



ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship
Training Standard

Automotive Electronic
Accessory Technician

Trade Code: 310K

Development Date: January 2003

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

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SKILL SETS

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AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

PREFACE

This training document was developed by the Workplace Support Services Branch of the Ministry of Training, Colleges and Universities (MTCU) in consultation with representatives from the industry. These Training Standards are intended to be used by the apprentice, trainers and employers/sponsors as a "blueprint" for training or as a prerequisite for government accreditation/ certification.

The care and maintenance of this book is the joint responsibility of the apprentice and the employer/sponsor. The Training Standards were developed specifically for documenting the apprentice's acquisition of skills.

The book becomes the only record of an apprentice's training.

Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College's website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

IMPORTANT DIRECTIONS TO EMPLOYERS/SPONSORS AND TRAINERS

The Training Standards identify skills required for this occupation and its related training program.

These Training Standards have been written in concise statements which describe how well an apprentice must perform each skill in order to become competent. Competence means being able to do the performance to the required standard on request.

In using these Training Standards, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.

Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Employers/Sponsors participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each unit.

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

IMPORTANT DIRECTIONS TO THE APPRENTICE

1. All hours working for each employer/sponsor(s) should be recorded in the Employer/Sponsor Information section. All Performance Objectives and skills completed while working for each Employer/Sponsor(s) should be recorded.
2. The "Summary of Hours" should be completed, signed and dated by both the apprentice and employer/sponsor, when either all terms of the training agreement have been completed or the apprentice leaves the employer/sponsor.
3. It is the responsibility of the apprentice to inform the local Apprenticeship Client Services office regarding the following changes:
 - change of employer/sponsor address;
 - change of apprentice name or address;
 - transfer to a new employer/sponsor.
4. At the fulfilment of all terms of the Training Agreement, the Apprentice Completion Form must be completed and signed by the current employer/sponsor. Present these completed and authorized Training Standards and the Apprentice Completion Form to your local Apprenticeship Client Services office.

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.
2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Training, Colleges and Universities
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
TTY: 1-866-533-6339 or 416-325-4084.

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

APPRENTICE RECORD

Apprentice Name: _____

EMPLOYER/SPONSOR INFORMATION

Training Agreement Number: _____

Name: _____

Address: _____

Telephone: _____

Summary of Training:

Dates of Employment: _____
From _____ To _____

Performance Objectives signed off:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

_____	_____	_____	_____
Employer/Sponsor Signature	Date	Apprentice Signature	Date

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

APPRENTICE RECORD

Apprentice Name: _____

EMPLOYER/SPONSOR INFORMATION

Training Agreement Number: _____

Name: _____

Address: _____

Telephone: _____

Summary of Training:

Dates of Employment: _____
From _____ To _____

Performance Objectives signed off:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Employer/Sponsor Signature

Date

Apprentice Signature

Date

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

APPRENTICE RECORD

Apprentice Name: _____

EMPLOYER/SPONSOR INFORMATION

Training Agreement Number: _____

Name: _____

Address: _____

Telephone: _____

Summary of Training:

Dates of Employment: _____
From _____ To _____

Performance Objectives signed off:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Employer/Sponsor Signature

Date

Apprentice Signature

Date

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

APPRENTICE COMPLETION FORM

Apprentice Name: _____

Print

Signature

Social Insurance Number: _____

Training Units when completed should be signed off by the Employer/Sponsor on the following page and presented with this completion form to your local Apprenticeship Client Services office. Any supporting documentation should also be attached.

In-School Completed: Yes () No () Not Applicable ()
(proof to be provided)

Hours completed as Yes () No () Not Applicable ()
per Training Agreement:

Employer/Sponsor Name: _____

Address: _____

Telephone: _____

Signature

MTCU USE ONLY:

Recommended for Exam: Yes () No ()

Signature

Consultant/Office Code

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

TRAINING UNIT COMPLETION FORM

Training Unit	Title	Signing Authority
U5740.0	Perform Safety, Work and Business Practices	_____
U5741.0	Plan and Prepare for the Installation	_____
U5742.0	Install Immobilizer/Theft-Deterrent System	_____
U5743.0	Install Remote Engine Starter Systems	_____
U5744.0	Service and Repair Immobilizer/ Theft-Deterrent Systems	_____
U5745.0	Service and Repair Remote Starter Systems	_____

SPECIAL INSTRUCTIONS

NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS:

Shaded performance objectives and skills are optional, that is, they do not have to be completed or signed off for the apprentice to complete his or her apprenticeship.

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5740.0 PERFORM SAFETY, WORK AND BUSINESS PRACTICES

GENERAL PERFORMANCE OBJECTIVE

Perform safety, work, and business practices, by: identifying workplace health and safety; wearing, adjusting, and maintaining personal protective equipment; maintaining a safe and secure workplace; handling and storing hazardous materials; following company fire procedures; operating emergency safety equipment; practicing industrial hygiene; accessing, interpreting, and applying service information; performing customer service activities; establishing rapport with customers' completing written injury and accidents reports to the *Occupational Health and Safety Act*, government regulations, manufacturer's recommendations and company policy.

PERFORMANCE OBJECTIVES

SKILLS

5740.01 **Identify workplace health and safety hazards**, including: exhaust and explosive fumes, dust, sound levels, liquid and dry chemicals, electrical and mechanical hazards (air lines and ventilation); so that the potential for personal injury and damage to the equipment, vehicles, and the environment are minimized, and corrective action is taken and hazards are reported; according to company policy and government safety regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.02 **Wear, adjust and maintain personal protective equipment**, including: eye, ear, hand, and foot protectors; to ensure a correct fit and optimum protection for the wearer and the specific task(s) performed; according to manufacturer's recommendations, safety requirements, company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5740.0 PERFORM SAFETY, WORK AND BUSINESS PRACTICES - Cont'd

5740.03 **Maintain a safe and secure workplace**, by: maintaining cleanliness and order, removing hazards, disposing of waste material, keeping aisles and floor clear of obstructions, venting fumes and dust, safely storing tools and equipment; so that potential for personal accidents, injury, and environmental damage is minimized; according to company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.04 **Handle and store hazardous material**, including: corrosives, dry chemicals and gases, using specified handling and storage equipment and materials; so that individuals are protected from injury, the environment from contamination and safety precautions are followed; according to company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.05 **Follow company fire procedures**, by: locating and assessing the severity and type of fire, taking appropriate action, including suppressing minor fires, activating alarm(s), and reporting the fire; according to company policy.

Date Completed

Trainer Signature

Apprentice Signature

5740.06 **Operate emergency safety equipment**, including: fire extinguishers, respirators, stretchers, and fire blankets, by: extinguishing fires and ensuring that procedures are carried out in a safe, efficient and timely manner; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5740.0 PERFORM SAFETY, WORK AND BUSINESS PRACTICES - Cont'd

5740.07 **Practice industrial hygiene**, by: wearing appropriate clothing, using eye wash, barrier creams, and/or showering; to avoid contamination or injury; according to company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.08 **Access, interpret and apply service information**, including: technical service bulletins, and parts catalogues; by: identifying make, model, year of vehicle and components, locating vehicle identification number (VIN) and manufacturer's labels, operating microfiche and computerized service information systems, including: CD-ROM; obtaining on-line manufacturer's assistance; using electronic data communication equipment; according to manufacturer's recommendations, company policy, customer requirements and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.09 **Perform customer service activities**, by: advising customers on installation and/or service and repair requirements and the general condition of the vehicle, components and accessories, communicating honestly and clearly, maintaining a positive attitude, responding courteously to customer queries, resolving concerns, preparing a detailed and accurate invoice/work order, explaining requirements and costs, returning replaced parts and promoting a professional image; according to manufacturer's recommendations, company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

5740.10 **Establish rapport with customers, supervisors and co-workers**, by: developing positive working relationships, communicating effectively, working as a team member and conducting oneself in a courteous, respectful, thoughtful, and polite manner; according to company policy.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5740.0 PERFORM SAFETY, WORK AND BUSINESS PRACTICES - Cont'd

5740.11 **Complete written injury and accident reports**, so that information for compensation boards and insurance companies, legal and insurance forms, are complete, accurate and timely; according to company policy and government regulations and legal requirements.

Date Completed

Trainer Signature

Apprentice Signature

5740.12 **Store and maintain tools and equipment**, including: hand, power, specialized, and electronic service and shop equipment; by: adjusting, sharpening and re-shaping tools, lubricating, cleaning and calibrating; ensuring tools and equipment are in good working order and safe operating condition; according to manufacturer's recommendations, company policy and government regulations.

Date Completed

Trainer Signature

Apprentice Signature

Employer Name

Employer Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5741.0 PLAN AND PREPARE FOR THE INSTALLATION

GENERAL PERFORMANCE OBJECTIVE

Plan and prepare for the installation, by: ensuring the availability of shop tools and equipment; verifying vehicle integrity; de-activating supplemental restraint system (SRS), and de-activating the battery; according to the manufacturer's recommendations, specifications, company policy and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

5741.01 **Ensure availability of shop tools and equipment**, including: hand, power, specialized, electronic service, and test instruments, according to the job and/or customer requirements.

Date Completed

Trainer Signature

Apprentice Signature

5741.02 **Verify vehicle's integrity**, by: activating and confirming performance and function of vehicle and accessory devices, including: lights and indicators; checking for warning lamp indicators, audible systems, gauge operation, interior/exterior condition; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5741.0 PLAN AND PREPARE FOR THE INSTALLATION - Cont'd

5741.03 **De-activate supplemental restraint systems (SRS)**, including: air bags and seat belt pre-tensioners; by: disconnecting and disabling (temporarily); using hand, power and specialized tools; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

5741.04 **De-activate battery**, by (first) installing a keep-alive memory power source, disconnecting and isolating the battery ground terminal, using hand tools and materials; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

Employer Name

Employer Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5742.0 INSTALL IMMOBILIZER/THEFT-DETERRENT SYSTEMS

GENERAL PERFORMANCE OBJECTIVE

Install immobilizer/theft-deterrent system, by: accessing vehicle data base; reading and interpreting wiring diagrams and schematics; verifying accuracy of data; selecting mounting and connecting locations; mounting main control unit; mounting accessory components; performing electrical interface; programming the system devices; testing and calibrating devices and components; organizing, routing and securing wiring; re-assembling dash and components; performing final installation checks; performing customer interface, and documenting the installation; according to manufacturer's recommendations, specifications, company policy and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

5742.01 **Access vehicle data base**, by: identifying colour codes, location, function and related notes; using materials including: manuals, computer data, faxback systems, technical telephone support, and in-house documentation; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

5742.02 **Read and interpret wiring diagrams and schematics**, to identify various aspects, including: reference points, identification of component(s), connections to earth points, colour(s) of wiring, test point connections, points of connection, fusible links, junction box position(s), and the relative position of adjoining systems and components; using instruction and service manuals; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5742.0 INSTALL IMMOBILIZER/THEFT-DETERRENT SYSTEMS - Cont'd

5742.03 **Verify accuracy of data**, by: measuring or testing identified circuits to confirm information supplied, using electronic test equipment, including: digital multi-meter (DMM) and specialty testers; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

5742.04 **Select mounting and connection locations**, including: safe and secure location for main control unit, connections, and components, to ensure that locations selected will avoid any physical, mechanical, or electrical interference with normal vehicle operation; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

5742.05 **Mount main control unit**, using specified mounting hardware or supplied mounting kit, in the selected location; using hand tools; to ensure a secure fit; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

5742.06 **Mount accessory components**, including: power door locks, windows and trunk release and pin switch, using specified mounting hardware or supplied mounting kit, in the selected location; using hand tools; to ensure a secure fit; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5742.0 INSTALL IMMOBILIZER/THEFT-DETERRENT SYSTEMS - Cont'd

5742.07 **Perform electrical interface**, by: connecting to the identified circuits; using a secure automotive connection method, including: tape/heat shrink tubing, crimp terminals, or designed connection kit; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.08 **Program the system devices**, using programming charts and procedures; according to manufacturer's recommendations and company policy.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.09 **Test and calibrate devices and components**, including: calibrating accessories, sensors, pin switches, audio discriminators, and field disturbances; by: analyzing the performance and functioning of the immobilizer/theft-deterrent system and measuring; according to manufacturer's recommendations, company policy, customer and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.10 **Organize, route and secure wiring**, by: installing a protective loom or concealment material similar to vehicle set-up; using hand and specialized tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5742.0 INSTALL IMMOBILIZER/THEFT-DETERRENT SYSTEMS - Cont'd

5742.11 **Re-assemble dash and components**, by: installing the original parts, including: panels, mounting clips, screws, and guides; using hand tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.12 **Perform final installation checks**, by: testing and analyzing performance and function; using hand, power and specialized tools, and company-supplied checklists; to ensure that the vehicle's systems operate as designed; according to manufacturer's recommendations, company policy, customer and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.13 **Perform customer interface**, by: briefing the customer, demonstrating the operation and maintenance of the system and components, and providing operators' instruction manuals and warranty information; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5742.14 **Document the installation**, by: completing paperwork and forms, including: invoices, work orders, or insurance certificates, and warranty information; according to company policy, and customer requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____
	Employer Name	Employer Signature
	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5743.0 INSTALLS REMOTE ENGINE STARTER SYSTEMS

GENERAL PERFORMANCE OBJECTIVE

Install remote engine starter systems, by: identifying colour codes; reading and interpreting wiring diagrams and schematics; verifying accuracy of data; verifying existence of original equipment manufacturer's (OEM) security system; selecting mounting and connection locations; mounting main control unit; mounting accessory components; performing electrical interface; interfacing original equipment manufacturer's (OEM) security system; programming system devices; testing and calibrating devices and components; confirming operation of safety devices; organizing, routing and securing wiring; re-assembling dash and components; performing final installation checks, and performing customer interface; according to manufacturer's recommendations, specifications, company policy and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

5743.01 **Access vehicle data base**, by: identifying colour codes, location, function and related notes; using materials, including: manuals, computer data, faxback systems, technical telephone support, and in-house documentation; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

5743.02 **Read and interpret wiring diagrams and schematics**, to identify various aspects, including: reference points, identification of component(s), connections to earth points, colour(s) of wiring, test point connections, points of connection, fusible links, junction box position(s), and the relative position of adjoining systems and components; using instruction and service manuals; according to manufacturer's recommendations and company policy.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5743.0 INSTALLS REMOTE ENGINE STARTER SYSTEMS - Cont'd

5743.03 **Verify accuracy of data**, by: measuring or testing identified circuits to confirm information supplied, using electronic test equipment, including: digital multi-meter (DMM) and specialty testers; according to manufacturer's recommendations and company policy.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.04 **Verify existence of original equipment manufacturer's (OEM) security system**, by: visually inspecting the ignition key, observing the dash indicator lights, vehicle label and/or data base information resources; according to manufacturer's recommendations and company policy.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.05 **Select mounting and connection locations**, including: safe and secure location for main control unit, connections, and components, to ensure that locations selected will avoid any physical, mechanical, or electrical interference with normal vehicle operation; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.06 **Mount main control unit**, using specified mounting hardware or supplied mounting kit, in the selected location; using hand tools; to ensure a secure fit; according to manufacturer's recommendations, company policy, and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5743.0 INSTALLS REMOTE ENGINE STARTER SYSTEMS - Cont'd

5743.07 **Mount accessory components**, using specified mounting hardware or supplied mounting kit, in the selected location; using hand tools; to ensure a secure fit; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.08 **Perform electrical interface**, by: connecting to the identified circuits; using a secure automotive connection method, including: tape/heat shrink tubing, crimp terminals, or designed connection kit; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.09 **Interface original equipment manufacturer's (OEM) security system**, by using the temporary by-pass module, according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.10 **Program the system devices**, using charts and procedures; according to manufacturer's recommendations and company.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5743.0 INSTALLS REMOTE ENGINE STARTER SYSTEMS - Cont'd

5743.11 **Test and calibrate devices and components**, including: harnesses, connectors, sensors, and expansion modules, by: analysing performance and function-testing the remote starter system and temporary by-pass module; according to manufacturer's recommendations, company policy, customer and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.12 **Confirm operation of safety devices**, by: analysing performance and function-testing safety interrupt switches and engine overspeed protection; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.13 **Organize, route and secure wiring**, by: installing a protective loom or concealment material similar to vehicle set-up; using hand and specialized tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.14 **Re-assemble dash and components**, by: installing the original parts, including: panels, mounting clips, screws, and guides; using hand tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5743.0 INSTALLS REMOTE ENGINE STARTER SYSTEMS - Cont'd

5743.15 **Perform final installation checks**, by: testing and analyzing performance and function; using hand, power and specialized tools, and company-supplied checklists; to ensure that the vehicle's systems operate as designed; according to manufacturer's recommendations, company policy, customer and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____

5743.16 **Perform customer interface**, by: briefing the customer, demonstrating the operation and maintenance of the system and components, and providing operators' instruction manuals and warranty information; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed	Trainer Signature	Apprentice Signature
_____	_____	_____
	Employer Name	Employer Signature
	_____	_____

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5744.0 SERVICE AND REPAIR IMMOBILIZER/THEFT-DETERRENT SYSTEMS

GENERAL PERFORMANCE OBJECTIVE

Service and repair immobilizer/theft-deterrent systems, by: verifying customer concerns; performing visual inspection; diagnosing and troubleshooting system and components; repairing system and components; performing final checks, and performing customer interface; according to manufacturer's recommendations, specifications, company policy and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

5744.01 **Verify customer concerns**, by: receiving and recording information, probing for nature of the problem and specific symptoms, communicating in a courteous and friendly manner, using a company-supplied checklist; according to company policy.

Date Completed

Trainer Signature

Apprentice Signature

5744.02 **Perform visual inspection**, identifying system type and application; by: checking for worn, damaged, loose, missing, or defective components and connections, including: modules, batteries, safety interrupt switches, cables, fuses, solenoids, wiring harnesses, displays, and programming; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5744.0 SERVICE AND REPAIR IMMOBILIZER/THEFT-DETERRENT SYSTEMS - Cont'd

5744.03 **Diagnose and troubleshoot system and components**, by: testing, analysing performance and function, noise, odour, corrosion and temperature; including: modules, batteries, safety interrupt switches, cables, fuses, solenoids, relays, wiring harnesses, and displays; using specialized electronic service tools, load testers, digital multi-meters (DMM), and chargers; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

5744.04 **Repair system and components**, including: batteries, safety interrupt switches, cables, fuses, solenoids, relays, wiring harnesses, displays, and programming; by: exchanging, upgrading, and servicing; using, hand, power, and specialized electronic service tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

5744.05 **Perform final checks**, by testing and analysing performance and function; ensuring that vehicle systems operate as designed; using company-supplied checklists; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5744.0 SERVICE AND REPAIR IMMOBILIZER/THEFT-DETERRENT SYSTEMS - Cont'd

5744.06 **Perform customer interface**, by: briefing the customer, demonstrating the operation and maintenance of the system and components, and providing operators' instruction manuals and warranty information; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

Employer Name

Employer Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

5745.0 SERVICE AND REPAIR REMOTE STARTER SYSTEMS

GENERAL PERFORMANCE OBJECTIVE

Service and repair remote starter systems, by: verifying customer concerns; performing visual inspection; diagnosing and troubleshooting system and components; repairing system and components; performing final checks, and performing customer interface; according to manufacturer's recommendations, specifications, company policy and safety requirements.

PERFORMANCE OBJECTIVES

SKILLS

5745.01 **Verify customer concerns**, by: receiving and recording information, probing for nature of the problem and specific symptoms, communicating in a courteous and friendly manner, using a company-supplied checklist; according to company policy.

Date Completed

Trainer Signature

Apprentice Signature

5745.02 **Perform visual inspection**, identifying system type and application; by: checking for worn, damaged, loose, missing, or defective components and connections, including: modules, batteries, safety interrupt switches, cables, fuses, solenoids, relays, wiring harnesses and displays; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5745.0 SERVICE AND REPAIR REMOTE STARTER SYSTEMS - Cont'd

5745.03 **Diagnose and troubleshoot system and components**, by: testing, analysing performance and function, noise, odour, corrosion and temperature; including: modules, batteries, safety interrupt switches, cables, fuses, solenoids, relays, wiring harnesses, and displays; using specialized electronic service tools, load testers, digital multi-meters (DMM), and chargers; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

5745.04 **Repair system and components**, including: batteries, safety interrupt switches, cables, fuses, solenoids, relays, wiring harnesses, displays, and programming; by: exchanging, upgrading, and servicing; using, hand, power, and specialized electronic service tools; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

4745.05 **Perform final checks**, by testing and analysing performance and function; ensuring that vehicle systems operate as designed; using company-supplied checklists; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

AUTOMOTIVE ELECTRONIC ACCESSORY TECHNICIAN

U5745.0 SERVICE AND REPAIR REMOTE STARTER SYSTEMS - Cont'd

5745.06 **Perform customer interface**, by: briefing the customer, demonstrating the operation and maintenance of the system and components, and providing operators' instruction manuals and warranty information; according to manufacturer's recommendations, company policy and safety requirements.

Date Completed

Trainer Signature

Apprentice Signature

Employer Name

Employer Signature
