



## Job Description Form

### Our Purpose

To provide safe, customer-focused, integrated and efficient transport services.

**Position Title**

Electrical Rollingstock Technician

**Level**

REA 8

**Position Number**

35231, 35232, 35233,  
35234, 35985

**Division/Directorate**

Transperth Train Operations

**Branch/Section**

Mechanical Engineering

**Effective Date**

March 2022

**Health Task Risk Assessment Category**

3

---

### Reporting relationships

Superordinate: Rollingstock Supervisor, Level 5

Subordinates: No Direct Reports

---

### Key role of this position

Maintains (by carrying out routine procedures and electrical/mechanical fault rectification procedures on safety critical components and train systems) an effective and reliable level of operating performance on the Public Transport Authority's (PTA) Australind and Prospector Rollingstock to meet with Rail Safety Standards and customer expectations.

---

### Core duties and responsibilities

#### Safety

- Responsible for ensuring all activities completed on Prospector and Australind railcars are completed in a safe and economical manner as per Rail Safety Standards.
- Responsible for ensuring all service sheets are completed and the PTA's Safety and Health policy and procedures are adhered to.
- Responsible for ensuring that all operations are carried out in a safe and economical manner.
- Responsible for working to individual granted permits to work limitations while conducting live and isolated fault finding, repairs and maintenance on Rollingstock systems and components.

#### Technical

- Maintains (by carrying out routine procedures and electrical/mechanical fault rectification procedures on safety critical components on a variety of AC and DC systems) an effective and reliable level of operating performance on PTA's Australind and Prospector Rollingstock including
  - Static Invertor and Battery charging systems and components.
  - Automatic Train Protection control systems and components.
  - Lighting circuits and control systems/components including interior and exterior lighting.
  - HVAC circuits and control systems/components.
  - DC Engine start systems, circuits and components.
  - Engine start and shutdown and Auxiliary engine circuits and control systems.

- AC emergency, aux shop supply and buffet circuit and control systems.
  - Saloon GPO circuits including Passenger Entertainment systems and Public Address Communications.
  - Radiator, Charge Air Fan and Air Compressor control systems and circuits.
  - Cab safety systems including Direction controller, Traction controller, Speed Control, Train Management and Drivers Entertainments systems and circuits.
  - Door Control Step lights, Door proving loop circuit, General Fault circuit and Saloon Door operation systems and components.
  - Safety systems including Fire Suppression systems, General fault circuits, Cab Controls, Auxiliary and Emergency Lighting systems and circuits.
  - Windscreen wiper system, Horn control, Vigilance and CCTV systems and components.
  - Communication systems including Train Radio, Satellite Phone and Public Address Systems.
  - Drivers cab emergency control circuits including Control Park Brake, Service Brakes and Coupler circuits and components.
- Ensures relevant Rollingstock procedures and standards are adhered to.
  - Carries out minor commissioning of new equipment, systems and technology.
  - Coordinates and liaises with Transwa drivers and operations staff to provide technical support in order to rectify faults in service.
  - Required to attend and provides technical support on the PTA's Network and Brookfield Rail Infrastructure to support the rectification or recovery of de-railed Rollingstock.
  - Monitors systems and equipment performance including entertainment systems, engine and transmission reliability software and upgrades.
  - Maintains components to specifications as advised by the Mechanical Engineering Branch and recommends improvements to exceed fleet reliability performance targets and customer satisfaction KPI's.
  - Responsible for ensuring all train components booked from the stores are controlled via the register as per local material management procedures.
  - Carries out reactive and non-routine inspections and repairs of Rollingstock and depot plant and equipment to minimise the impact on Rollingstock maintenance plans.
  - Works to the Kewdale shift roster to ensure that technical resources are available to achieve maintenance plans.
  - Assists in drafting and reviewing of technical maintenance instructions and procedures.

#### Other

- Performs other tasks and functions as are within the limits of the employee's skills, competence and training.

---

### SELECTION CRITERIA

#### 1. Core Competencies

- Technical Trades experience is essential / qualifications in Electrical Rollingstock Principles is highly desirable.
- Trade qualified - WA "A" Grade electrical licence and high-risk work license essential. Experience in the maintenance, service, repair, overhaul, and inspection of Rollingstock is highly desirable.
- Experience with the service and repair of - Safety critical components Such as: Electric over air Pneumatic braking systems, Door controllers, Couplers, Engines and Transmissions, Automatic train protection (ATP) and communication systems, wiring and fault finding, Static Inverters, and HVAC systems is highly desirable.
- Extensive fault finding knowledge and experience over 24VDC, 110VDC, 240VAC, 415VAC Rollingstock electrical systems: including, but not limited to HVAC systems, Door Control systems, and lighting systems and components including power generation equipment like Alternators and the diagnosis and repair of 24VDC Engine control wiring Or similar related systems and components, is highly desirable
- Experience in Heavy Maintenance component renewal/changes including, Wheelsets, Bogies, HVACs, Engines, Transmission, SIV's, Alternators, Couplers and Cooling Group components is highly desirable

#### 2. Communication and Interpersonal

- Good written, verbal and interpersonal skills.
- Demonstrated ability to read and interpret technical drawings and plans and use the appropriate test equipment.

- Demonstrated ability to read and interpret electrical schematics and conduct in process fault finding.

**3. Conceptual, Analytical and Problem Solving**

- Demonstrated analytical, decision making and problem solving skills.

**4. Organisation**

- Able to organise and prioritise tasks, and be proactive with a high degree of initiative.
- Ability to work unsupervised and make safety critical decision on the condition of Rollingstock.

**5. Personal Attributes**

- Demonstrated ability to work unsupervised and without direction in a team environment, to achieve personal and team outcomes.
- Be able to undertake focused work with meticulous attention to detail.

**6. Special Requirements**

- Satisfactory completion of required medical examinations to verify physical fitness to perform the duties of the position.
- Provision of a current National Police Clearance certificate, dated 3 months or less from the date of application for the position.
- Possession of a current Western Australian 'C' or 'C-A' Class Driver's Licence or equivalent. This requirement continues for the duration of employment in this position and from time to time production of the licence on request by the PTA may be required. Must be willing to complete Australind and Prospector Competency Assessments and Log Books as per the Mechanical Engineering Branch Competency Assessment Framework within the initial probation period.
- Must be willing to work and attend callouts at unsociable hours.
- Applicants must meet the special requirements shown below within an agreed period. Cancellation of the appointment will occur where an applicant does not meet the special requirements within an agreed period of time after appointment.
  - PTA Individual Access (IA) Track Access Permit

**Certification**

The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

**Managing Director / Executive Director / General Manager**

.....  
Signature

.....  
Date

**Employee**

I have read and accept the responsibilities of the Job Description Form.

The position's duties are to be performed in accordance with the PTA's Code of Conduct and the PTA's Values.

.....  
Signature

.....  
Date

