### **COMPETENCY ANALYSIS PROFILE**

# (All unshaded skill sets must be demonstrated/completed)

### **SKILL SETS**

# **SKILLS**

OCCUPATIONAL HEALTH AND SAFETY PROCEDURES	Identify and take corrective action against potential workplace health and safety hazards	Handle, store and dispose of hazardous workplace materials	Wear and maintain personal protective equipment	Comply with workplace-related legislation	Interpret and apply service-related information
U8000.0	8000.01	8000.02	8000.03	8000.04	8000.05
	Practice good housekeeping in the workplace	Comply with Workplace Hazardous Materials Information System (WHMIS)			
	8000.06	8000.07			
ENGINE SYSTEMS	Perform visual inspection, identifying systems type and applications	Diagnose and troubleshoot cooling systems and components	Repair cooling systems and components	Verify repair of cooling systems and components	Diagnose and troubleshoot engine lubricating systems and components
U8001.0	8001.01	8001.02	8001.03	8001.04	8001.05
	Repair engine lubricating systems and components	Verify repair of engine lubricating systems and components	Diagnose and troubleshoot cylinder heads and components	Repair cylinder heads and components	Verify repair of cylinder heads and components
	8001.06	8001.07	8001.08	8001.09	8001.10
	Diagnose and troubleshoot engine blocks and components	Repair engine blocks and components	Verify repair of engine blocks and components		
	8001.11	8001.12	8001.13		

# **HEAVY DUTY EQUIPMENT TECHNICIAN**

FUEL SYSTEMS	Perform visual	Diagnose and	Repair fuel	Verify repair of fuel	Perform a visual
	inspection, identifying	troubleshoot fuel	subsystems and	subsystems	inspection of
	fuel subsystems type	subsystems and	component	and components	mechanical controlled
	and applications	components			fuel systems and
					components
U8002.0	8002.01	8002.02	8002.03	8002.04	8002.05
08002.0	Diagnose and	Repair mechanical	Verify repair of	Perform mechanical	Perform a visual
	troubleshoot	controlled fuel	mechanical	controlled engine	inspection of
	mechanical controlled	systems and	controlled fuel	tune-ups	electronic controlled
	fuel systems and	components	systems and		fuel engine
	components		components		management systems
	·		•		and components
					·
	8002.06	8002.07	8002.08	8002.09	8002.10
	Diagnose and	Repair electronic	Verify repair of	Perform electronic	
	Troubleshoot	controlled fuel engine	electronic	controlled fuel	
	electronic controlled	management systems	controlled fuel	engine tune-ups	
	fuel engine	and components	management		
	management systems		systems and		
	and component		components		
	8002.11	8002.12	8002.13	8002.14	
INTAKE, EXHAUST AND	Perform visual	Diagnose and	Repair intake and	Verify repair of	Perform a visual
EMISSION CONTROL	inspection, identifying	troubleshoot, intake	exhaust systems	intake and exhaust	inspection, identifying
SYSTEMS	intake and exhaust	and exhaust systems	and components	systems and	turbocharger/blower
	systems type and	and components		components	systems and
	applications				components
U8003.0	8003.01	8003.02	8003.03	8003.04	8003.05
	Diagnose and	Repair	Verify repair of	Perform visual	Diagnose and
	troubleshoot	turbocharger/blower	turbocharger/	inspection,	troubleshoot emission
	turbocharger/blower	systems and	blower systems and	identifying emission	control systems and
	systems and	components	components	control systems and	components
	components			components	
	8003.06	8003.07	8003.08	8003.09	8003.10
	Repair emission	Verify repair of			
	control systems and	emission control systems and			
	components	components			
		сотронена			
-	8003.11	8003.12			
ELECTRICAL SYSTEMS	Perform visual	Diagnose and	Serve and	Diagnose and	Repair starting
	inspection,	troubleshoot batteries	boost/charge	troubleshoot	systems and
	identifying systems		batteries	starting systems	components
	type and applications			and components	
U8004.0	8004.01	8004.02	8004.03	8004.04	8004.05
	Verify repair of	Diagnose and	Repair charging	Verify repair of	Diagnose and
	starting systems and	troubleshoot charging	systems and	charging systems	troubleshoot
	components	systems and	components	and components	electrical/ electronic
		components			and computer
					controlled systems
					and components
	8004.06	8004.07	8004.08	8004.09	8004.10
		0004.07		0004.03	1 0004.10

	Repair electrical/ electronic and computer controlled systems and components	Verify repair of electrical/electronic and computer controlled systems and components	Diagnose and troubleshoot hybrid drives and components	Repair hybrid drives and components	Verify repair of hybrid drives and components
	8004.11	8004.12	8004.13	8004.14	8004.15
HYDRAULIC SYSTEMS	Perform an inspection, identifying electronic/computer, mechanical and pilot operated hydraulic systems type and applications	Diagnose and troubleshoot mechanical/pilot controlled hydraulic systems and components	Repair mechanical/pilot controlled hydraulic systems and components	Verify repair of mechanical/pilot controlled hydraulic systems and components	Diagnose and troubleshoot electronic/computer controlled hydraulic systems and components
U8005.0	8005.01	8005.02	8005.03	8005.04	8005.05
	Repair electronic/ computer controlled hydraulic systems and components	Verify repair of electronic/computer controlled hydraulic systems and components			
	8005.06	8005.07			
HYDROSTATIC AND TRANSMISSION SYSTEMS	Perform visual inspection, identifying hydrostatic and transmission systems type and applications	Diagnose and troubleshoot clutch systems and components	Repair clutch systems and components	Verify repair of clutch systems and components	Diagnose and troubleshoot manual transmissions/transfer cases and components
U8006.0	8006.01	8006.02	8006.03	8006.04	8006.05
	Repair manual transmissions/transfer cases and components	Verify repair of manual transmissions/trans fer cases and components	Diagnose and troubleshoot torque converters, lock-up clutches and components	Repair torque converters, lock-up clutches and components	Verify repair of torque converters, lock-up clutches and components
	8006.06	8006.07	8006.08	8006.09	8006.10
	Diagnose and troubleshoot powershift transmissions and components	Repair powershift transmissions and components	Verify repair of powershift transmissions and components	Diagnose and troubleshoot hydrostatic transmissions and components	Repair hydrostatic transmissions and components
	8006.11	8006.12	8006.13	8006.14	8006.15
	Verify repair of hydrostatic transmissions and components	Diagnose and troubleshoot powershift /hydrostatic transmission electrical, electronic and computer controlled	Repair powershift/ hydrostatic transmission electrical, electronic and computer controlled components	Verify repair of powershift / hydrostatic transmission electrical, electronic and computer controlled components	
	8006.16	components 8006.17	8006.18	8006.19	

# **HEAVY DUTY EQUIPMENT TECHNICIAN**

DRIVE SHAFTS, DRIVE AXLE ASSEMBLIES AND FINAL DRIVES  U8007.0  STEERING SYSTEMS	Perform visual inspection, identifying systems type and applications  8007.01  Perform visual inspection, identifying systems type and applications	Diagnose and troubleshoot drive shafts, drive axle assemblies, final drives and components  8007.02  Diagnose and troubleshoot steering systems and components	Repair drive shafts, drive axle assemblies, final drives and components  8007.03  Repair steering systems and components	Verify repair of drive shafts, drive axle assemblies, final drives and components  8007.04  Verify repair of steering systems and components	Diagnose and troubleshoot steering clutches/brakes and components
U8008.0	8008.01	8008.02	8008.03	8008.04	8008.05
	Repair steering clutches/brakes and components	Verify the repair of steering clutches/brakes and components			
BRAKING SYSTEMS	Perform visual inspection, identifying systems type and applications	Diagnose and troubleshoot mechanical/hydraulic braking systems and components	Repair mechanical/ hydraulic braking systems and components	Verify repair of mechanical/ hydraulic braking systems and components	Diagnose and troubleshoot air braking systems and components
U8009.0	8009.01	8009.02	8009.03	8009.04	8009.05
	Repair air braking systems and components	Verify repair of air braking systems and components 8009.07			
SUSPENSION SYSTEMS	Perform visual inspection, identifying systems type and applications	Diagnose and troubleshoot suspension systems and components	Repair suspension systems and components	Verify repair of suspension systems and components	
U8010.0	8010.01	8010.02	8010.03	8010.04	
CLIMATE CONTROL SYSTEMS	Perform visual inspection, identifying systems type and components	Diagnose and troubleshoot climate control systems and components	Repair climate control systems and components	Verify repair of climate control systems and components	
U8011.0	8011.01	8011.02	8011.03	8011.04	

STRUCTURAL COMPONENTS AND ACCESSORIES	Perform visual inspection, identifying systems type and components	Diagnose and troubleshoot structural components and accessories	Repair structural components and accessories	Verify repair of structural components and accessories	
U8012.0	8012.01	8012.02	8012.03	8012.04	
TIRES, WHEELS, FRAMES AND UNDERCARRIAGES	Perform visual inspection, identifying systems type and components	Diagnose and troubleshoot tires, wheels and components	Install, remove or replace wheel assemblies and components	Verify installation, removal or replacement of wheel assemblies and components	Diagnose and troubleshoot undercarriages and components
U8013.0	8013.01	8013.02	8013.03	8013.04	8013.05
	Repair undercarriages and components	Verify repair of undercarriages and components			
	8013.06 Perform visual	8013.07	Danais are sad	Vanif. manain af	
GROUND ENGAGING EQUIPMENT AND ATTACHMENTS	inspection, identifying systems type and applications	Diagnose and troubleshoot ground engaging equipment, attachments and components	Repair ground engaging equipment, attachments and components	Verify repair of ground engaging equipment, attachments and components	
U8014.0	8014.01	8014.02	8014.03	8014.04	