

Automotive Refinishing Technician On-the-Job Training Guide

2020



Online: www.saskapprenticeship.ca

Recognition:

To promote transparency and consistency, this document has been adapted from the 2019 Automotive Refinishing 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 on-the-job training guide contains the following sections:

Description of the Automotive Refinishing Technician subtrade: an overview of the subtrade's duties and training requirements.

Essential Skills Summary: an overview of how each of the nine essential skills is applied in this subtrade.

Elements of Harmonization for Apprenticeship Training: a brief description on the Pan-Canadian Harmonization Initiative for the Automotive Refinishing Technician subtrade.

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 Training Content for the Automotive Refinishing Technician Subtrade: a chart which outlines the topics of technical training with on-the-job examples for apprentice to achieve relevant experience at work.

DESCRIPTION OF THE AUTOMOTIVE REFINISHING TECHNICIAN SUBTRADE

Automotive Refinishing Technicians appraise and refinish motor vehicle bodies. This is a subtrade of the Auto Body and Collision Technician trade.

Automotive refinishing technicians work on the surfaces of motor vehicles, primarily in restoring vehicle finishes once body work has been completed. Some of the duties that an automotive refinishing technician completes include: removing layers of old coatings; matching colours and mixing paints; preparing surfaces for painting by spot filling, sanding, and masking; applying primers, primer surfacers, sealers, base coats, single-stage and clear coats; cleaning and polishing painted surfaces; and applying protective coatings.

Automotive refinishing technicians use hand and power tools and automotive refinishing equipment in their work. Computers and related software are used for computerized paint colour reading, generating paint formulas and tinting recommendations, and documentation.

Journeypersons in this subtrade usually work indoors and can expect a work environment that includes paint fumes, dust and noise. Health and safety are important issues for automotive refinishing technicians, as they are exposed to chemical hazards such as paints and solvents, and physical hazards such as shop equipment, power tools and lifting equipment. Automotive refinishing technicians are exposed to repetitive movements, bending, lifting and reaching on a daily basis. Ongoing safety training and a good knowledge of government safety standards and regulations are important in providing a safer working environment as well as addressing environmental concerns.

Many automotive refinishing technicians work in close contact with automotive refinishing technicians who tend to work in multi-shop companies, independent or dealership auto body and collision shops. Automotive painting duties may overlap with automotive refinishing technicians' duties, particularly in small shops. In larger places of employment, automotive refinishing technicians likely work as specialists, after body repairs have been completed. They may also work with estimators, parts technicians, detailers, preppers, glass installers and production managers. While they may work as part of the repair team, automotive refinishing technicians tend to work independently. They may work in the automotive, truck and transport, commercial transport, heavy equipment, motorcycle, specialty vehicle, aviation and aerospace sectors.

Key attributes for people entering this subtrade include: mechanical aptitude; manual dexterity; good colour vision; the ability to do precise work that requires attention to detail; and, problem solving and multitasking skills. Good physical condition and agility are important because the work often requires considerable standing, bending, crouching, kneeling and reaching.

Being an automotive refinishing technician is very rewarding. With experience, journeypersons have a number of career options, including supervisory or teaching/training in the field, insurance appraiser, estimator and manufacturers' representative.

Training Requirements: 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 3600 and at least 2 years in the subtrade.

NOTE: Due to Harmonization, Level One Auto Body and Collision Technician technical training is common with Automotive Refinishing Technician at the Saskatoon and Regina campuses of Saskatchewan Polytechnic. Automotive Body and Collision Technician apprentices that chose to switch to the Automotive Refinishing Technician subtrade receive Level One technical training credit and move into Level Two when sufficient trade time in Automotive Refinishing Technician is acquired and submitted.

There are two levels of technical training delivered by the Northern Alberta Institute of Technology (NAIT) Polytechnic in Edmonton Alberta and the Southern Alberta Institute of Technology (SAIT) Polytechnic in Calgary Alberta.

Journeyman 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 apprentice's 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 journeyman's responsibility to supervise an apprentice's practical skills 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 procedures to appraise automobiles and light trucks
- provide guided, hands-on practice refinishing automobiles and light trucks
- ensure that the apprentice can evaluate the end product

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.

Entrance Requirements for Apprenticeship Training

Your grade twelve transcripts (with no modified classes) or GED 12 is your guarantee that you meet the educational entrance requirements for apprenticeship in Saskatchewan. In fact, employers prefer and recommend apprentices who have completed high school. This ensures the individual has all of the necessary skills required to successfully complete the apprenticeship program, and receive journeyman certification.

Individuals with "modified" or "general" classes in math or science do not meet our entry requirements. These individuals are required to take an entrance assessment prescribed by the SATCC.

English is the language of instruction in all apprenticeship programs and is the common language for business in Saskatchewan. Before admission, all apprentices and/or "upgraders" must be able to understand and communicate in the English language. Applicants whose first language is not English must have a minimum Canadian Language Benchmark Assessment of six (CLB6).

Note: A CLB assessment is valid for a one-year period from date of issue.

Designated Trade Name	Math Credit at the Indicated Grade Level❶	Science Credit at Grade Level
Automotive Refinishing Technician	Grade 10	Grade 10
<p>❶ - (One of the following) WA – Workplace and Apprenticeship; or F – Foundations; or P – Pre-calculus, or a Math at the indicated grade level (Modified and General Math credits are not acceptable.).</p> <p>*Applicants who have graduated in advance of 2015-2016, or who do not have access to the revised Science curricula will require a Science at the minimum grade level indicated by trade.</p> <p>For information about high school curriculum, including Math and Science course names, please see: http://www.curriculum.gov.sk.ca/#</p> <p>Individuals not meeting the entrance requirements will be subject to an assessment and any required training.</p>		

ESSENTIAL SKILLS SUMMARY

Essential skills are needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change.

Through extensive research, the Government of Canada and other national and international agencies have identified and validated nine essential skills. These skills are used in nearly every occupation and throughout daily life in different ways.

A series of CCDA-endorsed tools have been developed to support apprentices in their training and to be better prepared for a career in the trades. The tools can be used independently or with the assistance of a tradesperson, trainer, employer, teacher or mentor to:

- understand how essential skills are used in the trades;
- learn about individual essential skills strengths and areas for improvement; and
- improve essential skills and increase success in an apprenticeship program.

Tools are available online or for order at: <https://www.canada.ca/en/employment-social-development/programs/essential-skills/tools.html>.

The application of these skills may be described throughout this document within the competency statements which support each subtask of the trade. The following are summaries of the requirements in each of the essential skills, taken from the essential skills profile. A link to the complete essential skills profile can be found at: www.red-seal.ca.

READING

Automotive refinishing technicians read repair orders (work orders and estimates), labels, application or installation instructions, technical data sheets (TDS), manufacturers' service bulletins and manuals for safe use and storage of paints, solvents and equipment. They also read trade publications to learn about new technologies, products and materials.

DOCUMENT USE

Automotive refinishing technicians reference safety or hazard icons to obtain information on a product's toxicity. They read forms and tables to determine product specifications such as temperatures, humidity, drying times and ratios. Automotive refinishing technicians also use colour chips, vehicle information, tinting charts and technology to determine colour variant to achieve a blend-able match. They use safety and environmental documentation such as safety data sheets (SDS), VOC and isocyanates logs, maintenance logs, and TDS. They track and log colour libraries. They use business-related documentation such as: time sheets, repair orders (work orders), production schedules and pre-delivery checklists.

WRITING

Automotive refinishing technicians write notes on repair orders (work orders) and forms to describe previous damage, work that was carried out and any irregularities. Automotive refinishing technicians may write reports describing workplace accidents and note information for the colour library, chemical tracking and equipment logs. They may prepare lists for ordering inventory.

ORAL COMMUNICATION

Automotive refinishing technicians communicate with colleagues and customers about the scope of work and work completed. They explain procedures to apprentices and estimators. Automotive refinishing technicians need to communicate with suppliers and manufacturer representatives.

NUMERACY

Automotive refinishing technicians monitor temperatures, humidity and pressure levels. They calculate quantities of materials needed and mix refinishing materials based on weight, volume, ratios and formulas. Automotive refinishing technicians may also estimate time required to complete painting tasks including force-drying calculations.

THINKING

Automotive refinishing technicians use analytical and problem solving skills to determine appropriate solutions to refinishing issues such as surface imperfections, contamination, production problems and equipment problems. Automotive refinishing technicians make decisions about which products to use to create the desired finish. They use organizational skills to enhance production schedule and maintain work flow.

WORKING WITH OTHERS

Automotive refinishing technicians spend most of their time working independently but they are required to coordinate activities with colleagues from body repair, detailing, vehicle preparation and office staff to maintain production schedule. They may also work directly with colleagues to help them with vehicle preparation duties.

DIGITAL TECHNOLOGY

Automotive refinishing technicians may use digital tools and equipment to measure temperature, humidity, air pressure and paint thickness. They may also use digital devices to determine paint colours and codes. Automotive refinishing technicians may use computer software to retrieve paint formulas and access instructions for selecting and mixing appropriate refinishing materials. Workplace records and technical and safety information may be recorded and accessed using computers.

CONTINUOUS LEARNING

Automotive refinishing technicians are continuously learning to keep up with the changes in the industry in relation to products, vehicles and equipment. They may attend manufacturers' or suppliers' seminars to become a certified user of their products. Some jurisdictions require automotive refinishing technicians to participate in continuous learning.

ELEMENTS OF HARMONIZATION FOR APPRENTICESHIP TRAINING

At the request of industry, the Harmonization Initiative was launched in 2013 to *substantively align* apprenticeship systems across Canada by making training requirements more consistent in the Red Seal trades. Harmonization aims to improve the mobility of apprentices, support an increase in their completion rates and enable employers to access a larger pool of apprentices.

As part of this work, the Canadian Council of the Directors of Apprenticeship (CCDA) identified four main harmonization priorities in consultation with industry and training stakeholders:

1. Trade name

The official Red Seal name for this trade is Automotive Refinishing Technician.

2. Number of Levels of Apprenticeship

The number of levels of technical training recommended for the Automotive Refinishing Technician trade is two.

3. Total Training Hours during Apprenticeship Training

The total hours of training, including both on-the-job and in-school training for the Automotive Refinishing Technician subtrade is 3600.

4. Consistent sequencing of training content (at each level) using the most recent Occupational Standard

Implementation for harmonization will take place progressively. Level one to be implemented in 2020/2021 and level two in 2021/2022.

B – Performs preparation

B-5 Prepares surface	5.01 Performs initial preparation 1	5.02 Masks surface 1, 2	5.03 Strips surface 1	5.04 Sands surface 1
B-6 Uses repair materials	6.01 Mixes repair materials 1	6.02 Applies repair materials 1	6.03 Applies protective coating 1	

C – Performs refinishing procedures

C-7 Prepares refinishing equipment	7.01 Prepares spray booth 1, 2	7.02 Performs spray gun setup 1, 2		
C-8 Prepares refinishing equipment	8.01 Mixes refinishing materials 1, 2	8.02 Performs colour adjustments 2		
C-9 Prepares refinishing equipment	9.01 Applies sealers 2	9.02 Applies base coat 1, 2	9.03 Applies single-stage paint 1, 2	9.04 Applies clear coat 2
C-10 Prepares refinishing equipment	10.01 Removes masking materials 2	10.02 Corrects surface imperfections 2	10.03 Performs final check 2	

TRAINING PROFILE CHART SASKATCHEWAN (LEVEL ONE ONLY (at this time))

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

Note: Level One Auto Body and Collision Technician (ABCT) and Automotive Refinishing Technician (ART) grant the same technical training credit by the SATCC. Either apprentice may switch to the other trade upon completion of level one technical training and work experience. Graduates of Saskatchewan Polytechnic's applied certificate ABCT program with sufficient work experience hours may enter Automotive Refinishing Technician apprenticeship at level two.

At this time, all Saskatchewan's Automotive Refinishing Technician apprentices attend technical training in Alberta at NAIT or SAIT.

Automotive Refinishing Technician Level two apprenticeship technical training has yet to be developed. Once industry indentures sufficient, sustainable numbers of Automotive Refinishing Technician apprentices, level two will begin development.

Saskatchewan Polytechnic Level One (Harmonized)	Transcript Code	Hours
Trade Mathematics	MATH 131 – Theory	12
Metal Repair	METL 122 – Theory	20
	METL 123 – Shop	36
Refinishing	PNTG 122 – Theory	24
	PNTG 123 – Shop	32
Vehicle Body Trim Repair	VEHC 122 – Theory	24
	VEHC 123 – Shop	32
		180

Saskatchewan Polytechnic (To Be Developed) Level Two (Harmonized)	Transcript Code	Hours
Refinishing	PNTG 222 – Theory	20
	PNTG 223 – Shop	40
Vehicle Body Trim Repair	VEHC 222 – Theory	23
	VEHC 223 – Shop	47
Welding	WELD 230 – Theory	15
	WELD 231 – Shop	35
		180

TRAINING PROFILE CHART ALBERTA

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

Northern and Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level One (Harmonized)	Hours
SECTION ONE: STANDARD WORKPLACE SAFETY, INDUSTRY OVERVIEW, REGULATIONS AND ADMINISTRATION	37 hours total
Safety Legislation, Regulations & Industry Policy in the Trades	2
Climbing, Lifting, Rigging and Hoisting	2
Hazardous Materials & Fire Protection	2
Apprenticeship Training Program	2
Alberta's Industry Network	2
Interprovincial Standards Red Seal Program	2
Safety in the Workplace	6
Regulations that Affect the Trade	6
Workplace Coaching Skills	3
Estimates	8
Communication	2
SECTION TWO: COMPONENT REMOVAL, INSTALLATION AND FINAL DETAIL	47 hours total
Tools	8
Removal and Installation	30
Batteries	3
Final Detail	6
SECTION THREE: SUBSTRATE PREPARATION	96 hours total
Substrate Identification	6
Application of Fillers	18
Sanding	24
Masking	18
Application of Undercoats	30
	180 hours total

Northern and Southern Alberta Institute of Technology (NAIT, SAIT) Polytechnic Level Two (Harmonized)	Hours
SECTION ONE: SHOP PRACTICES AND PROCEDURES	24 hours total
Shop Maintenance	18
Shop Procedures	6
SECTION TWO: PRODUCT PREPARATION	49 hours total
Topcoat Identification	18
Mixing	4
Colour Matching	27
SECTION THREE: TOPCOAT APPLICATION	107 hours total
Application	95
Application Faults	12
	180 hours total

ON-THE JOB AND IN-SCHOOL TRAINING

CONTENT FOR THE AUTOMOTIVE REFINISHING

TECHNICIAN SUBTRADE

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	6 weeks	180 hours
Section One		37 hours total
Standard Workplace Safety, Industry Overview, and Regulations and Administration		
A Safety Legislation, Regulations and Industry policy		
B Climbing, Lifting, Rigging and Hoisting		
C Hazardous Materials and Fire Protection		
D Apprenticeship Training Program		
E Alberta's Industry Network (<i>due to the fact SK's technical training is in Alberta</i>)		
F Canadian Standards Red Seal Program		
G Safety in the Workplace		
H Trade Regulations		
I Workplace Coaching Skills		
J Estimates		
K Communication		
A	Safety Legislation, Regulations and Industry Policy	2 hours
	<ul style="list-style-type: none"> • 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. 	
Mentors can assist the apprentice to prepare for this section of technical training by:		
	<ul style="list-style-type: none"> • <i>identifying safe work practices.</i> • <i>describing environmental hazards of the trade and policies/procedures associated with these hazards.</i> 	

- *demonstrating the use of supplied breathing systems.*
 - *explain/enforce regulations applying to the auto body trade such as WHMIS, OH&S and VOC.*
-

B Climbing, Lifting, Rigging and Hoisting **2 hours**

- 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.

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

- *demonstrating proper climbing, lifting, rigging and hoisting techniques.*
 - *describing environmental hazards of the trade and policies/procedures associated with these hazards.*
-

C Hazardous Materials and Fire Protection **2 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.

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

- *identifying safe work practices.*
 - *describing environmental hazards of the trade and policies/procedures associated with these hazards.*
 - *demonstrating the use of supplied breathing systems.*
 - *explain/enforce regulations applying to the auto body trade such as WHMIS, OH&S and VOC.*
-

D Apprenticeship Training Program **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.

Topics covered in this section of training:

This section of training exceeds scope of work in Level One and exceeds the minimum sequencing as set out in the Automotive Refinishing Technician RSOS. Its purpose is to assist in the understanding of an apprentice the steps to earn journeyman certification.

E 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).

Topics covered in this section of training:

This section of training exceeds scope of work in Level One and exceeds the minimum sequencing as set out in the Automotive Refinishing Technician RSOS. Its purpose is to assist in the understanding Alberta’s apprenticeship system. Even though Saskatchewan’s apprentices take this course, the Alberta system is similar to Saskatchewan’s.

F Canadian Standards Red Seal Program

2 hours

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

Topics covered in this section of training:

This section of training exceeds scope of work in Level One and exceeds the minimum sequencing as set out in the Automotive Refinishing Technician RSOS. Its purpose is to assist in the understanding of the Canadian Standards Red Seal Program and Red Seal trade certification.

G Safety in the Workplace

6 hours

- Describe types of personal hazards associated with the work assigned to an auto body technician (electrical tools, rotating machinery, comp. air, jacking and hoisting, exhaust gases, etc).
- Use safety equipment and procedures when dealing with hazards associated with auto body work.
- Control hazardous products used by auto body technicians.
- Describe environmental hazards associated with the trade.
- Use supplied air breathing systems.

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

- *identifying safe work practices.*
- *describing environmental hazards of the trade and policies/procedures associated with these hazards.*
- *demonstrating the use of supplied breathing systems.*
- *explain/enforce regulations applying to the auto body trade such as WHMIS, OH&S and VOC.*

H Regulations That Affect the Trade

6 hours

- Apply Workplace Health and Safety regulations.
- Apply Occupational Health and Safety (OHS) regulations.
- Apply Workplace Hazardous Materials Information System (WHMIS) regulations.
- Apply fire regulations.
- Apply Workers’ Compensation Board (WCB) regulations.
- Apply environmental regulations including volatile organic compounds (VOC) legislation.

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

- *identifying safe work practices.*
- *describing environmental hazards of the trade and policies/procedures associated with these hazards.*
- *explain/enforce regulations applying to the auto body trade such as WHMIS, OH&S and VOC.*

I Workplace Coaching Skills **3 hours**

- Describe the process for coaching an apprentice

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

- *demonstrating mentoring and workplace communication skills.*
-

J Estimates **8 hours**

- Describe the requirements of an estimate.
- Explain estimates and repair orders.
- Explain the use of Original Equipment Manufacturer (OEM) service information.
- Explain the use of aftermarket service information.
- Develop a work plan.

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

- *explaining the creation and accuracy in work estimates.*
-

K Communication **2 hours**

- Practice professional verbal and nonverbal communication between trade related contacts.
- Interpret standard operating procedures.

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

- *demonstrating workplace communication skills.*
-

Section Two **47 hours total**

Component Removal, Installation and Fine Detail

- A Tools
 - B Removal and Installation
 - C Batteries
 - D Fine Detail
-

A Tools **8 hours**

- Identify hand tools.
- Identify power tools.
- Identify equipment.

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

- *having the apprentice use the tools and shop equipment common for an Automotive Refinishing Technician.*
-

B Removal and Installation **30 hours**

- Identify types of body components.
- Identify the purpose of trim.
- Identify restraint systems.
- Describe methods of fastening.
- Assess components for hidden damage.
- Describe component storage procedures.
- Remove bolt on components.
- Describe body panel alignment of bolt on components.
- Describe headlight alignment procedure.
- Describe leak test procedure.
- Install bolt on components.

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

- *allowing the apprentice to remove and install interior/exterior trim components.*
- *discussing safety when removing components that pertain to the restraint system.*

Topics covered in this section of training:

This section of training exceeds scope of work in Level One and exceeds the minimum sequencing as set out in the Automotive Refinishing Technician RSOS. Its purpose is to assist in the understanding of an apprentice the steps in disassembly and reassembly with an Auto Body and Collision Technician.

C Batteries

3 hours

- Identify battery types.
- Describe battery function.
- Describe battery charging.
- Describe battery boosting.

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

- *supervising the testing and servicing of a battery.*

Topics covered in this section of training:

This section of training exceeds scope of work in Level One and exceeds the minimum sequencing as set out in the Automotive Refinishing Technician RSOS. Its purpose is to assist in the understanding of an apprentice the steps in disassembly and reassembly with an Auto Body and Collision Technician.

D Final Detail

6 hours

- Describe detailing procedures.
- Describe types of decals and striping.
- Describe removal of decals and striping.
- Describe installation of decals and striping.
- Clean interior of vehicle.
- Clean exterior of vehicle.

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

- *demonstrating final detailing procedures and techniques.*

Section Three

96 hours total

Substrate Preparation

- A Substrate Identification
- B Application of Fillers
- C Sanding
- D Masking
- E Applications of Undercoats

A Substrate Identification

6 hours

- Identify substrate.
- Identify condition of substrate.
- Describe substrate preparation methods.

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

- *allowing the apprentice to observe and demonstrate identifying the substrate surface of the vehicle.*
- *allowing the apprentice to clean the substrate surface and vehicle.*

B Application of Fillers**18 hours**

- Describe surface preparation for filler.
- Apply fillers.
- Perform sanding of fillers

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

- *supervising the apprentice during a repair requiring filler.*
 - *identifying various methods of paint removal on good and poor substrate surfaces.*
-

C Sanding**24 hours**

- Describe surface preparation for filler.
- Describe undercoat preparation methods.
- Perform sanding for undercoats.
- Describe topcoat preparation methods.
- Perform sanding for topcoats.

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

- *supervising the apprentice during a repair requiring filler.*
 - *identifying various methods of paint removal on good and poor substrate surfaces.*
 - *explaining the sanding process to prepare different types of substrate.*
 - *allowing the apprentice to sand and prep an area for repair.*
-

D Masking**18 hours**

- Describe methods and materials used for masking.
- Mask a repair area for undercoat application.
- Mask a repair area for topcoat application.

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

- *describe the various masking techniques for various types of repair.*
 - *allowing the apprentice to mask an area for repair.*
-

E Application of Undercoats**30 hours**

- Describe undercoats.
- Prepare undercoat materials.
- Perform operating procedures for refinishing equipment.
- Perform maintenance procedures for refinishing equipment.
- Apply undercoats.

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

- *supervising the apprentice during the preparation and application of undercoating.*

Level Two

6 weeks

180 hours

Section One

24 hours total

Shop Practices and Procedures

- A Shop Maintenance
 - B Shop Procedures
-

A Shop Maintenance

18 hours

- Describe spray environment set-up.
- Describe air supply systems.
- Describe record keeping procedures.
- Describe the management of materials inventory.
- Describe the management of waste materials.
- Identify mixing room requirements.
- Maintain mixing room.
- Maintain spray environment.
- Maintain refinishing equipment.

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

- *explaining the spray environment set-up and air supply systems.*
 - *demonstrating record keeping procedures and the management of materials inventory.*
 - *explaining the management of waste materials.*
 - *identifying mixing room requirements.*
 - *the maintaining of the mixing room.*
 - *the maintaining spray environment and the refinishing equipment.*
-

B Shop Procedures

6 hours

- Explain a refinish supplement.
- Explain a refinish estimate.
- Identify refinish work required.
- Develop refinish schedule.

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

- *explaining a refinish supplement.*
 - *explaining a refinish estimate.*
 - *Identifying refinish work that is required.*
 - *develop a refinish schedule.*
-

Section Two

49 hours total

Product Preparation

- A Topcoat Identification
 - B Mixing
 - C Colour Matching
-

A Topcoat Identification

18 hours

- Identify existing substrates.
- Describe topcoat considerations for complete panel refinish.
- Describe topcoat considerations for spot repair.
- Select a formula that corresponds to a paint code. Maintain spray environment.

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

- *identifying existing substrates.*
- *describing topcoat considerations for complete panel refinish.*
- *describing topcoat considerations for spot repair.*
- *selecting a formula that corresponds to a paint code.*
- *describing additive considerations.*

B Mixing Identification

4 hours

- Describe additive considerations.
- Mix paint according to specifications.
- Correct an over-pour situation when mixing paint.

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

- *explaining colour theory.*
- *identifying a colour mismatch.*
- *correcting an over-pour situation when mixing paint.*
- *adjusting colour using gun technique*
- *adjusting colour by tinting*

C Colour Matching

27 hours

- Explain colour theory.
- Identify a colour mismatch.
- Adjust colour using gun technique.
- Adjust colour by tinting.

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

- *explaining colour theory*
- *identifying a colour mismatch*
- *adjusting colour using gun technique*
- *adjusting colour by tinting*

Section Three

107 hours total

Topcoat Application

- A Apply Topcoat
- B Paint Faults

A Apply Topcoat

95 hours

- Describe topcoat application.
- Describe blending techniques and applications.
- Prepare the refinisher for topcoat application.
- Prepare the work piece for topcoat application.
- Prepare spray equipment for topcoat application.
- Perform topcoat application.
- Perform multi-stage blend repair.

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

- *describing topcoat application.*
- *describing blending techniques and applications.*
- *preparing the refinisher for topcoat application.*
- *preparing the workpiece for topcoat application.*
- *preparing the spray equipment for topcoat application.*
- *supervising the apprentice during the performing a topcoat application.*
- *supervising the apprentice during the performing multi-stage blend repair.*

B Paint Faults**12 hours**

- Identify paint faults.
- Repair paint faults.

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

- *supervising the apprentice during the identifying paint faults.*
- *supervising the apprentice during the repairing paint faults.*

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.

Saskatchewan Apprenticeship & Trade Certification Commission

2140 Hamilton St Regina SK S4P 2E3

Tel: (306) 787-2444

Fax: (306) 787-5105

Toll Free: 1-877-363-0536

web site: www.saskapprenticeship.ca

District Offices

Estevan (306) 637-4930

La Ronge (306) 425-4385

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