# Recreation Vehicle Service Technician Course Outline

2022



# TRAINING PROFILE CHART ALBERTA

At this time, <u>all</u> Saskatchewan's Recreation Vehicle Service Technician apprentices attend technical training in Alberta at Southern Alberta Institute of Technology Polytechnic (SAIT) located in Calgary, AB.

Implementation for harmonization will take place progressively. Level one to be implemented in 2022/2023, level two 2023/2024 and level three in 2024/2025.

This Training Profile Chart represents Alberta Apprenticeship and Industry Training (AIT) technical training at the topic level.

Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level One	Hours
SECTION ONE:	
STANDARD WORKPLACE SAFETY, INDUSTRY OVERVIEW,	38 hours total
REGULATIONS AND ADMINISTRATION	oo nouro total
Safety Legislation, Regulations & Industry Policy in the Trades	4
Climbing, Lifting, Rigging and Hoisting	3
Hazardous Materials & Fire Protection	3
Apprenticeship Orientation	2
Tools and Equipment	4
Cleaning Procedures	2
Vehicle Identification Number (VIN) Plates and Labels	2
Cutting and Heating	10
Pre-Delivery Inspection (PDI)	6
Motorhome Controls	2
SECTION TWO:	24 hours total
PLUMBING	24 nours total
Potable Water Systems	9
Waste Water Systems	9
Winterizing and De-winterizing	2
Service Monitoring Systems	4
SECTION THREE:	44 hours total
LIQUIFIED PETROLEUM (LP) SYSTEMS	44 Hours total
Propane Systems	44
SECTION FOUR:	48 hours total
DIRECT CURRENT (DC) ELECTRICAL SYSTEMS	40 110013 total
DC Electrical System Service	33
Batteries	15
SECTION FIVE: APPLIANCE OPERATION AND ACCESSORIES	44 hours total
Appliance Operation and Replacement	12
Interior Accessories and Safety Components	12
Exterior Accessories	20
SECTION SIX:	42 hours total
MECHANICAL AND TOWING SYSTEMS	42 Hours total
Tow Vehicle	6
Hitch Systems	12
Brake Systems	12
Undercarriage	12
Level One:	240 hours total

Northern and Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level Two	Hours
SECTION ONE: STANDARD PRACTICES AND PROCEDURES	24 hours total
Work Orders	4
Estimating	10
Warranty and Recall Procedures	2
Parts Catalogues and Related References	4
Customer Relations	4
SECTION TWO:	4
ALTERNATING CURRENT (AC) ELECTRICAL SYSTEMS	54 hours total
AC Electrical System Service	24
Generators	20
Convertors and Charging Systems	10
SECTION THREE:	04 h avea 4 a4 a1
CONSUMER PRODUCTS	24 hours total
Consumer Media Products	24
SECTION FOUR:	53 hours total
APPLIANCES	55 Hours total
Cooking Equipment	5
Water Heating Systems	13
Heating Systems	35
SECTION FIVE:	61 hours total
EXTERIOR STRUCTURES	or nours total
Exterior Surfaces, Components and Structures	41
Body Panels	15
Camper Tie-Downs and Jacks	5
SECTION SIX:	24 hours total
MECHANICAL AND SUSPENSION SYSTEMS	
Suspension Aids	16
Lift and Wall Systems	8
Level Two:	240 hours total

Northern and Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level Three	Hours
SECTION ONE:	
INVERTER AND SOLAR SYSTEMS	30 hours total
Solar Systems	15
Inverter Systems	15
SECTION TWO:	80 hours total
APPLIANCES	60 Hours total
Air Conditioning and Heat Pumps	20
Refrigerators	35
Appliance Products	10
Electronic Control Systems	15
SECTION THREE:	30 hours total
INTERIOR STRUCTURES AND COMPONENTS	30 Hours total
Cabinets, Furnishings and Flooring	30
SECTION FOUR:	50 hours total
SLIDE OUTS AND LEVELLING SYSTEMS	30 Hours total
Hydraulic Systems	15
Slide Out Systems	20
Levelling Systems	15
SECTION FIVE:	25 hours total
AUXILIARY FUELING SYSTEMS AND SPECIALTY HAULERS	25 Hours total
Auxiliary Fueling Systems	15
Specialty Haulers	10
SECTION SIX:	25 hours total
WELDING, COACHING, CERTIFICATION AND COMMITTEES	
Gas Metal Arc Welding (GMAW)	15
Workplace Coaching Skills	4
Alberta's Industry Network	2
Interprovincial Standards Red Seal Program	4
Level Three:	240 hours total

## TECHNICAL TRAINING COURSE OUTLINE

This chart outlines the model for Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training sequencing. For the harmonized level of training, a cross reference to the Red Seal Occupational Standard (RSOS) apprenticeship technical training sequencing, at the learning outcome level, is provided.

Level One 8 weeks 240 hours

Section One 38 hours total

#### SAFETY, TOOLS AND SHOP EQUIPMENT

- A safety legislation, regulations and industry policy in the trades
- B climbing, lifting, rigging and hoisting
- C hazardous materials and fire protection
- D apprenticeship orientation
- E tools and equipment
- F cleaning procedures
- G Vehicle Identification Number (VIN) plates and labels
- H cutting and heating
- I pre-delivery inspection (PDI)
- J motorhome controls

#### A safety legislation, regulations and industry policy in the trades

4 hours

- Demonstrate the application of the Occupational Health and Safety Act, Regulation and Code.
- Describe the employer's and employee's role with Occupational Health and Safety (OH&S) regulations, Worksite Hazardous Materials Information Systems (WHMIS), fire regulations, Workers Compensation Board regulations and related advisory bodies and agencies.
- Describe industry practices for hazard assessment and control procedures.
- Describe the responsibilities of worker and employers to apply emergency procedures.
- Describe tradesperson attitudes with respect to housekeeping, personal protective equipment and emergency procedures.
- Describe the roles and responsibilities of employers and employees with the selection and use of personal protective equipment (PPE).
- Maintain required PPE for tasks.
- Use required PPE for tasks.

#### B climbing, lifting, rigging and hoisting

- Describe manual lifting procedures.
- Describe rigging hardware and associated safety factors.
- Select equipment for rigging loads.
- Describe hoisting and load moving procedures.
- Maintain personal protective equipment (PPE) for climbing, lifting and load moving equipment.
- Use PPE for climbing, lifting and load moving equipment.



#### C hazardous materials and fire protection

3 hours

- Describe roles, responsibilities, features and practices related to the Workplace Hazardous Materials Information System (WHMIS) program.
- Describe three key elements of WHMIS.
- Describe handling, storing and transporting procedures for hazardous material.
- Describe venting procedures when working with hazardous materials.
- Describe hazards, classes, procedures and equipment related to fire protection.

#### apprenticeship orientation

2 hours

- Describe the contractual responsibilities of the apprentice, employer and Alberta Apprenticeship and Industry Training.
- Describe the purpose of the apprentice record book.
- Describe the procedure for changing employers during an active apprenticeship.
- Describe the purpose of the course outline.
- Describe the procedure for progressing through an apprenticeship.
- Describe advancement opportunities in this trade.

#### Е tools and equipment

4 hours

- Describe the types and application of tools and equipment.
- Describe the procedures for maintaining tools and equipment.
- Maintain tools and equipment.
- Use tools and equipment

#### cleaning procedures

2 hours

- Describe methods and products used for spot cleaning recreation vehicles.
- Describe the hazards associated with cleaning products and procedures.

#### Vehicle Identification Number (VIN) plates and labels

2 hours

- Describe the types and purpose of labels applicable to recreation vehicles.
- Interpret information on VIN plates and labels

#### Н cutting and heating

10 hours

- Describe cutting and heating operations permitted within the scope of this
- Describe the characteristics and handling of cutting and heating gases.
- Describe the components of cutting and heating equipment.
- Perform a leak check on cutting and heating equipment.
- Describe the procedure for adjusting cutting and heating equipment.
- Demonstrate the procedure for storing and maintaining cutting and heating equipment.
- Perform cutting and heating operations.

#### pre-delivery inspection (PDI)

- Describe the purpose of a PDI.
- Describe PDI procedures.



- Describe the purpose of PDI documentation.
- Describe PDI tasks specific to recreation vehicle designs.
- Perform a PDI

#### J motorhome controls

2 hours

- Describe the operation of motorhome control systems.
- Describe the purpose of motorhome safety equipment.
- Describe codes, regulations and liabilities relating to motorhomes.
- Describe diesel engine start-up procedures.
- Describe the operation of air brake systems

Section Two 24 hours total

#### **PLUMBING**

- A potable water systems
- B waste water systems
- C winterizing and de-winterizing
- D service monitoring systems

#### A potable water systems

9 hours

- Describe the components and operation of potable water systems.
- Describe the procedure for installing and servicing potable water systems.
- Identify codes for potable water systems.
- Service potable water systems.

#### B waste water systems

9 hours

- Describe the components and operation of waste water systems.
- Describe the procedure for installing and servicing waste water systems.
- · Identify codes for waste water systems.
- Service waste water systems

#### C winterizing and de-winterizing

2 hours

- Describe the types and applications of plumbing antifreeze.
- Describe winterizing and de-winterizing procedures.
- demonstrate knowledge of potable water systems, their components, characteristics and applications
- demonstrate knowledge of procedures to repair potable water systems

#### D service monitoring systems

4 hours

- Describe the components, principles of operation and owner procedures for monitoring systems.
- Describe servicing of monitor panels and sensors.

Section Three 44 hours total

#### LIQUIFIED PETROLEUM GAS (LP) SYSTEMS

A propane systems

#### A propane systems

44 hours

• Describe the properties of propane.



- Describe safety procedures for working with propane.
- Describe the types and applications of propane storage vessels.
- Describe the requirements for inspecting, recertifying and filling propane storage vessels.
- Describe the purpose of propane system components.
- Describe the operation of propane system components.
- Describe the operation of leak detectors.
- Identify codes for propane systems.
- Perform a leak and pressure test.
- Perform operations to make connections in propane systems.
- Adjust a propane regulator.

Section Four 48 hours total

#### **DIRECT CURRENT (dc) ELECTRICAL SYSTEMS**

- A DC electrical systems
- B batteries

#### A DC electrical systems

33 hours

- Describe electrical principles.
- Describe the function and operation of dc circuits and circuit components.
- Describe the use of schematics in servicing dc electrical systems.
- Construct dc electrical circuits.
- Identify codes for dc electrical systems.
- Service dc components and circuits

B batteries 15 hours

- Identify the types and application of batteries.
  - Describe the principles of battery operation.
  - Describe the procedure for storing and installing batteries.
  - Describe the procedure for testing, recharging and boosting batteries.
  - Identify the types of battery disconnect devices and systems.

Section Five 44 hours total

#### APPLIANCES AND ACCESSORIES

- A appliance operation and replacement
- B interior accessories and safety components
- C exterior accessories

#### A appliances operation and replacement

12 hours

- Describe the general operation of RV appliances.
- Describe the precautions and procedures for removing and installing RV appliances.

#### B interior accessories and safety components

- Describe the purpose of interior accessories and safety components.
- Describe the operation of interior accessories and safety components.
- Describe the procedure for installing and servicing interior accessories and safety components.



#### C exterior accessories

20 hours

- Describe the procedure for installing and servicing awnings.
- Describe the procedure for installing and servicing screen rooms.
- Describe the procedure for installing aftermarket/optional exterior accessories.
- Describe the procedure for installing and servicing back-up alarms and monitoring devices.
- Describe the procedure for installing and servicing steps.

Section Six 42 hours total

#### **MECHANICAL AND TOWING SYSTEMS**

- A tow vehicle
- B hitch systems
- C brake systems
- D undercarriage

A tow vehicle 6 hours

- Describe the requirements and procedure for installing wiring trailer connections on a tow vehicle.
- Describe the operation, application and installation of charging system isolators and relays.

B hitch systems 12 hours

- Describe the types and application of hitch and tow systems.
- Describe the procedure for installing and adjusting hitch and tow systems.
- Describe the types and application of sway control devices.
- Describe the purpose and requirements for safety chains.
- Describe methods, regulations and applications for dinghy towing.

#### C brake systems

- Describe the components and operation of brake systems.
- Describe the procedure for installing a tow vehicle brake control system.
- Service brake systems and components.

#### D undercarriage 12 hours

- Describe the purpose of undercarriage components.
- Describe the construction of trailer frames.
- Describe axle types, suspension systems and weight ratings.
- Describe the procedure for aligning an axle.
- Describe wheel and tire types and ratings.
- Describe tire wear patterns and causes.
- Describe types of landing gear and trailer tongue jacks.
- Describe the procedure for servicing landing gear and trailer tongue jacks.
- Perform wheel and tire balance.
- Service wheel bearings and seals



8 weeks 240 hours **Level Two** 24 hours total **Section One** STANDARD PRACTICES AND PROCEDURES A work orders B estimating C warranty and recall procedures D parts catalogs and related references E customer relations work orders 4 hours Describe purpose and types of work orders. Describe air supply systems. Describe procedure for documenting parts, labour and shop supplies. В estimating 10 hours Describe the purpose and types of estimates. Describe estimating policies and procedures. Perform an estimate. warranty and recall procedures 2 hours Describe warranty policies and procedures. Describe the procedure for processing recalls and service bulletins. parts catalogues and related references 4 hours Describe warranty policies and procedures. Describe the procedure for processing recalls and service bulletins. customer relations 4 hours Describe how to provide courtesy to a customer and project a professional image. Identify how to address customer needs and expectations. Describe expectations for professional conduct during customer communications

Section Two 54 hours total

#### **ALTERNATING CURRENT (ac) ELECTRICAL SYSTEMS**

- A AC electrical system service
- B generators
- C converters and charging systems

#### A AC electrical system service

- Describe the difference between ac and dc circuits.
- Describe safety precautions used when servicing ac electrical systems.
- Describe the purpose and operation of ac circuit components.
- Describe the purpose and operation of Energy Management Systems.
- Describe codes for ac electrical systems.



B generators 20 hours

- Describe safety hazards associated with generators.
- Calculate output requirements for generators.
- Describe the procedure for installing generators.
- Describe codes for generator systems.
- Describe the procedure for servicing generators.
- Test generator output.

#### C converters and charging systems

10 hours

- Describe types of converters and charging systems.
- Describe the operation of converters and charging systems.
- Describe the operation of power centers.
- Describe the procedure for servicing converters, power centers and charging systems.
- Calculate convertor requirements.

Section Three 24 hours total

#### **CONSUMER PRODUCTS**

A consumer media products

#### A consumer media products

24 hours

- Describe the types of consumer media products.
- Describe the general operation and set up procedures for common consumer products.
- Describe the procedure for installing and servicing entertainment systems.
- Describe the procedure for installing and servicing antennae and satellite systems.

Section Four 53 hours total

#### **APPLIANCES**

- A cooking equipment
- B water heating systems
- C heating systems

#### A cooking equipment

5 hours

- Describe the types of cooking equipment.
- Describe the purpose and operation of cooking equipment components.
- Describe codes relating to cooking equipment.
- Describe the procedure for servicing cooking equipment

#### B water heating systems

- Describe the types of water heating systems.
- Describe the purpose and operation of water heating system components.
- Describe codes for water heating systems.
- Service water heating systems

#### C heating systems

35 hours

- Describe the types and operation of heating systems.
- Describe the purpose and operation of heating systems components.
- Describe the types and operation of thermostats and climate controls.
- Describe codes for heating systems.
- Describe the procedure for servicing heating systems

Section Five 61 hours total

#### **EXTERIOR STRUCTURES**

- A exterior surfaces, components and structures
- B body panels
- C camper tie-downs and jacks

#### A exterior surfaces, components and structures

41 hours

- Describe framing and insulating methods, materials and design.
- Describe the types of exterior finishes.
- Describe the procedure for servicing framing.
- Describe the procedure for servicing exterior components.
- Describe the procedure for replacing fiber reinforced plastic (FRP).
- Describe the types of material used in windows.
- Describe the types of roof construction.
- Describe the procedure for servicing roofing systems.
- Describe the procedure for preparing units for cold weather use.
- Describe the design and construction of slide-out rooms.
- Describe the procedure for servicing interior walls, ceiling coverings and panels.
- Identify codes relating to the servicing of exterior structures.
- Replace metal siding.
- Service structural and exterior components

#### B body panels

15 hours

- Describe the composition of body panels and components.
- Describe the procedure for servicing FRP, fibre glass panels and components.
- Describe the procedure for servicing plastic components.
- Describe the procedure for installing and replacing decals and graphics.

#### C camper tie-down systems and jacks

5 hours

- Describe the types and capacities of tie down systems.
- Describe the types and capacities of camper jacks.
- Describe the procedure for installing and servicing camper jacks.
- Describe the procedure for installing and servicing tie down systems.

Section Six 24 hours total

#### **MECHANICAL AND SUSPENSION SYSTEMS**

A suspension aids

B lift and wall systems

#### A suspension aids

16 hours

- Describe trailer frame types and features.
- Describe types of suspension systems.
- Describe the effect of add-on suspension aids.
- Describe the effect of vehicle modifications on suspension operation.
- Describe the procedure for installing suspension aids.
- Describe the procedure for adjusting suspension aids.
- Describe the procedure for servicing suspension aids

#### B lift and wall systems

- Describe the types of lift systems.
- Describe the operation of lift systems.
- Describe the servicing of lift systems.
- Describe the procedure for servicing wall systems

## Level Three 8 weeks 240 hours

Section One 30 hours total

#### **INVERTER AND SOLAR PANELS**

A solar systems

B inverter systems

#### A solar systems

15 hours

- Describe the purpose of solar charging system components.
- Describe the operation and application of solar charging systems.
- Describe the procedure for installing solar charging systems.
- Size a solar charging and battery system to meet customer requirements.
- Describe the procedure for expanding a solar charging system to match higher requirements.
- Describe the procedure for servicing a solar charging system.

#### B inverter systems

15 hours

- Describe the purpose and operation of an inverter system.
- Describe types of inverters and remote control panels.
- Describe the procedure for installing an inverter system.
- Calculate power draws, battery requirements, cable sizes and load protection devices.
- Describe the procedure for servicing inverter systems

Section Two 80 hours total

#### **APPLIANCES**

A air conditioning and heat pumps

- B refrigerators
- C appliance products
- D electronic control systems

#### A air conditioning and heat pumps

20 hours

- Describe the types of air conditioners and heat pumps.
- Describe the purpose of air conditioner and heat pump components.
- Describe types and operation of thermostats and climate controls.
- Describe the procedure for servicing air conditioners and heat pump systems.
- Describe the procedure for disposing, reclaiming and recycling refrigerants.
- Describe codes for air conditioners and heat pumps.

#### **B** refrigerators

- Describe the types and operation of refrigerators.
- Describe the purpose of refrigerator components.
- Describe the procedure for servicing refrigerators.
- Describe codes related to refrigerators.
- Service refrigerators.

#### appliance products

10 hours

- Describe types of appliance and consumer products.
- Describe the procedure for servicing appliances and consumer products.
- Describe the procedure for installing appliance and consumer products.

#### D electronic control systems

15 hours

- Describe the operation of electronic components.
- Describe precautions required for handling electronics.
- Service the wiring connection to an electronic component.
- Describe common faults in electronic components.
- Test electronic components

**Section Three** 30 hours total

#### INTERIOR STRUCTURES AND COMPONENTS

A cabinets, furnishings and flooring

#### cabinets, furnishings and flooring

30 hours

- Describe the types of material used in counter top construction.
- Describe the procedure for servicing countertops.
- Describe the types of materials used in cabinet construction.
- Describe the procedure for servicing cabinet structures.
- Describe the procedure for servicing cabinet trim, doors and hardware.
- Describe the procedure for servicing drawers and hardware.
- Describe the procedure for servicing upholstery components.
- Describe the procedure for servicing window coverings, blinds and valances.
- Describe the procedure for servicing floor coverings.
- Service interior components

50 hours total **Section Four** 

#### SLIDE OUTS AND LEVELLING SYSTEMS

- A hydraulic systems
- slide out systems
- C levelling systems

#### hydraulic systems

15 hours

- Describe the function of hydraulic system components.
- Describe hydraulic system operation, applications and testing.
- Describe the procedure for servicing hydraulic system components.
- Describe the procedure for adjusting hydraulic systems.
- Describe safety procedures relating to hydraulic systems.
- Test a hydraulic system

#### slide out systems В

- Describe the purpose of slide out system components.
- Describe the operation of slide out systems.
- Describe the procedure for servicing slide out systems.
- Describe procedure for adjusting, removing and replacing slide out rooms.



#### C levelling systems

15 hours

- Describe the purpose of levelling systems.
- Describe types of levelling systems.
- Describe the purpose of levelling system components.
- Describe the operation of levelling systems.
- Describe the procedure for installing levelling systems.
- Describe the procedure for servicing levelling systems

Section Five 25 hours total

#### **AUXILIARY FUELING SYSTEMS AND SPECIALTY HAULERS**

- A auxiliary fueling systems
- B specialty haulers

#### A auxiliary fueling systems

15 hours

- Describe the properties of gasoline and diesel fuel.
- Describe auxiliary fuel system components.
- Describe the procedure for handling fuel.
- Describe the procedure for dispensing fuel.
- Identify codes for auxiliary fuel systems

#### B specialty haulers

10 hours

- Describe the purpose of speciality hauler components.
- Describe the operation of specialty hauler components
- Describe the types of materials used in constructing speciality haulers.
- Describe the design and ventilation requirements.
- Describe codes and safety procedures relating to the servicing of speciality haulers.

Section Six 25 hours total

#### WELDING, COACHING, CERTIFICATION AND COMMITTEES

- A gas metal arc welding (GMAW)B workplace coaching skills
- C Alberta's industry network
- D Interprovincial Standards Red Seal Program

#### A gas metal arc welding (GMAW)

15 hours

- Describe the welding operations permitted within the scope of this trade.
- Describe the function of GMAW components of GMAW equipment.
- Describe the operation of GMAW equipment.
- Describe troubleshooting of GMAW equipment.
- Demonstrate material preparation.
- Perform the sequence of start-up and shut down of GMAW equipment.
- Perform tack welds using GMAW

#### B workplace coaching skills

4 hours

• Describe the process for coaching an apprentice



#### C Alberta's industry network

2 hours

- Describe Alberta's Apprenticeship and Industry Training system.
- Describe roles and responsibilities of the Alberta Apprenticeship and Industry Training Board, the Government of Alberta and post-secondary institutions.
- Describe roles and responsibilities of the Provincial Apprenticeship Committees (PACs), Local Apprenticeship Committees (LACs) and Occupational Committees (OCs).

#### D Interprovincial Standards Red Seal Program

- Identify Red Seal products used to develop Interprovincial examinations.
- Use Red Seal products to prepare for an Interprovincial examination.

## RECREATION VEHICLE SERVICE TECHNICIAN

## **TASK MATRIX**

This chart outlines the major work activities, tasks and sub-tasks from the 2021 Recreation Vehicle Service Red Seal Occupational Standard. Each sub-task details the corresponding essential skill and level of training where the content is covered. \*

\* Sub Tasks with numbers in the boxes is where the content will be delivered in training. The Task Matrix Chart will be updated every year until Harmonization implementation is complete. Implementation for harmonization will take place progressively. Level one to be implemented in 2022/2023, level two in 2023/2024 and level three in 2024/2025.

### A - Performs common occupational skills

		·ir	1
Task A-1 Performs safety-related activities	A-1.01 Uses personal protective equipment (PPE) and safety equipment	A-1.02 Maintains safe work environment	
	1	1	
Task A-2 Uses and maintains tools and equipment	A-2.01 Uses tools and equipment	A-2.02 Uses lifting, moving and access equipment	
	1	1	
Task A-2 Uses and maintains tools and equipment	A-2.01 Uses tools and equipment	A-2.02 Uses lifting, moving and access equipment	
	1	1	
Task A-3 Performs common work practices and procedures	A-3.01 Uses documentation	A-3.02 Identifies recalls and service bulletins	A-3.03 Performs pre-delivery inspections (PDI)
	1, 2,3	1	1
Task A-4 Uses communication and mentoring techniques	A-4.01 Uses communication techniques	A-4.02 Uses mentoring techniques	
	1	3	

# **B - Plumbing systems**

Task B-5 Diagnoses plumbing systems	B-5.01 Diagnoses potable water systems	B-5.02 Diagnoses waste water systems	
	1	1	
Task B-6 Services potable water systems	B-6.01 Maintains potable water systems	B-6.02 Repairs potable water systems	B-6.03 Installs potable water systems
	1	1	1
Task B-7 Services waste water systems	B-7.01 Maintains waste water systems	B-7.02 Repairs waste water systems	B-7.03 Installs waste water systems
	1	1	1

# **C** – **Electrical systems**

Task C-8 Diagnoses electrical systems	C-8.01 Diagnoses AC electrical systems	C-8.02 Diagnoses DC electrical systems	C-8.03 Diagnoses generators
	2	2	3
Task C-9 Services AC electrical systems	C-9.01 Maintains AC electrical systems	C-9.02 Repairs AC electrical systems	C-9.03 Installs AC electrical systems
	1	2,3	1,2,3
Task C-10 Services DC electrical systems	C-10.01 Maintains DC electrical systems	C-10.02 Repairs DC electrical systems	C-10.03 Installs DC electrical systems
	1	1,2,3	1,2,3
Task C-11 Services generators	C-11.01 Maintains generators	C-11.02 Installs generators	
	3	3	

# D - Liquefied petroleum (LP) gas systems

Task D-12 Diagnoses LP gas systems
Task D-13 Services LP gas systems

D-12.01 Diagnoses LP gas supply systems (high pressure)	D-12.02 Diagnoses LP gas distribution systems (low pressure) 2	
D-13.01 Maintains LP gas systems	D-13.02 Repairs LP gas systems	D-13.03 Installs LP gas systems
1	1,2,3	1,2,3

# **E – Appliances and consumer products**

Task E-14 Diagnoses appliances	E-14.01 Diagnoses water heaters	E-14.02 Diagnoses furnaces	E-14.03 Diagnoses cooktops and ranges
	2	2,3	2
_	E-14.04 Diagnoses refrigerators and ice makers	E-14.05 Diagnoses air conditioners and heat pumps	
	2,3	2,3	
Task E-15 Services water heaters	E-15.01 Maintains water heaters	E-15.02 Repairs water heaters	E-15.03 Installs water heaters
	1	2	2
Task E-16 Services furnaces	E-16.01 Maintains furnaces	E-16.02 Repairs furnaces	E-16.03 Installs furnaces
	1,2,3	2,3	2,3
Task E-17 Services cooktops and ranges	E-17.01 Maintains cooktops and ranges	E-17.02 Repairs cooktops and ranges	E-17.03 Installs cooktops and ranges
	1,2	2	2
Task E-18 Services refrigerators and ice makers	E-18.01 Maintains refrigerators and ice makers	E-18.02 Repairs refrigerators and ice makers	E-18.03 Installs refrigerators and ice makers
	1,2,3	2,3	2,3

Task E-19 Services air conditioners and heat pumps	E-19.01 Maintains air conditioners and heat pumps	E-19.02 Repairs air conditioners and heat pumps	E-19.03 Installs air conditioners and heat pumps
	1,3	3	3
Task E-20 Services consumer products	E-20.01 Replaces consumer products	E-20.02 Installs consumer products	
	1,3	1,3	

# **F** – Interior and exterior components

Task F-21 Diagnoses interior and exterior components	F-21.01 Diagnoses interior components	F-21.02 Diagnoses exterior components	
	2	2	]
Task F-22 Services interior components	F-22.01 Maintains interior components	F-22.02 Repairs interior components	F-22.03 Installs interior components
	2	2	2
Task F-23 Services exterior components	F-23.01 Maintains exterior components	F-23.02 Repairs exterior components	F-23.03 Installs exterior components
	2	2	2

# **G** – Frames and mechanical components

Task G-24 Diagnoses frames and mechanical components	G-24.01 Diagnoses frames	G-24.02 Diagnoses running gear	G-21.03 Diagnoses levelling systems
	1,3	1,3	1,3
	G-24.04 Diagnoses slide-out systems	G-24.05 Diagnoses lifting systems	
	1,3	1,3	
Task G-25 Services frames	G-25.01 Maintains frames	G-25.02 Repairs frames	
	1	3	

Task G-26 Services running gear	G-26.01 Maintains running gear	G-26.02 Repairs running gear	
	1	1	
Task G-27 Services levelling systems	G-27.01 Maintains levelling systems	G-27.02 Repairs levelling systems	G-27.03 Installs levelling systems
	1	3	3
Task G-28 Services slide-out systems	G-28.01 Maintains slide-out systems	G-28.02 Repairs slide-out systems	
	1	3	
Task G-29 Services lifting systems	G-29.01 Maintains lifting systems	G-29.02 Repairs lifting systems	
	1	3	

## **H - Towing systems**

Task H-30 Diagnoses towing systems	H-30.01 Diagnoses tow vehicle systems	H-30.02 Diagnoses towed vehicle systems	
	2	3	
Task H-31 Services tow vehicle systems	H-31.01 Maintains tow vehicle systems	H-31.02 Repairs tow vehicle systems	F-31.03 Installs tow vehicle systems
	1	2,3	2,3
Task H-32 Services towed vehicle systems	H-32.01 Maintains towed vehicle systems	H-32.02 Repairs towed vehicle systems	F-32.03 Installs towed vehicle systems
	1	3	3

The Recreation Vehicle Service Technician Red Seal Occupational Standard (RSOS), describing the "full scope" of the trade, can be found at <a href="https://www.red-seal.ca">www.red-seal.ca</a>.

For more detailed information on course content, please refer to the Recreation Vehicle Service Technician Guide to Course Content at <a href="https://www.saskapprenticeship.ca">www.saskapprenticeship.ca</a>.

