses and services electric and electronic systems

14%

Task F-16 Diagnoses electric and electronic systems 57%	F-16.01 Diagnoses lighting systems	F-16.02 Diagnoses wiring systems	F-16.03 Diagnoses trailer monitoring and control systems
Task F-17 Services electric and electronic systems 43%	F-17.01 Maintains electric and electronic systems	F-17.02 Repairs lighting and wiring systems	F-17.03 Repairs trailer monitoring and control systems

G – Diagnoses and services hydraulic systems

6%

Task G-18 Diagnoses hydraulic systems 56%	G-18.01 Diagnoses self-contained hydraulic systems	G-18.02 Diagnoses auxiliary-powered hydraulic systems
Task G-19 Services hydraulic systems 44%	G-19.01 Maintains hydraulic systems	G-19.02 Repairs hydraulic systems

H – Diagnoses and services temperature control systems

10%

Task H-20 Diagnoses temperature control systems 42%	H-20.01 Diagnoses fuel systems	H-20.02 Diagnoses charging and starting systems	H-20.03 Diagnoses high-voltage electric, hybrid and alternative drive systems
	H-20.04 Diagnoses refrigeration and heating systems		
Task H-21 Services temperature control systems 58%	H-21.01 Maintains fuel systems	H-21.02 Repairs fuel systems	H-21.03 Maintains charging and starting systems
	H-21.04 Repairs charging and starting systems	H-21.05 Maintains high-voltage electric, hybrid and alternative drive systems	H-21.06 Repairs high-voltage electric, hybrid and alternative drive systems
	H-21.07 Maintains refrigeration and heating systems	H-21.08 Repairs refrigeration and heating systems (NCC)	