### Automotive Maintenance

#### Bus Brake Systems Maintenance

**TSC Description**
Implement corrective and preventive maintenance of bus brake systems

<table>
<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tr>
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<td>PTP-AMT-1003-1.1</td>
<td>PTP-AMT-2003-1.1</td>
<td>PTP-AMT-3003-1.1</td>
<td>PTP-AMT-4003-1.1</td>
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<tr>
<td>Carry out scheduled preventive maintenance and serviceability checks on bus brake systems</td>
<td>Conduct corrective maintenance on bus brake systems</td>
<td>Troubleshoot faulty bus brake systems to locate faults and recommend rectification methods</td>
<td>Diagnose root causes of recurring faults on bus brake systems to resolve systemic failure issues</td>
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**Knowledge**
- System layout and operating functions of bus brake systems
- Types of components and parts of bus brake systems
- Procedures for preventive maintenance on bus brake systems in accordance to organisational procedures, Work Instructions (WI) and/or Original Equipment Manufacturer (OEM) technical manuals
- Procedures for inspection and serviceability checks on bus brake systems
- Types of maintenance supplies, spare parts and consumables for bus brake systems maintenance
- Types and safe usage of tools and equipment for performing preventive maintenance work
- Types and usage of Personal Protective Equipment (PPE)
- System layout and operating functions of bus brake systems
- Types of components and parts of bus brake systems
- Methods to rectify air-pressure build up in bus brake systems
- Types of faults for bus brake systems
- Procedures and methods to disassemble, repair and/or replace bus brake systems
- Functional test procedures on bus brake systems
- Types of maintenance supplies, spare parts and consumables for bus brake systems maintenance
- Types and usage of Personal Protective Equipment (PPE)
- Organisational maintenance documentation and fault reporting procedures
- Operating principles of bus brake systems and its components
- Types of troubleshooting and rectification techniques for bus brake systems maintenance
- Types of fault identification methods for bus brake systems
- Signs of defective or degenerated components and parts within bus brake systems
- Safety guidelines on usage of tools and equipment to troubleshoot bus brake systems
- Operating principles of bus brake systems and its components
- Principles of braking dynamics
- Types and causes of systemic failures of bus brake systems
- Types of failure investigation and prevention methods
- Types of diagnostic tools and equipment
- Diagnostic procedures for bus brake systems and components
- Organisational maintenance procedures, Work Instructions (WI) and/or Original Equipment Manufacturer (OEM) technical recommendations
- Methods to develop maintenance WI
<table>
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<tr>
<th>Abilities</th>
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<tr>
<td>• Organisational maintenance documentation and fault reporting procedures</td>
<td>• Prepare tools, equipment, materials and checklists required for preventive maintenance tasks</td>
<td>• Implement troubleshooting procedures to investigate causes of faults in bus brake systems</td>
<td>• Establish failure investigation and specify functional testing requirements</td>
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<td>• Carry out scheduled preventive maintenance tasks on bus brake systems according to organisation procedures, WI and/or OEM technical manuals</td>
<td>• Carrying out scheduled preventive maintenance tasks on bus brake systems according to organisation procedures, WI and/or OEM technical manuals</td>
<td>• Recommend corrective actions on defects identified on bus brake systems</td>
<td>• Perform fault analysis to address systemic failures on bus brake systems</td>
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<td>• Inspect the condition and serviceability of bus brake systems</td>
<td>• Follow organisation procedures, WI and/or OEM technical manual instructions on safety handling of tools and equipment during maintenance work</td>
<td>• Disassemble bus brake systems for corrective maintenance</td>
<td>• Review data gathered from diagnostic procedures to recommend rectification solutions for recurring faults identified in bus brake systems</td>
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<td>• Document maintenance activities performed on bus brake systems</td>
<td>• Carry out repair and/or replacement of faulty components and parts</td>
<td>• Reassemble and reinstate bus brake systems</td>
<td>• Analyse performance of bus brake systems to evaluate effectiveness of rectification solutions</td>
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<td>• Report occurrences of faults and defects identified</td>
<td>• Reassemble and reinstate bus brake systems</td>
<td>• Perform functionality tests on bus brake systems</td>
<td>• Propose new and/or enhanced bus brake systems maintenance WI in reference to OEM technical recommendations</td>
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