Parts Technician
On-the-Job Training Guide

2024

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Saskatchewan Apprenticeship and Trade Certification Commission

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Recognition:
To promote transparency and consistency, portions of this document have been adapted from the 2020 Parts Technician Red Seal Occupational Standard (Employment and Social Development Canada).

A complete version of the Occupational Standard can be found at www.red-seal.ca

STRUCTURE OF THE ON-THE-JOB-TRAINING GUIDE

To facilitate understanding of the occupation, this document contains the following sections:

Task Matrix: a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard detailing the essential skills and the level of training where the content is covered.

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.

On-the-Job and In-school Training Content for the Parts Technician Trade: a chart which outlines the topics of technical training with on-the-job examples for apprentices to achieve relevant experience at work.

TRAINING REQUIREMENTS FOR THE PARTS TECHNICIAN TRADE

To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1800 hours each year. Total trade time required is 5400 and at least 3 years in the trade.

Journeyperson to apprentice ratio for this trade is: 1:2

The information contained in this document serves as a guide for employers and apprentices. Apprenticeship training is mutually beneficial to both employer and apprentice. The employer's investment in training apprentices results in skilled and certified workers. The document summarizes the tasks to be covered by the apprentice during their on-the-job portion of apprenticeship training. An apprentice spends approximately 85% of their apprenticeship term training on-the-job.

It is the employer's or journeyperson's responsibility to supervise an apprentice's practical skill development until a satisfactory level of proficiency has been reached.

EMPLOYER TRAINING RESPONSIBILITY

- promote a safety-conscious workplace
- provide mentored, hands-on practice in the use of tools and equipment
- demonstrate the techniques and knowledge of the Parts Technician trade
- parts technicians perform ordering, warehousing, inventory control and sales of parts
- identifying parts and equipment, searching for parts, shipping and receiving parts
- providing customer service and advice and maintaining records.

Employers should make every effort to expose their apprentices to work experience in as many areas of the trade as possible.

In the On-the-Job Training Guide, in-school instruction is listed first; on-the-job suggestions to help employers assist the apprentice to prepare for in-school training are listed next.

The content of the training components is subject to change without notice.

PARTS TECHNICIAN TASK MATRIX

This chart outlines the major work activities, tasks and sub-tasks from the 2020 Parts Technician 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.

A - Performs Common Occupational Skills — 16%

A-1 Performs safety-related functions	**A-1.01 Maintains safe work environment** **1, 3** **(2 In Context)**	**A-1.02 Uses personal protective equipment (PPE) and safety equipment** **1, 3** **(2 In Context)**				
A-2 Uses tools and equipment	**A-2.01 Uses catalogs and price lists** **1** **(2, 3 In Context)**	**A-2.02 Uses hand tools** **1** **(2, 3 In Context)**	**A-2.03 Operates power tools** **1** **(2, 3 In Context)**	**A-2.04 Operates warehouse tools and equipment** **1** **(2, 3 In Context)**	**A-2.05 Uses measuring and testing tools and equipment** **1** **(2, 3 In Context)**	
	A-2.06 Operates business machines **1** **(2, 3 In Context)**	**A-2.07 Uses computers and digital devices** **1** **(2, 3 In Context)**				
A-3 Organizes work	**A-3.01 Uses work-related documents** **1, 2** **(3 In Context)**	**A-3.02 Prioritizes tasks** **1, 2** **(3 In Context)**				

A-4 Communicates with others	A-4.01 Uses communication techniques 1	A-4.02 Uses mentoring techniques 3

B – Performs Customer Service 22%

B-5 Provides services to retail customers	B-5.01 Identifies retail customers' needs 1, 2, 3	B-5.02 Provides technical information to retail customers 2, 3		
B-6 Provides services to wholesale customers	B-6.01 Identifies wholesale customers' needs 1, 2, 3	B-6.02 Provides training opportunities and technical information to wholesale customers 1, 2, 3		
B-7 Provides services to internal customers	B-7.01 Identifies internal customers' needs 1, 2, 3	B-7.02 Maintains inventory and records for internal customers 1, 2, 3		
B-8 Provides general customer service and support	B-8.01 Prepares customer quotes 2, 3	B-8.02 Provides no-fee value-added services and information 1, 2, 3	B-8.03 Records customer information 1, 2, 3	B-8.04 Implements product improvement programs (PIP) 2

C – Performs Parts Acquisition 24%

C-9 Identifies parts	C-9.01 Identifies parts function 1, 2	C-9.02 Identifies parts application 1, 2	C-9.03 Identifies parts number 1, 2	
C-10 Sources parts	C-10.01 Searches inventory for parts 1, 2, 3	C-10.02 Identifies suppliers 1, 2, 3	C-10.03 Purchases parts 2, 3	C-10.04 Arranges shipment of special orders 2, 3

D – Performs Warehousing and Inventory 25%

D-11 Handles parts and materials	D-11.01 Maintains storage design layout 3	D-11.02 Handles sensitive products 3	D-11.03 Rotates inventory 2, 3	D-11.04 Places inventory in designated location 2, 3
D-12 Performs inventory control	D-12.01 Manages core and warranty inventory 2, 3	D-12.02 Handles parts inventory recalls 3	D-12.03 Maintains inventory levels 3	D-12.04 Participates in periodic physical inventory control 2, 3
D-13 Performs shipping and receiving duties	D-13.01 Verifies estimated time of arrival (ETA) 1, 2, 3	D-13.02 Receives incoming shipment 1, 2, 3	D-13.03 Resolves order discrepancies 1, 2, 3	D-13.04 Prepares for shipment 1, 2, 3

E – Applies Business Practices

13%

E-14 Promotes products and services	**E-14.01 Displays products and literature** 3	**E-14.02 Uses digital marketing** 2, 3	**E-14.03 Recommends parts and products to customer** 2, 3	**D-14.04 Recommends services to customer** 2, 3
E-15 Implements pricing formula	**E-15.01 Calculates additional costs** 3	**E-15.02 Overrides price** 3		
E-16 Processes financial transactions	**E-16.01 Generates invoices** 1, 2	**E-16.02 Accepts payments** 2	**E-16.03 Processes customer returns** 2, 3	**E-16.04 Processes day-end reports** 2, 3

TRAINING PROFILE CHART

This Training Profile Chart represents Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training at the topic level.

Sask. Polytechnic Level One	Transcript Code	Hours
Parts Information Systems	AV 184 – Theory	19
Computer Applications	COAP 188 – Theory	20
Parts Workplace Skills	PART 177 – Theory	15
Applied Trade Measurement	MEAS 105 – Theory	15
Parts ID for Engines	PART 171 – Theory	20
Parts ID for Electrical	PART 172 – Theory	20
Parts ID for Vehicle Systems	PART 173 – Theory	20
Parts ID for Lubrication and Drive Systems	PART 174 – Theory	20
Machine/Vehicle Identification	PART 175 – Theory	20
Common Tools	PART 176 – Theory	29
Regulations and Safety	PART 183 – Theory	16
Warehouse and Documentation	PART 188 – Theory	26
		240

Sask. Polytechnic Level Two	Transcript Code	Hours
Parts Information Systems	AV 280 – Theory	12
Computers	COAP 283 – Theory	20
Customer Service	PART 279 – Theory	15
Engine Systems	PART 280 – Theory	35
Drive Train Components	PART 281 – Theory	30
Vehicle Systems	PART 282 – Theory	28
Hydraulic Systems	PART 283 – Theory	20
Standard Stock	PART 284 – Theory	21
Machine/Vehicle Identification	PART 285 – Theory	35
Parts Networking	PART 290 – Theory	12
Documentation	RPRT 280 – Theory	12
		240

Sask. Polytechnic Level Three	Transcript Code	Hours
Parts Business Practices	PART 378 – Theory	12
Parts Communications	PART 379 – Theory	12
Inventory Control	PART 380 – Theory	37
New Vehicle Technology	PART 381 – Theory	22
Facility Design	PART 382 – Theory	24
Purchasing	PART 384 – Theory	12
Parts Sales and Merchandising	PART 385 – Theory	37
Applied Parts Management	PART 386 – Theory	24
		180

ON-THE-JOB AND IN-SCHOOL TRAINING CONTENT FOR THE PARTS TECHNICIAN TRADE

This chart outlines on-the-job examples for apprentices to achieve relevant work experience to prepare for the topics of technical training. Topics of technical training are provided with the associated learning outcomes.

Level One — 8 weeks — 240 hours

Parts Information Systems – Theory — 19 hours

- identify the different tools that can be used to locate parts information
- describe the components of the different systems
- discuss the parts pricing structures
- demonstrate alternative methods for locating parts
- explain the use of serial numbers & vehicle identification numbers (VIN)

Mentors can assist the apprentice to prepare for this section of technical training by:

- *relaying knowledge of the customer base and related product requirements*
- *providing training in communication skills and pricing structures*
- *introducing the apprentice to outsourcing materials*
- *providing training in interpreting codes and labels such as VIN/serial numbers and paint codes*

Computer Applications – Theory — 20 hours

- discuss software programs used by parts departments
- discuss networks used by parts departments
- discuss the use of electronic parts catalogs
- discuss business and invoicing software

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring hands-on training on the company's parts management system and all its functions*

Parts Workplace Skills – Theory — 15 hours

- examine essential workplace procedures
- discuss customer communication skills
- explain workplace conflict resolution
- describe workplace mentoring

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing sales and communication training in building relationships with co-workers, customers and suppliers*

Applied Trade Measurement – Theory — 15 hours

- explain common trade measurements and their use
- use formula to calculate measurements
- apply common trade measurements

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in gross margins and mark-up*
- *providing training in metric and imperial measurement*
- *provide training in fluid capacities*

Parts ID for Engines – Theory — 20 hours

- describe the principles of combustion
- identify basic engine components
- describe engine classifications
- describe the principles of engine operation
- describe engine parts operation
- describe engine construction features
- examine engine parts failures
- describe engine repair procedures

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on principles of engine operation*
- *providing instruction in the company parts identification system*
- *providing hands-on training with the service department if available*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Parts ID for Electrical – Theory — 20 hours

- identify the basic fundamentals of electricity and electronics
- explain battery types and functions
- describe charging system components and functions
- describe charging system problems
- identify chassis wiring

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on principles of electricity*
- *providing training in battery storage and safety*
- *providing training in charging system diagnostics*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Parts ID for Vehicle Systems – Theory — 20 hours

- describe the parts and function of the fuel system
- describe the parts and function of the exhaust system
- describe the parts and function of the emissions system
- describe parts and function of the cooling system
- describe parts and function of the heating system

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on the basic fundamentals of the various vehicle support systems*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Parts ID for Lubrication and Drive Systems – Theory — 20 hours

- describe the parts and operation of the lubrication system
- discuss lubricants
- identify belt and chain drive components
- describe shaft couplers and clutches

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on principles of the lubrication and drive systems*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Machine/Vehicle Identification – Theory — 20 hours

- identify different passenger vehicle types
- identify agricultural machinery
- identify industrial machinery
- identify heavy truck and trailer vehicle types
- identify recreational vehicles

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring an understanding of the terminology used by the company to identify equipment*
- *assisting the apprentice to relate model and serial numbers to year and model of equipment*

Common Tools – Theory — 29 hours

- identify the different types of hand tools
- describe the use and purpose of hand tools
- identify the different types of power tools
- describe the use and purpose of power tools
- identify measuring tools and equipment
- demonstrate measuring tool use and operation

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in metric and imperial measurement*
- *providing experience in the safe and proper use of hand and power tools*

Regulations and Safety – Theory — 16 hours

- describe the types of distribution networks
- identify the duties and responsibilities of parts department personnel
- recognize safe working practices and safety equipment
- explain fire safety

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring apprentice participation in housekeeping audits*
- *providing jobsite orientation and training including use of fire extinguishers and personal protective equipment*
- *reviewing OH&S Regulations and WHMIS*
- *reviewing TDG (Transportation of Dangerous Goods)*

Warehouse and Documentation – Theory — 26 hours

- identify the different point of sale documentation
- describe the use of order forms
- describe the use of warranty claim and return forms
- explain shipping methods and procedures
- explain receiving procedures and practices
- demonstrate the completion of shipping and receiving forms

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing hands-on training in the use of company forms, policies and procedures*
- *introducing display design and maintenance*
- *introducing a parts department layout that increases productivity, safety and access*
- *giving an overview of specialty warehousing policy and procedures (electronics equipment, time-sensitive goods, dangerous goods)*

Level Two — 8 weeks — 240 hours

Parts Information Systems – Theory — 12 hours

- identify the different tools that can be used to locate parts information
- describe the components of the different systems
- identify alternative methods for locating parts
- use service manuals to reference specifications and procedures

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in correlation between part and catalogue/microfiche/computer, including specialty parts catalogues and cross-referencing*
- *providing exposure to service manuals*

Computers – Theory — 20 hours

- identify the basic types of computer hardware systems
- discuss the advantages of different software programs
- discuss how computers are used in industry

Mentors can assist the apprentice to prepare for this section of technical training by:

- *facilitating training and use of computer systems*
- *ensuring the apprentice receives an introduction to new computer programs*

Customer Service – Theory — 15 hours

- identify different types of customers
- describe the elements of customer service
- explain methods of meeting customer's needs

Mentors can assist the apprentice to prepare for this section of technical training by:

- *relaying knowledge of the customer base and related product requirements*
- *providing training in communication skills*
- *introducing the apprentice to outsourcing materials*

Engine Systems – Theory — 35 hours

- explain the function of the ignition circuit
- describe the components of the ignition system
- explain diesel fuel characteristics
- describe the parts and function of the diesel fuel system
- explain the differences between gas and diesel engines
- explain the difference between turbo charger and super charger
- identify controllers and monitors used on diesel engines

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on various engine related systems diagnostics and repair*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Drive Train Components – Theory — 30 hours

- describe axle and driveline parts and their functions
- discuss clutches and torque converters
- discuss transmissions and transaxles
- discuss differentials and final drives
- compare the different drive train systems

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on various driveline related support system diagnostics and repair*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Vehicle Systems – Theory — 28 hours

- describe parts and operation of the air conditioning system.
- describe the components and principles of operation of the suspension system
- describe the components and principles of operation of the steering system
- describe the components and principles of operation of the brake system
- discuss a variety of tires and vehicle ballasting
- identify the components of track systems

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction on various vehicle support systems diagnostics and repair*
- *providing training and exposure to specific parts brands and makes*
- *providing warranty assessment training*

Hydraulic Systems – Theory — 20 hours

- identify the basic hydraulic principles
- identify hydraulic system components
- describe hydraulic system circuits
- discuss hydraulic system operation
- explain hydraulic steering systems
- discuss the hydrostatic drive systems

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring exposure to hydraulic system functions and applications*
- *familiarization with hydraulic system terminology and component purpose and function*

Standard Stock – Theory — 21 hours

- discuss types and functions of fasteners
- discuss types and functions of fittings
- describe friction and non-friction bearings and their applications
- describe static and dynamic seals and their applications
- compare common products used within the parts industry
- describe the parts and operation of the lubrication system

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in the uses of bearings and bearing types, and of seals and gaskets*
- *ensuring an understanding in the applications of all bearings, seals and gaskets*
- *providing an introduction to API ratings of lubricants*

Machine/Vehicle Identification – Theory — 35 hours

- discuss body structure design
- identify chassis components
- explain body styles and classifications
- describe vehicle comfort and safety systems
- discuss vehicle identification codes and labels
- identify operator features and controls
- compare parts supply and systems
- identify types of agricultural equipment and their function
- describe the fast-wearing components of agricultural equipment
- identify types of industrial equipment and their function
- describe the fast-wearing components of industrial equipment

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring an understanding of the terminology used by the company to identify equipment*
- *assisting the apprentice to relate model and serial numbers to year and model of equipment*

Parts Networking – Theory — 12 hours

- describe parts networking
- demonstrate the use of peer-to-peer communication
- demonstrate the use of technologies

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing sales and communication training in building relationships with customers and suppliers*
- *providing training in communication skills*
- *introducing the apprentice to outsourcing products, parts and materials*

Documentation – Theory — 12 hours

- explain the different point of sale documentation
- discuss the purpose and required information on a work order
- describe the purpose and use of an estimate
- prepare an order form from suppliers
- describe the process when handling a warranty claim
- explain the forms used to handle core returns
- describe the forms required to complete transfers of inventory

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing an explanation of company procedures for sales, warranties, returns, as well as the ordering system and its classes*
- *providing training in the maintenance and use of customer records*

Level Three — 6 weeks — 180 hours

Parts Business Practices – Theory — 12 hours

- compare different forms of business ownership
- discuss financial sources available for a business
- review the financial status of a business
- discuss tax implications of a business

Mentors can assist the apprentice to prepare for this section of technical training by:

- *facilitating an understanding of the business operation and financials*
- *ensuring apprentice participation in factory direct technical training*

Parts Communications – Theory — 12 hours

- discuss effective communication skills for dealing with customers
- examine effective communication skills for dealing with coworkers
- discuss issues related to supervising coworkers
- evaluate potential new employees

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing sales and communication training in building relationships with customers and suppliers*
- *stressing the importance of supplying the customer with all related parts*
- *encourage career development and supervisory skills*

Inventory Control – Theory — 37 hours

- identify inventory ordering systems
- discuss inventory monitoring tools
- discuss reasons for adjusting inventory
- discuss parts activity
- compare methods used to control inventory
- discuss the importance of proper procedures for a physical inventory

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in inventory policies and procedures*

New Vehicle Technology – Theory — 22 hours

- identify recent technology changes in vehicles and engines
- identify recent changes to vehicle electrical and electronic systems
- compare new lubricant and chemical technology and industry
- requirements for these products

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring brand specific factory training*
- *providing training in inventory policies and procedures*

Facility Design – Theory — 24 hours

- describe the required areas for a parts facility
- describe the supplemental areas
- explain various types of binning systems
- prepare a layout of a parts storage facility with display area

Mentors can assist the apprentice to prepare for this section of technical training by:

- *facilitating an understanding of the parts department design and layout for convenience and access*
- *encouraging input into design and layout changes and improvements*
- *providing available training programs*

Purchasing – Theory — 12 hours

- identify product needs
- demonstrate proper supplier selection
- compare different types of orders
- compare different types of freight transportation
- identify different purchasing documents
- explain expedited freight

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in inventory control*
- *explaining the system used to identify new product setups*
- *identifying carrier to be used (expedited or non-expedited*
- *identifying types of orders (seasonal, emergency, regular) and purchase orders*

Parts Sales and Merchandising – Theory — 37 hours

- describe pricing for sales
- explain styles of marketing and merchandising
- explain personal selling

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing training in gross margins and mark-up*
- *providing sales and communication training in building relationships with customers and suppliers*
- *stressing the importance of supplying the customer with all related parts*

Applied Parts Management – Theory — 24 hours

- demonstrate the use of communication skills
- demonstrate the use of business skills
- demonstrate the use of marketing skills
- demonstrate the use of facilities management skills
- demonstrate the use of scheduling skills
- demonstrate the operations of parts and warehousing skills

Mentors can assist the apprentice to prepare for this section of technical training by:

- *facilitating an understanding of the parts department design and layout for convenience and access*
- *encouraging input into design and layout changes*
- *providing available training programs*
- *encouraging input into parts department improvement*
- *encouraging communications, business, marketing, facilities, scheduling and other operations that are common to parts and warehousing*

Consider apprenticeship training as an investment in the future of your company and in the future of your workforce. Ultimately, skilled and certified workers increase your bottom line.

Get involved in the apprenticeship training system. Your commitment to training helps to maintain the integrity of the trade.

Do you have employees who have been working in the trade for a number of years but don't have trade certification? Contact your local apprenticeship office for details on how they might obtain the certification they need.

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