

**COMPETENCY ANALYSIS PROFILE
AUTOMOTIVE SERVICE TECHNICIAN – 310S**

(All unshaded skill sets must be demonstrated/completed)

SKILL SETS

SKILLS

OCCUPATIONAL HEALTH & SAFETY PROCEDURES	Identify potential workplace health and safety hazards	Handle, store and dispose of hazardous materials	Wear and maintain personal protective equipment	Comply with workplace-related legislation	Interpret and apply service related information
U5160.0	5160.01	5160.02	5160.03	5160.04	5160.05
	Practice good housekeeping in the workplace	Comply with WHMIS guidelines			
	5160.06	5160.07			

ENGINE SYSTEMS	Perform visual inspection	Diagnose and troubleshoot cooling system and components	Repair cooling system and components	Verify repair of cooling system and components	Diagnose and troubleshoot engine lubricating systems and components
U5161.0	5161.01	5161.02	5161.03	5161.04	5161.05
	Repair engine lubricating system and components	Verify repair of engine lubricating system and components	Diagnose and troubleshoot cylinder head and components	Repair cylinder head and components	Verify repair of cylinder head and components
	5161.06	5161.07	5161.08	5161.09	5161.10
	Diagnose and troubleshoot engine block assemblies and components	Repair engine block assemblies and components	Verify repair of engine block assemblies and components		
	5161.11	5161.12	5161.13		

AUTOMOTIVE SERVICE TECHNICIAN

SKILL SETS

SKILLS

ELECTRICAL SYSTEMS - STARTING AND CHARGING U5162.0	Perform visual inspection 5162.01	Diagnose and troubleshoot batteries 5162.02	Service and boost/charge batteries 5162.03	Diagnose and troubleshoot starting system and components 5162.04	Repair starting system and components 5162.05
	Verify repair of starting system and components 5162.06	Diagnose and troubleshoot charging system and components 5162.07	Repair charging system and components 5162.08	Verify repair of charging system and components 5162.09	
ENGINE MANAGEMENT SYSTEMS U5163.0	Perform visual inspection 5163.01	Diagnose and troubleshoot fuel control system and components 5163.02	Repair fuel control system and components 5163.03	Verify repair of fuel control system and components 5163.04	Diagnose and troubleshoot ignition system and components 5163.05
	Repair ignition system and components 5163.06	Verify repair of ignition system and components 5163.07	Diagnose & troubleshoot computer-controlled systems & components 5163.08	Repair computer-controlled systems and components 5163.09	Verify repair of computer-controlled systems and components 5163.10
	Perform gasoline engine service 5163.11	Perform electronic diesel engine service 5163.12	Perform mechanical diesel engine service 5163.13		
ELECTRICAL SYSTEMS - BODY U5164.0	Perform visual inspection 5164.01	Diagnose and troubleshoot body electrical & computer-controlled systems and components 5164.02	Repair body electrical and computer-controlled systems and components 5164.03	Verify repair of body electrical and computer-controlled systems and components 5164.04	Diagnose and troubleshoot supplemental restraint systems (SRS) and components 5164.05
	Repair supplemental restraint systems (SRS) and components 5164.06	Verify repair of supplemental restraint systems (SRS) and components 5164.07			

AUTOMOTIVE SERVICE TECHNICIAN

SKILL SETS

SKILLS

FUEL DELIVERY SYSTEMS U5165.0	Perform visual inspection	Diagnose and troubleshoot gasoline fuel systems and components	Repair gasoline fuel systems and components	Verify repair of gasoline fuel systems and components	Diagnose and troubleshoot diesel fuel systems and components
	5165.01	5165.02	5165.03	5165.04	5165.05
	Repair diesel fuels systems and components	Verify repair of diesel fuel systems and components			
	5165.06	5165.07			

TRANSMISSION SYSTEMS U5166.0	Perform visual inspection	Diagnose and troubleshoot clutch systems and components	Repair clutch systems and components	Verify repair of clutch system and components	Diagnose and troubleshoot manual transmissions/transaxles and components
	5166.01	5166.02	5166.03	5166.04	5166.05
	Repair manual transmissions/transaxles and components	Verify repair of manual transmissions/transaxles and components	Diagnose and troubleshoot automatic transmissions/transaxles and components	Repair automatic transmissions/transaxles and components	Verify repair of automatic transmissions/transaxles and components
	5166.06	5166.07	5166.08	5166.09	5166.10
	Diagnose and troubleshoot computer-controlled systems and components	Repair computer-controlled systems and components	Verify repair of computer-controlled systems and components	Diagnose and troubleshoot transfer cases and components	Repair transfer cases and components
5166.11	5166.12	5166.13	5166.14	5166.15	
	Verify repair of transfer cases and components				
	5166.16				

AUTOMOTIVE SERVICE TECHNICIAN

SKILL SETS

SKILLS

DRIVE SHAFTS, DIFFERENTIALS, AND DRIVE AXLE ASSEMBLIES	Perform visual inspection	Diagnose and troubleshoot drive shafts, differentials, drive axle assemblies and components	Repair drive shafts, differentials, drive axle assemblies and components	Verify repair of drive shafts, differentials, drive axle assemblies and components	
U5167.0	5167.01	5167.02	5167.03	5167.04	
SUSPENSION SYSTEMS AND FRAMES	Perform visual inspection	Diagnose and troubleshoot suspension systems, frames/sub-frames and components	Repair suspension systems, frames/sub-frames, and components	Verify repair of suspension systems, frames/sub-frames, and components	
U5168.0	5168.01	5168.02	5168.03	5168.04	
STEERING SYSTEMS	Perform visual inspection	Diagnose and troubleshoot steering systems and components	Repair steering systems and components	Verify steering systems and components	Align steering, axles, and suspension
U5169.0	5169.01	5169.02	5169.03	5169.04	5169.05
BRAKING SYSTEMS	Perform visual inspection	Diagnose and troubleshoot hydraulic braking systems and components	Repair hydraulic braking systems and components	Verify repair of hydraulic braking systems and components	Diagnose and troubleshoot anti-lock braking systems traction and stability control systems and components
U5170.0	5170.01	5170.02	5170.03	5170.04	5170.05
	Repair anti-lock braking systems (ABS) traction and stability control systems and components	Verify repair of anti-lock braking systems (ABS), traction and stability control systems and components	Diagnose and troubleshoot anti-skid/traction control systems and components	Repair anti-skid/traction control systems and components	Verify repair of anti-skid/traction control systems and components
	5170.06	5170.07	5170.08	5170.09	5170.10
	Measure and resurface brake drums, linings and rotors				
	5170.11				
TIRES, WHEELS, RIMS, AND HUBS	Perform visual inspection	Diagnose and troubleshoot tires and components	Repair tires and components	Verify repair of tires and components	Balance tires and components
U5171.0	5171.01	5171.02	5171.03	5171.04	5171.05

AUTOMOTIVE SERVICE TECHNICIAN

SKILL SETS

SKILLS

HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS	Perform visual inspection	Diagnose and troubleshoot air-conditioning systems and components	Repair air-conditioning systems and components	Verify repair of air-conditioning systems and components	Diagnose and troubleshoot heating and ventilation systems and components
	5172.01	5172.02	5172.03	5172.04	5172.05
U5172.0					
	Repair heating and ventilation systems	Verify repair of heating and ventilation systems			
	5172.06	5172.07			
BODY AND TRIM	Perform visual inspection	Diagnose and troubleshoot body and trim	Repair body and trim	Verify repair of body and trim	
U5173.0	5173.01	5173.02	5173.03	5173.04	

EXHAUST, INTAKE AND EMISSION CONTROL SYSTEMS	Perform visual inspection	Diagnose and troubleshoot exhaust, and intake systems and components	Repair exhaust, and intake systems and components	Verify repair of exhaust and intake systems and components	Diagnose and troubleshoot turbocharger/supercharger system and components
	5174.01	5174.02	5174.03	5174.04	5174.05
U5174.0					
	Repair turbocharger/supercharger system and components	Verify repair of turbocharger/supercharger system and components	Diagnose and troubleshoot emission control systems and components	Repair emission control systems and components	Verify repair of emission control systems and components
	5174.06	5174.07	5174.08	5174.09	5174.10
	Diagnose and troubleshoot diesel emission control systems and components	Repair diesel emission control systems and components	Verify repair of diesel emission control systems and components		
	5174.11	5174.12	5174.13		

HYBRID VEHICLE SYSTEMS	Perform visual inspection	Diagnose and troubleshoot hybrid vehicle systems and components	Repair hybrid vehicle systems and components	Verify repair of hybrid vehicle systems and components	
U5175.0	5175.01	5175.02	5175.03	5175.04	