

**DIESEL MECHANIC: PHASE 3**  
**On-The Job Training Record**  
**Apprenticeship: Log Book**  
**[OFO Code: 653306]**

<b>Contract No:</b>											
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<b>Trade Name:</b>	<b>Diesel Phase 3</b>
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<b>Employer details:</b>	
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<b>Full Name:</b>	
<b>Surname:</b>	

<b>ID No:</b>															
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**NOTE: The total number of hours allocated to the subjects are applicable to the year in which the apprentice is completing.**

Authorized by Issued by	Steve	Document Control No.	eQMS 1 1-1	Company stamp	Training Institution Stamp
Date	2022/09/13	Page Number	1		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: DRIVETRAIN</b>	<b>Ref No: I</b>
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<b>TRADE NAME:</b>
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<b>APPRENTICE NAME:</b>
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<b>ID NO:</b>													
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<b>Record of Occupation Trade experience and or Institutional Training Drive Train Overview</b>
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JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>1. Recall tools and equipment required to service/repair drivetrain.</b>				
	<b>2. Identify and recall the components and functions of the (Drive train).</b>				
	<b>3. Assessment of drivetrain. Inspections:</b>				
	<ul style="list-style-type: none"> <li>• Shakiness or vibrations from under the vehicle.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Difficulty making turns.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Unusual noises, like clunking sounds, when driving at high speeds.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Vehicle shudders when accelerating.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Worn or Broken couplings.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Universal joint (U joint) or a Constant Velocity joint (CV joint). Inspect the joints for tears, splits, leaking lubricant or excessive movement.</li> </ul>				
	<b>4. Condition report</b>				
	<b>5. Drivetrain Service or Repairs. (Repair in line with condition report. I.e. replacement of components where applicable).</b>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	2		
Review Date	2025/09/12	Version	1		

	<b>6. Post inspection to all repairs.</b>				
	<b>7. Training Institution.</b>				
	<b>Note:</b> All measurements, clearances & torque valves according to manufacturers' specifications, methods and procedures.				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	3		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: TRANSMISSION</b>	<b>Ref No: 2</b>
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<b>TRADE NAME:</b>
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<b>APPRENTICE NAME:</b>
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<b>ID NO:</b>													
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<b>Record of Occupation Trade experience and or Institutional Training</b>
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JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>8. Recall tools and equipment required to service/repair Transmission.</b>				
	<b>9. Identify and recall the components and functions of the transmission.</b>				
	<b>10. ATF/ Gear fluids</b>				
	<b>11. Transmission Service:</b>				
	<ul style="list-style-type: none"> <li>• Assessment of transmission</li> </ul>				
	<ul style="list-style-type: none"> <li>• Drain transmission fluid</li> </ul>				
	<ul style="list-style-type: none"> <li>• Remove and clean the oil pan</li> </ul>				
	<ul style="list-style-type: none"> <li>• Inspect the fluid condition, evidence of metal or clutch lining material in pan and any evidence of sludge</li> </ul>				
	<ul style="list-style-type: none"> <li>• Full transmission flush if needed.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Remove, clean and replace the filter.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check and adjust the bands and controls</li> </ul>				
	<ul style="list-style-type: none"> <li>• Refit the pan, using a new gasket</li> </ul>				

Authorized by	Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	4			
Review Date	2025/09/12	Version	1			

	<ul style="list-style-type: none"> <li>• Fill the transmission to the recommended level with new transmission fluid of the correct type</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check for leaks and wear on seals and hoses</li> </ul>				
	<ul style="list-style-type: none"> <li>• Test to check working of serviced auto trans.</li> </ul>				
	<b>I2. Assemble/Disassemble procedures:</b>				
	<ul style="list-style-type: none"> <li>• Disassemble procedure: Steps 1-44</li> </ul>				
	<b>I3. Condition report</b>				
	<ul style="list-style-type: none"> <li>• Assemble procedure: Steps 44 - 76</li> </ul>				
	<b>I4. Post inspection to all repairs.</b>				
	<i>Note: All measurements, clearances must be according to manufacturers' specifications, methods and procedures.</i>				
	<b>I5. Training Institution.</b>				
<b>Total</b>					

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	5		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: PNEUMATICS</b>											<b>Ref No: 3</b>		
<b>TRADE NAME:</b>													
<b>APPRENTICE NAME:</b>													
<b>ID NO:</b>													
Record of Occupation Trade experience and or Institutional Training													
<b>JOB CARD NO</b>	<b>DETAILS OF WORK DONE</b>						<b>DATE</b>	<b>HOURS</b>	<b>MENTOR SIGN</b>	<b>APPRENTICE SIGN</b>			
	<b>16. Recall safety procedure the types of cooling systems:</b>												
	<ul style="list-style-type: none"> <li>Secure the system so it's completely safe.</li> </ul>												
	<b>17. Recall Pneumatic (general design, pneumatic system, components):</b>												
	<ul style="list-style-type: none"> <li>Cylinder stroke lengths</li> </ul>												
	<ul style="list-style-type: none"> <li>Flow rates</li> </ul>												
	<ul style="list-style-type: none"> <li>Pressure test points</li> </ul>												
	<ul style="list-style-type: none"> <li>Pressure settings for regulators and valves</li> </ul>												
	<ul style="list-style-type: none"> <li>Air motor speeds</li> </ul>												
	<b>18. Recall the functions of the following component:</b>												
	<ul style="list-style-type: none"> <li>Air preparation system (shut-off/lock-out, combination filter/regulator, soft start valve).</li> </ul>												
	<ul style="list-style-type: none"> <li>Control valves and manifolds (manual, air pilot, solenoid operated).</li> </ul>												
	<ul style="list-style-type: none"> <li>Air cylinders and actuators.</li> </ul>												
	<ul style="list-style-type: none"> <li>Tubing and hoses.</li> </ul>												
Authorized by Issued by	Steve	Document Control No.	eQMS 1 1-1	Company stamp				Training Institution Stamp					
Date	2022/09/13	Page Number	6										
Review Date	2025/09/12	Version	1										

	<ul style="list-style-type: none"> <li>• Push-to-connect fittings.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Cylinder position sensors.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Discrete pressure switches.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Specialty components and accessories</li> </ul>				
	<b>19. Recall schemes of directional control valves/ Common symbols</b>				
	<b>20. Scheduled inspections with minor adjustments</b> (Include Visual Inspection: identify basic problems like frayed, leaking or burst hoses, worn or extruded seals, and loose or broken components). <ul style="list-style-type: none"> <li>• Do pre and post inspections.</li> <li>• Do condition report.</li> </ul>				
	<b>21. Check Seal lubrication:</b>				
	<ul style="list-style-type: none"> <li>• Check for insufficient lubrication.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check for careless installation.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check for defective slide surface.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check for impurities.</li> </ul>				
	<b>22. Test System:</b>				
	<ul style="list-style-type: none"> <li>• Check actuator alignment.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check pressures with an accurate gauge.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check flow rates with a flow meter.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check air system temperature.</li> </ul>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	7		
Review Date	2025/09/12	Version	1		

	<ul style="list-style-type: none"> <li>• Check actuator alignment.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check pressures with an accurate gauge.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Complete condition report.</li> </ul>				
	<b>23. Repair Or Replace (Parts). Base on condition report.</b>				
	<i>Note: All measurements, clearances must be according to manufacturers' specifications, methods and procedures. Ensure adherence to ISO standards.</i>				
	<b>24. Training Institution.</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	8		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: CLUTCHES</b>	<b>Ref No: 4</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

**Record of Occupation Trade experience and or Institutional Training**

JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>25. Recall safety procedure when working with clutches</b>				
	<ul style="list-style-type: none"> <li>• OSHA-approved safety glasses and gloves when working on the clutch.</li> <li>• Asbestos material in the clutch friction disc.</li> <li>• Clean all fluids.</li> <li>• Secure vehicle appropriately (<i>Hoists/ Jacks/ etc.</i>)</li> <li>• Address braking system (<i>Place vehicle in neutral and engage the handbrake system.</i>)</li> </ul>				
	<b>26. Recall tools and equipment required to perform service</b> (types of measuring instruments, tools & equipment, etc.).				
	<b>27. Recall Clutch classification</b> (“Dry” or “Wet”).				
	<b>28. Recall clutch components.</b>				
	<b>Recall the types and function of clutches used in LDV/HDV’s:</b> ( <i>Friction, cone, centrifugal clutch, single plate, hydraulic clutch and diaphragm clutch or conical spring clutch</i> )				
	<b>29. Recall common clutch issues</b>				

Authorized by	Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	9			
Review Date	2025/09/12	Version	1			

	<b>30. Inspection (Check):</b>				
	• Slipping clutch.				
	• Clutch chatter (vibration).				
	• High clutch pedal release.				
	• Squeaking whirring noise.				
	• Grinding when shifting gears.				
	• Leaking fluid and/or strange odour.				
	• Clutch pedal noise.				
	• Difficulty getting into/out of gear (spongy/loose pedal).				
	• Clutch pedal is hard.				
	• Clutch pedal stays on floor.				
	<b>31. Complete condition report.</b>				
	<b>32. Service or Repairs.</b> (Repair in line with condition report. I.e. replacement of parts or components).				
	<b>33. Post condition report/check list.</b>				
	<b>Note:</b> Correct according to manufacturers' specifications.				
	<b>34. Training Institution.</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	10		
Review Date	2025/09/12	Version	1		

GUIDE/SUBJECT/TOPIC: PROPELLER SHAFTS (PROPSHAFT)											Ref No: 5														
TRADE NAME:																									
APPRENTICE NAME:																									
ID NO:	<table border="1" style="width:100%; height:20px;"> <tr> <td style="width:10%;"></td> </tr> </table>																								
Record of Occupation Trade experience and or Institutional Training																									
JOB CARD NO	DETAILS OF WORK DONE							DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN														
	35. Recall tools and equipment required to perform service (types of measuring instruments, tools & equipment, etc.).																								
	36. Recall the function of a propeller shaft																								
	37. Recall construction of propeller shaft.																								
	38. Identify main parts of the propshaft. (U-joint, Tube, Centre Bearing, Midship Shaft, End Yoke, Slip Yoke and Tube Yoke and Flanges).																								
	39. Identify types of CV joints.																								
	40. Diagnose problems with the types of propeller shafts. (Common issues).																								
	41. Complete condition report																								
	42. Service, Repairs, or replacements. (Must be done in line with condition report. I.e. replacement, parts or components).																								
	43. Notes: All safety aspects adhered to. Correct according to manufacturers' specifications.																								
	44. Training Institution.																								
<b>Total</b>																									

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	11		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: DIFFERENTIAL</b>	<b>Ref No: 6</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

**Record of Occupation Trade experience and or Institutional Training**

<b>JOB CARD NO</b>	<b>DETAILS OF WORK DONE</b>	<b>DATE</b>	<b>HOURS</b>	<b>MENTOR SIGN</b>	<b>APPRENTICE SIGN</b>
	<b>45. Recall the of the differentials.</b> <i>(Open, Locked, Limited slip, Torsion, Active, Welded and Torque vectoring differential's).</i>				
	<b>46. Recall the functions and operation of the differential and final drive.</b>				
	<b>47. Differential Stripping Procedures: Steps 1-21</b>				
	<b>48. Pinion Bearing Layout: Steps 1-7</b>				
	<b>49. Complete the condition report.</b>				
	<b>50. Assemble the Main Differential and Ring Gear Assembly</b> <i>(Caution: Do not press a cold ring gear on the flange case half. A cold ring gear will damage the case half because of the tight fit. Metal particles between the parts will cause gear runout.)</i> <b>Steps 1-11</b>				
	<b>51. Pinion gear assembly: Steps 1-4</b>				
	<b>52. Pinion Preload and Installation: Steps 1-3</b>				
	<b>53. Yoke or Flange Method: Steps 1-5</b>				
	<b>54. Adjusting Shim Pack Thickness for the Pinion Cage (Depth/Height of Pinion): Steps 1-8</b>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	12		
Review Date	2025/09/12	Version	1		

	<b>55. Install the Differential and Ring Gear Assembly: Steps 1-4</b>				
	<b>56. Adjust Preload of Differential Bearings (Total Preload): Steps 1-10</b>				
	<b>57. Inspect all components.</b>				
	<i>Note: All safety aspects adhered to. Correct sequence adhered to. All adjustments and calibrations according to manufacturers' specifications and procedures.</i>				
	<b>58. Training Institution</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	13		
Review Date	2025/09/12	Version	1		

GUIDE/SUBJECT/TOPIC: AXELS											Ref No: 7		
TRADE NAME:													
APPRENTICE NAME:													
ID NO:													
Record of Occupation Trade experience and or Institutional Training													
JOB CARD NO	DETAILS OF WORK DONE						DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN			
	<b>59. Recall tools and equipment required to undertake tasks.</b>												
	<b>60. Recall construction features, types and working principle of axles.</b> <i>(Rear, front, dead front, live front &amp; stub axles)</i>												
	<b>61. Recall Design of axles.</b> <i>(Tubular, split or salisbury, semi-floating rear, three quarter floating rear and fully floating rear axles)</i>												
	<b>62. Recall Internal construction and transfer case.</b>												
	<b>63. Recall transfer case and four-wheel drive.</b>												
	<b>64. Inspecting axles:</b>												
	<ul style="list-style-type: none"> <li><b>Visual inspection</b> (Check for holes, splits or grease leakage. Next, you should inspect the shaft for any nicks, dings or dents, plus signs that anything is rubbing on it.)</li> </ul>												
	<ul style="list-style-type: none"> <li><b>Driving inspection</b> (Check for a loud "clunk" sound once the vehicle is put into gear. Vehicle vibrates/shakes if the engine is on. There is a clicking or popping noise when you turn on your car. The vehicle car is running, but it won't move forward or</li> </ul>												
Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1				Company Stamp			Training Institution Stamp			
Date	2022/09/13	Page Number	14										
Review Date	2025/09/12	Version	1										

	backward.				
	<b>65. Complete condition report</b>				
	<b>66. Repairs or replacements</b>				
	<ul style="list-style-type: none"> <li>• <b>Repairs done in line with condition report.</b> (<i>OEM guidelines, procedures and methods to be followed</i>)</li> </ul>				
	<ul style="list-style-type: none"> <li>• <b>Replacing: Removing the wheels and brakes from the broken axle in line with the manufacturer's removal instructions.</b> (<i>This will require raising the car up and placing the undercarriage on jack stands or a garage lift.</i>)</li> </ul>				
	<ul style="list-style-type: none"> <li>• <b>When the axle is exposed, the next step will be removing the axle from the axle assembly gears.</b> (<i>This procedure differs based on the type of axle being removed but can normally be completed by removing the gear cover on the rear and removing the spring that holds the end of the axle into the gear drive.</i>)</li> </ul>				
	<ul style="list-style-type: none"> <li>• <b>Install a new axle in the reverse order of the removal process.</b></li> </ul>				
	<ul style="list-style-type: none"> <li>• <b>Brakes and wheel can be fitted back onto the end of the new axle.</b></li> </ul>				
	<b>67. Inspect all components.</b>				
	<i>Note: Correct procedures and tools used. Correct according to manufacturers' specifications.</i>				
	<b>68. Training Institution.</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	15		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: BRAKING SYSTEMS</b>	<b>Ref No: 8</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

**Record of Occupation Trade experience and or Institutional Training**

<b>JOB CARD NO</b>	<b>DETAILS OF WORK DONE</b>	<b>DATE</b>	<b>HOURS</b>	<b>MENTOR SIGN</b>	<b>APPRENTICE SIGN</b>
	<b>69. Recall safety procedure when working with brakes</b>				
	<ul style="list-style-type: none"> <li>• OSHA-approved safety glasses, masks and gloves when working on the brakes.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Clean all areas.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check for any fluid leaks before working on braking systems.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Secure vehicle appropriately (<i>Hoists/ Jacks/ etc.</i>).</li> </ul>				
	<ul style="list-style-type: none"> <li>• Address braking system (<i>Place vehicle in neutral. Engage the handbrake system where applicable.</i>).</li> </ul>				
	<b>70. Recall tools and equipment required to perform service</b> (types of measuring instruments, tools & equipment, etc.).				
	<b>71. Recall basic different types of brakes systems.</b>				
	<b>72. Recall oil/ fluids use.</b>				
	<b>73. Recall issues /risks with braking systems</b> (leakage, damaged hoses/pipes/lines, brake circuits, etc.)				
	<b>74. Identify Brake system components and function of LDV/ HDV's.</b> ( <i>Brake pedal, parking brake, boost system, hydraulic system, wheel brakes, brake balance control system,</i>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	16		
Review Date	2025/09/12	Version	1		

	<i>mechanical, electrical, and hydraulic components (components in this category include metering valves, proportioning valves, and antilock braking system components), brake warning lights, circuit configurations, compressor and governor).</i>				
	<b>75. Identify &amp; principals of operation: HDV Air brake Systems.</b>				
	<b>76. Identify &amp; principals of operation: HDV Antilock Braking Systems (ABS).</b>				
	<b>77. Identify &amp; principals of operation: HDV Brake Retarders.</b>				
	<b>78. Identify &amp; principals of operation: Hydraulic Brakes &amp; ABS.</b>				
	<b>79. Recall various sensors (ABS, Wheel speed, Passive/ Active speed sensors, signal sensors and Hall-Effect Acceleration sensors)</b>				
	<b>80. Recall function of the compressor and governor</b>				
	<b>81. Recall brake chambers, spring brake chambers, slack adjusters and brake lining and types.</b>				
	<b>82. Brake lining and types. (S-Cam, wedge brakes, disc brakes).</b>				
	<b>83. Inspection of braking system.</b>				
	<b>84. Complete condition report.</b>				
	<b>85. Diagnose, Service/ Repairs:</b>				
	<ul style="list-style-type: none"> <li><b>Brake adjustment and in-service check:</b></li> </ul>				
	<ul style="list-style-type: none"> <li><b>Check for the following symptoms:</b>  <i>(Spongy brake pedal, brake shudder, vehicle pulling to the left or right, low brake pedal (too much travel), brake build up, pulsating brake pedal, pulsating brake pedal, brake pedal fade under high pressure, brake fade under low pressure, hard brake pedal, brakes binding &amp; brakes squeak/squeal/rattle).</i> </li> </ul>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	17		
Review Date	2025/09/12	Version	1		

	<ul style="list-style-type: none"> <li>• Check Parking Braking System.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check Auxiliary Braking System.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check Automatic Braking of the Trailer.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check ABS components.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check Air–Boost Hydraulic Brake System.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Check Hydraulic Retarder.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Apply Brake adjustments.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Apply S–Cam Brake Adjustments.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Apply Adjustments to S–Cam Brakes with Automatic Slack Adjusters.</li> </ul>				
	<p><i>(Note: Repair in line with condition report. I.e. Adjustments, replacement of components done correctly, following procedures, guidelines, and Methods according to manufacturers' specifications).</i></p>				
	<b>86. Post inspection to all repairs.</b>				
	<p><i>Notes: All safety aspects adhered to. Correct according to manufacturers' specifications.</i></p>				
	<b>87. Training Institution.</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	18		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: COMMON RAIL</b>	<b>Ref No: 9</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

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**Record of Occupation Trade experience and or Institutional Training**

JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>88. Recall safety procedures when working on common rails.</b>				
	<b>89. Recall tools and equipment required to undertake tasks.</b>				
	<b>90. Recall CRD layout and operation.</b>				
	<b>91. Recall principals of operation: Diesel heaters.</b>				
	<b>92. Recall principals of operation: Injectors.</b>				
	<b>93. Identify &amp; principals of operation: Low-pressure system components.</b>				
	<b>94. Identify &amp; principals of operation: High-pressure system components.</b>				
	<b>95. Identify &amp; principals of operation: Injection pressure adjustment.</b>				
	<b>96. Identify &amp; principals of operation: Understanding fuel flow and pressure.</b>				
	<b>97. Recall System Diagram for Passenger &amp; Commercial vehicles.</b>				
	<b>98. Recall inputs &amp; outputs components of diesel common rail. (Control: ECM).</b>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	19		
Review Date	2025/09/12	Version	1		

	<b>99. Diagnose component issues/faults.</b> <i>(Check injector spray patterns, power loss; rough idle; engine rattle; dirty diesel engine oil; oil use; EGR valve problems, and inlet system deposits &amp; ECM fault codes)</i>				
	<b>I00. Complete condition report.</b>				
	<b>I01. Service/ Repairs</b> <i>(Note: Repair in line with condition report. I.e. Test injectors, adjustments, replacement of components done correctly, following procedures, guidelines, and methods according to manufacturers' specifications).</i>				
	<b>I02. Post inspection to all repairs.</b>				
	<i>Notes: All safety aspects adhered to. Correct according to manufacturers' specifications.</i>				
	<b>I03. Training Institution.</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	20		
Review Date	2025/09/12	Version	1		

GUIDE/SUBJECT/TOPIC: EXHAUST SYSTEM											Ref No: 10		
TRADE NAME:													
APPRENTICE NAME:													
ID NO:													
Record of Occupation Trade experience and or Institutional Training													
JOB CARD NO	DETAILS OF WORK DONE						DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN			
	<b>I04. Recall safety procedures when working on Exhaust systems</b>												
	<b>I05. Identify &amp; principals of operation: Exhaust systems.</b>												
	<b>I06. Construction &amp; operating principles: Exhaust System Types and Components.</b>												
	<b>I07. Recall Limitations of each type of exhaust system.</b>												
	<b>I08. Recall concepts, terms, and terminology related to exhaust systems. (Single Exit, dual Exit, Opposite Dual, Dual Side &amp; High Performance Exhausts).</b>												
	<b>I09. Recall names, locations, structure, and functions of exhaust system components and parts. (Resonator, Oxygen sensor, Exhaust Pipe &amp; Exhaust Muffler).</b>												
	<b>I10. Calculation of exhaust system. (Torque or top end power)</b>												
	<b>I11. Diagnose Common issues with the exhaust system. (Exhaust leaks, rust, broken hangers, vibrations, increased engine noise, loose parts, blockages, wear and tear.)</b>												
	<b>I12. Inspection of exhaust systems (Check: Exhaust manifold and gaskets, oxygen sensor, catalytic converters, black soot inside tailpipe, hangers, clamps and brackets, shields, exhaust joints and damper weights).</b>												
Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1				Company Stamp			Training Institution Stamp			
Date	2022/09/13	Page Number	21										
Review Date	2025/09/12	Version	1										

	<i>Notes: All safety aspects adhered to. Correct according to manufacturers' specifications.</i>				
	<b>I 13. Complete inspection report</b>				
	<b>I 14. Service/ Repairs:</b>				
	<b>I 15.</b> ( <i>Note: Repair in line with condition report. I.e. Adjustments, replacement of components done correctly, following procedures, guidelines, and methods according to manufacturers' specifications.</i> )				
	<b>I 16. Post inspection to all repairs.</b>				
	<b>I 17. Training</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	22		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: TURBOCHARGER</b>	<b>Ref No: 11</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

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**Record of Occupation Trade experience and or Institutional Training**

JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>I 18. Recall safety procedures when working on turbochargers</b>				
	<b>I 19. Recall the Turbocharging components &amp; theory</b>				
	<ul style="list-style-type: none"> <li>• Wastegates</li> </ul>				
	<ul style="list-style-type: none"> <li>• Blow-off valves</li> </ul>				
	<ul style="list-style-type: none"> <li>• Piping and manifolds</li> </ul>				
	<ul style="list-style-type: none"> <li>• Manifolds</li> </ul>				
	<ul style="list-style-type: none"> <li>• Piping</li> </ul>				
	<ul style="list-style-type: none"> <li>• Turbo Lag</li> </ul>				
	<ul style="list-style-type: none"> <li>• Turbo charger lubrication</li> </ul>				
	<b>I 20. Recall the Center Housing / Rotating Assembly (CHRA)</b>				
	<b>I 21. Identify the types of intercooler &amp; principals of operation: Turbo intercooler systems</b>				
	<b>I 22. Diagnose common issues with the turbocharger system. (Check for oil starvation, oil contamination and foreign object damage)</b>				

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	23		
Review Date	2025/09/12	Version	1		

	<b>I23. Inspection &amp; and cleaning of turbocharger system.</b>				
	<b>I24. Complete inspection report</b>				
	<b>I25. Dismantling the Turbocharger.</b>				
	<b>I26. Assessment of turbocharger.</b>				
	<b>I27. Assembling the turbocharger.</b>				
	<b>I28. Waste Gate Service.</b>				
	<b>I29. The replacement or service of a turbochargers.</b>				
	<b>I30. Operating checks.</b>				
	<b>I31. Performance testing.</b>				
	<b>I32. Post inspection to all repairs.</b>				
	<b>I33. Notes: All safety aspects adhered to. Correct according to manufacturers' specifications.</b>				
	<b>I34. Training</b>				
			<b>Total</b>		

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	24		
Review Date	2025/09/12	Version	1		

<b>GUIDE/SUBJECT/TOPIC: WORK EXPERIENCE AND INDEPENDENT WORK</b>	<b>Ref No: 12</b>
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**TRADE NAME:**

**APPRENTICE NAME:**

**ID NO:**

**Record of Occupation Trade experience and or Institutional Training**

JOB CARD NO	DETAILS OF WORK DONE	DATE	HOURS	MENTOR SIGN	APPRENTICE SIGN
	<b>I35. On the job experience and independent work.</b>				
	<ul style="list-style-type: none"> <li>This should cover at least 80% of all modules to ensure as wide as possible field of experience and must take place under supervisory control.</li> </ul>				
	<i>(Note: All work done to be recorded with respect to performance standards.)</i>				
<b>Total</b>					

Authorized by Issued	Steve	Document Control No.	eQMS 1 1-1	Company Stamp	Training Institution Stamp
Date	2022/09/13	Page Number	25		
Review Date	2025/09/12	Version	1		