| PROJECT | CUSTOMER | TRAIN |
|---|---|---|
| **X'trapolis-PRASA** | **PRASA** | **259 – TFD** |

# RTR Train Functional Dynamic Testing TS259 Report

# GIB0000007452

| | CREATED | VERIFIED | APPROVED | DISTRIBUTION |
|---|---|---|---|---|
| **Name** | Nhlakanipho MASONDO | Sifiso LUKHELE | Kgomotso NKOANA | Confidentiality Category<br>*Restricted* ☐ *Project* ☐ *Normal* ☑ |
| **Date** | 27/11/2024 | 27/11/2024 | 27/11/2024 | Control Category<br>*Controlled* ☑ *Not Controlled* ☐ |
| **Signature** | | | | Language<br>**EN** |

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## Table of modifications

| Rev | Date | Modifications Content | Writer |
|---|---|---|---|
| A0 | 27/11/2024 | Creation | Nhlakanipho MASONDO |

## Internal validations

| | Name | Function | Date | Signature |
|---|---|---|---|---|
| **Creator** | Nhlakanipho MASONDO | EPU Manager | 27/11/2024 | X<br>Nhlakanipho MASONDO<br>EPU Manager |
| **Verifier** | Sifiso LUKHELE | Serial Test Manager | 27/11/2024 | X<br>Sifiso LUKHELE<br>Serial Test Manager |
| **Approver** | Kgomotso NKOANA | Test Expert | 27/11/2024 | X<br>Kgomotso NKOANA<br>Test Expert |

## Execution Plan

| | |
|---|---|
| **Start Date** | 23/11/2024 |
| **End Date** | 23/11/2024 |


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## Section 1 – Purpose / Objectives

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# Section 2 – Dynamic

## 2.1 Instructions list

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### 2.1.1 TFD-Dynamic

I - Information A - Action R - Result NE - Not Executed

| N° | Type | Instruction | File | Result status | Result value | Operator | Vehicle |
|---|---|---|---|---|---|---|---|
| 10001 | I | Dynamic Test | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10002 | I | Initial conditions | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10003 | I | This test shall be done under dry weather conditions i.e. no rain | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10004 | I | This test shall be carried out on a straight rail(R>=700m). The track must be well bedded with a maximum gradient =<5% of 3 km length. The track must be dry and clean before commencing the test to prevent degraded adhesion conditions. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10005 | I | The catenary nominal voltage should be 3.3 +/- 0.3 kV DC. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10006 | I | The test must be done with a complete 6-car configuration Prasa X'Trapolis Train. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10007 | I | All routine static tests must be completed before commencing with this test, unless authorization has been given by Management | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10008 | I | Dynamic Pre-Test has been completed | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10009 | I | The test shall be performed in M1 load configuration | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10010 | I | Have a laptop ready with Train Tracer installed and loaded with the dashboard attached. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10011 | I | Refer to this image for all lamp in alarm module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10012 | I | Initial Conditions | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10013 | I | Deadman switch 60S1 is in NORMAL position on both TC cars | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10014 | I | The Traction Isolation switch 22S1 should be in NORMAL position on both TC cars | | OK | | Siphesihle Mchunu - 491465 | Train |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10015 | A | Put the ERTMS switch 62S1 in ISOLATION position in both TC cars | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10016 | A | Apply the Safety procedure for movements before starting the test below | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10017 | I | All traction units are in black colour on the DDU maintenance screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10018 | A | Prepare the train in high voltage with active cab on TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10019 | R | Read Min [TT] BKT_LineVoltageGl: 2700<= x | | OK | 3248.52 | Siphesihle Mchunu - 491465 | Train |
| 10020 | I | Movement preparation | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10021 | A | Put the switch 45S1 to 0 position to release the parking brake | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10022 | A | Select Driving Mode to EFFORT position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10023 | A | Put the direction selector switch in FORWARD position in TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10024 | R | Lamp 31H1 is "ON" on the alarm module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10025 | R | TA appears on DDU screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10026 | A | Force [TT] (TBCU1) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10027 | A | Force [TT] (TBCU2) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10028 | A | Force [TT] (TBCU3) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10029 | A | Force [TT] (TBCU4) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10030 | A | Slowly move the Master Controller to TRACTION position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10031 | R | The train does not move | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10032 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu1EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10033 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu2EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10034 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu3EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |

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|---|---|---|---|---|---|---|---|
| 10035 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu4EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10036 | A | Release [TT] (TBCU1) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10037 | A | Release [TT] (TBCU2) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10038 | A | Release [TT] (TBCU3) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10039 | A | Release [TT] (TBCU4) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10040 | A | Put the direction selector switch in NEUTRAL position in TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10041 | R | Read Defined Variable [TT] (MPU1) bcu1_tlneb = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10042 | R | Read Defined Variable [TT] (MPU1) li_drc_tc1dsnozeror1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10043 | A | Put the direction selector switch to FORWARD and again in NEUTRAL position to reset the emergency brake | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10044 | I | Traction and Electric Brake - Wheel Turn Test | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10045 | A | Prepare and run Dynamic dashboard | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10046 | A | Record and SAVE the above dashboard for each car | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10047 | I | Traction and Brake M4 - Wheel Turn Test | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10048 | A | Force [TT] (TBCU1) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10049 | A | Force [TT] (TBCU2) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10050 | A | Force [TT] (TBCU3) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10051 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu1TcuDrinC1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10052 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu2TcuDrinC2 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |

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|---|---|---|---|---|---|---|---|
| 10053 | R | Read Defined Variable [TT] (MPU1)<br>BKT_Tbcu3TcuDrinC3 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10054 | R | Read Defined Variable [TT] (MPU1)<br>BKT_Tbcu4TcuDrinC4 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10055 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10056 | A | Put the Master controller in 100% TRACTION immediately, accelerate to speed 15 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10057 | R | The train is moving forward towards TC1 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10058 | R | Read Min [TT] (MPU1)<br>BKT_Tbcu4EffAchPerc: 1<= x | | OK | 61 | Siphesihle Mchunu - 491465 | Train |
| 10059 | R | Read Defined Variable [TT] (MPU1)<br>BKT_Tbcu2EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10060 | R | Read Defined Variable [TT] (MPU1)<br>BKT_Tbcu3EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10061 | R | Read Defined Variable [TT] (MPU1)<br>BKT_Tbcu1EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10062 | I | For FORWARD direction:<br>Speed sensor 1 axle 1 (+)<br>Speed sensor 2 axle 1 (direction) (-)<br>Speed sensor axle 2 (+)<br>Speed sensor axle 3 (+)<br>Speed sensor axle 4 (+) | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10063 | R | Read Min [TT] (TBCU4)<br>dsp2_rd_inv_fq_axle0_4: 1<= x | | OK | 1.77 | Siphesihle Mchunu - 491465 | Train |
| 10064 | R | Result Max [TT] (TBCU4)<br>dsp2_rd_inv_fq_axle1_4: x <= 0 | | OK | -2 | Siphesihle Mchunu - 491465 | Train |
| 10065 | R | Read Min [TT] (TBCU4)<br>dsp2_rd_inv_fq_axle2_4: 1<= x | | OK | 2.26 | Siphesihle Mchunu - 491465 | Train |
| 10066 | R | Read Min [TT] (TBCU4)<br>dsp2_rd_inv_fq_axle3_4: 1<= x | | OK | 2.4 | Siphesihle Mchunu - 491465 | Train |
| 10067 | R | Read Min [TT] (TBCU4)<br>dsp2_rd_inv_fq_axle4_4: 1<= x | | OK | 2.58 | Siphesihle Mchunu - 491465 | Train |
| 10068 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10069 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10070 | A | Put the Master controller in TRACTION position and slowly accelerate to speed <5 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10071 | R | The train is moving backward towards TC2 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10072 | R | Result Max [TT] (TBCU4) dsp2_rd_inv_fq_axle0_4: x <= 0 | | OK | -0.71 | Siphesihle Mchunu - 491465 | Train |
| 10073 | R | Read Min [TT] (TBCU4) dsp2_rd_inv_fq_axle1_4: 1<= x | | OK | 1.04 | Siphesihle Mchunu - 491465 | Train |
| 10074 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10075 | A | Release [TT] (TBCU1) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10076 | I | Traction and Brake M1 - Wheel Turn Test | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10077 | A | Force [TT] (TBCU4) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10078 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10079 | A | Put the Master controller in 100% TRACTION immediately, accelerate to speed 15 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10080 | R | The train is moving forward towards TC1 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10081 | R | Read Min [TT] (MPU1) BKT_Tbcu1EffAchPerc: 1<= x | | OK | 100 | Siphesihle Mchunu - 491465 | Train |
| 10082 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu2EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10083 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu3EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10084 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu4EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10085 | R | Read Min [TT] (TBCU1) dsp2_rd_inv_fq_axle0_1: 1<= x | | OK | 4.56 | Siphesihle Mchunu - 491465 | Train |

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|---|---|---|---|---|---|---|---|
| 10086 | R | Result Max [TT] (TBCU1) dsp2_rd_inv_fq_axle1_1: x <= 0 | | OK | -4.75 | Siphesihle Mchunu - 491465 | Train |
| 10087 | R | Read Min [TT] (TBCU1) dsp2_rd_inv_fq_axle2_1: 1<= x | | OK | 4.95 | Siphesihle Mchunu - 491465 | Train |
| 10088 | R | Read Min [TT] (TBCU1) dsp2_rd_inv_fq_axle3_1: 1<= x | | OK | 5.11 | Siphesihle Mchunu - 491465 | Train |
| 10089 | R | Read Min [TT] (TBCU1) dsp2_rd_inv_fq_axle4_1: 1<= x | | OK | 5.25 | Siphesihle Mchunu - 491465 | Train |
| 10090 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10091 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10092 | A | Put the Master controller in TRACTION position and slowly accelerate to speed <5 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10093 | R | The train is moving backward towards TC2 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10094 | R | Result Max [TT] (TBCU1) dsp2_rd_inv_fq_axle0_1: x <= 0 | | OK | -0.67 | Siphesihle Mchunu - 491465 | Train |
| 10095 | R | Read Min [TT] (TBCU1) dsp2_rd_inv_fq_axle1_1: 1<= x | | OK | 1.03 | Siphesihle Mchunu - 491465 | Train |
| 10096 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10097 | A | Release [TT] (TBCU2) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10098 | I | Traction and Brake M2 - Wheel Turn Test | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10099 | A | Force [TT] (TBCU1) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10100 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10101 | A | Put the Master controller in 100% TRACTION immediately, accelerate to speed 15 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10102 | R | The train moves forward towards TC1 direction | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10103 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu1EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10104 | R | Read Min [TT] (MPU1) BKT_Tbcu2EffAchPerc: 1<= x | | OK | 100 | Siphesihle Mchunu - 491465 | Train |
| 10105 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu3EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10106 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu4EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10107 | R | Result Max [TT] (TBCU2) dsp2_rd_inv_fq_axle0_2: x <= 0 | | OK | -2.7 | Siphesihle Mchunu - 491465 | Train |
| 10108 | R | Read Min [TT] (TBCU2) dsp2_rd_inv_fq_axle1_2: 1<= x | | OK | 3.45 | Siphesihle Mchunu - 491465 | Train |
| 10109 | R | Read Min [TT] (TBCU2) dsp2_rd_inv_fq_axle2_2: 1<= x | | OK | 3.69 | Siphesihle Mchunu - 491465 | Train |
| 10110 | R | Read Min [TT] (TBCU2) dsp2_rd_inv_fq_axle3_2: 1<= x | | OK | 3.88 | Siphesihle Mchunu - 491465 | Train |
| 10111 | R | Read Min [TT] (TBCU2) dsp2_rd_inv_fq_axle4_2: 1<= x | | OK | 4.12 | Siphesihle Mchunu - 491465 | Train |
| 10112 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10113 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10114 | A | Put the Master controller in TRACTION position and slowly accelerate to speed <5 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10115 | R | The train moves backward towards TC2 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10116 | R | Read Min [TT] (TBCU2) dsp2_rd_inv_fq_axle0_2: 1<= x | | OK | 1.22 | Siphesihle Mchunu - 491465 | Train |
| 10117 | R | Result Max [TT] (TBCU2) dsp2_rd_inv_fq_axle1_2: x <= 0 | | OK | -1.36 | Siphesihle Mchunu - 491465 | Train |
| 10118 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10119 | A | Release [TT] (TBCU3) DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10120 | I | Traction and Brake M3 - Wheel Turn Test | | OK | | Siphesihle Mchunu - 491465 | Train |

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|---|---|---|---|---|---|---|---|
| 10121 | A | Force [TT] (TBCU2) DSP2_WR_inv_B_inv_on = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10122 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10123 | A | Put the Master controller in 100% TRACTION immediately, accelerate to speed 15 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10124 | R | The train moves forward towards TC1 direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10125 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu1EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10126 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu2EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10127 | R | Read Min [TT] (MPU1) BKT_Tbcu3EffAchPerc: 1<= x | | OK | 100 | Siphesihle Mchunu - 491465 | Train |
| 10128 | R | Read Defined Variable [TT] (MPU1) BKT_Tbcu4EffAchPerc = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10129 | R | Result Max [TT] (TBCU3) dsp2_rd_inv_fq_axle0_3: x <= 0 | | OK | -1.65 | Siphesihle Mchunu - 491465 | Train |
| 10130 | R | Read Min [TT] (TBCU3) dsp2_rd_inv_fq_axle1_3: 1<= x | | OK | 2.46 | Siphesihle Mchunu - 491465 | Train |
| 10131 | R | Read Min [TT] (TBCU3) dsp2_rd_inv_fq_axle2_3: 1<= x | | OK | 2.74 | Siphesihle Mchunu - 491465 | Train |
| 10132 | R | Read Min [TT] (TBCU3) dsp2_rd_inv_fq_axle3_3: 1<= x | | OK | 2.98 | Siphesihle Mchunu - 491465 | Train |
| 10133 | R | Read Min [TT] (TBCU3) dsp2_rd_inv_fq_axle4_3: 1<= x | | OK | 3.22 | Siphesihle Mchunu - 491465 | Train |
| 10134 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10135 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10136 | A | Put the Master controller in TRACTION position and slowly accelerate to speed <5 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10137 | R | The train moves backward towards TC2 direction | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10138 | R | Read Min [TT] (TBCU3)<br>dsp2_rd_inv_fq_axle0_3: 1<= x | | OK | 1.43 | Siphesihle Mchunu - 491465 | Train |
| 10139 | R | Result Max [TT] (TBCU3)<br>dsp2_rd_inv_fq_axle1_3: x <= 0 | | OK | -1.58 | Siphesihle Mchunu - 491465 | Train |
| 10140 | A | Put the Master controller in BRAKE position until the train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10141 | I | Wheel Turn Test Results Check | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10142 | A | Analyse the recorded results before continuing with the test. If the results are out of range, the test must be STOPPED immediately, and the respective car motor wiring needs to be checked. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10143 | R | M4 - Time taken to reach 15km/h<br>Result Max: x <= 24 (s) | | OK | 22 | Siphesihle Mchunu - 491465 | Train |
| 10144 | R | M1 - Time taken to reach 15km/h<br>Result Max: x <= 24 (s) | | OK | 21.2 | Siphesihle Mchunu - 491465 | Train |
| 10145 | R | M2 - Time taken to reach 15km/h<br>Result Max: x <= 24 (s) | | OK | 23.38 | Siphesihle Mchunu - 491465 | Train |
| 10146 | R | M3 - Time taken to reach 15km/h<br>Result Max: x <= 24 (s) | | OK | 23.45 | Siphesihle Mchunu - 491465 | Train |
| 10147 | R | All M cars reach 15km/h in less than 24 seconds | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10148 | I | All Motors Test Run | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10149 | A | Release [TT] (TBCU1)<br>DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10150 | A | Release [TT] (TBCU2)<br>DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10151 | A | Release [TT] (TBCU4)<br>DSP2_WR_inv_B_inv_on | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10152 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10153 | A | Slowly move the Master Controller to TRACTION position until the train speed reaches 15km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10154 | R | Read Defined Variable [TT] (MPU1)<br>bcu1_tlneb = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10155 | R | Read Defined Variable [TT] (MPU1)<br>li_drc_tc1dsnozeror1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10156 | A | Put the Master Controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10157 | R | The train comes to a standstill | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10158 | I | Wheel Diameter Calibration | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10159 | I | Following conditions need to be met in order to successfully calibrate the wheel diameter. Ensure that the OTDR reference value of a Wheel Diameter has been entered. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10160 | A | 1) Train running on a straight track<br>2) Effort Driving Mode<br>3) Speed>15km/h<br>4) No wheel slippage<br>5) No Emergency Braking<br>6) Traction Effort = 0% (Coasting)<br>7) All Traction and Braking Units are working | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10161 | A | On the DDU screen select "First Acquisition Request" | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10162 | A | Check if the wheel diameter for each axle is between 838 mm and 842 mm, see picture attached. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10163 | R | Read Min/Max [TT] (MPU1) BKT_Bcu1WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10164 | R | Read Min/Max [TT] (MPU1) BKT_Bcu1WhDiamAx2: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10165 | R | Read Min/Max [TT] (MPU1) BKT_Bcu1WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10166 | R | Read Min/Max [TT] (MPU1) BKT_Bcu1WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10167 | R | Read Min/Max [TT] (MPU1) BKT_Bcu2WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10168 | R | Read Min/Max [TT] (MPU1) BKT_Bcu2WhDiamAx2: 839<= x <= 841 | | OK | 839 | Siphesihle Mchunu - 491465 | Train |
| 10169 | R | Read Min/Max [TT] (MPU1) BKT_Bcu2WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10170 | R | Read Min/Max [TT] (MPU1) BKT_Bcu2WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10171 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu1WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |

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| 10172 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu1WhDiamAx2: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10173 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu1WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10174 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu1WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10175 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu2WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10176 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu2WhDiamAx2: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10177 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu2WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10178 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu2WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10179 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu3WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10180 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu3WhDiamAx2: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10181 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu3WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10182 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu3WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10183 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu4WhDiamAx1: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10184 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu4WhDiamAx2: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10185 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu4WhDiamAx3: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10186 | R | Read Min/Max [TT] (MPU1) BKT_Tbcu4WhDiamAx4: 839<= x <= 841 | | OK | 840 | Siphesihle Mchunu - 491465 | Train |
| 10187 | I | Brake Tests | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10188 | I | For each test run, ensure the following are done:<br>-Prepare the dashboard on train tracer to record train performance<br>-Activate the relevant cab<br>-Login to DDU as Maintainer (70979080)<br>-Save each performance (only for speed of 60Km/h) result as .CVS on local drive of service laptop<br>-Ensure there is enough space remaining | | OK | | Siphesihle Mchunu - 491465 | Train |

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| | | for each run, else put the train at the end of the line<br>-From 40km/h tests IT IS FORBIDDEN to do more than one run at a time on the track, each run should start at the beginning/end of the track | | | | | |
| 10189 | I | Initial Conditions for each car:<br>-ERTMS is ISOLATED<br>-Driving mode set to EFFORT mode | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10190 | I | ALL the brake tests should be done from the extremities of the test track | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10191 | I | Emergency Brake @ 20km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10192 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10193 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10194 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10195 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 20 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10196 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10197 | R | Result Max [TT] SBK_BrakeDist: x <= 42 | | OK | 20 | Siphesihle Mchunu - 491465 | Train |
| 10198 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10199 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10200 | I | Service Brake @ 30km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10201 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10202 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10203 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10204 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 30 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10205 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10206 | R | Result Max [TT] SBK_BrakeDist: x <= 87 | | OK | 42 | Siphesihle Mchunu - 491465 | Train |

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| 10207 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10208 | I | Emergency Brake @ 40km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10209 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10210 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10211 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10212 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 40 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10213 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10214 | R | Result Max [TT] SBK_BrakeDist: x <= 80 | | OK | 74 | Siphesihle Mchunu - 491465 | Train |
| 10215 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10216 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10217 | I | Service Brake @ 20km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10218 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10219 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10220 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10221 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 20 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10222 | A | Put the Master Controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10223 | R | Result Max [TT] SBK_BrakeDist: x <= 60 | | OK | 21 | Siphesihle Mchunu - 491465 | Train |
| 10224 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10225 | I | Emergency Brake @ 30km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10226 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10227 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10228 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10229 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 30 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10230 | A | Put the Master Controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10231 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10232 | R | Result Max [TT] SBK_BrakeDist: x <= 62 | | OK | 48 | Siphesihle Mchunu - 491465 | Train |
| 10233 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10234 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10235 | I | Service Brake @ 40km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10236 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10237 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10238 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10239 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 40 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10240 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10241 | R | Result Max [TT] SBK_BrakeDist: x <= 113 | | OK | 79 | Siphesihle Mchunu - 491465 | Train |
| 10242 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10243 | I | ERTMS Dynamic | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10244 | A | Put the ERTMS switch 62S1 in NORMAL position in both TC cars | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10245 | A | Active cab on TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10246 | A | Use the procedure attached for ERTMS dynamic commissioning. ***[10-23-37-350576_ERTMS_Dynamic Procedure.pdf]*** | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10247 | R | Dynamic ERTMS commissioning has been completed successfully | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10248 | I | HIGH SPEED TEST | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10249 | I | For each and the following high-speed test make sure that the train is positioned at the start of the track, and the driver can see the Eurobalise on the track as shown in the picture attached. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10250 | I | Service Brake @ 50km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10251 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10252 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10253 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10254 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10255 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 50 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10256 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10257 | R | Result Max [TT] SBK_BrakeDist: x <= 142 | | OK | 104 | Siphesihle Mchunu - 491465 | Train |
| 10258 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10259 | I | Emergency Brake @ 50km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10260 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10261 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10262 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10263 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10264 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 50 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10265 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10266 | R | Result Max [TT] SBK_BrakeDist: x <= 100 | | OK | 88 | Siphesihle Mchunu - 491465 | Train |
| 10267 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10268 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10269 | I | For the following tests, ensure the dashboard is running and record each result and save each file as .CSV | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10270 | I | Service Brake @ 60km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10271 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10272 | A | Put the train in starting position on the track | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10273 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10274 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10275 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10276 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 60 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10277 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10278 | R | Result Max [TT] SBK_BrakeDist: x <= 171 | | OK | 150 | Siphesihle Mchunu - 491465 | Train |
| 10279 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10280 | I | Service Brake @ 60km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10281 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10282 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10283 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10284 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10285 | A | Put the Master Controller in MAX TRACTION position until the train speed | | OK | | Siphesihle Mchunu - 491465 | Train |

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| | | reaches 60 +/- 2 km/h | | | | | |
| 10286 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10287 | R | Result Max [TT] SBK_BrakeDist: x <= 171 | | OK | 143 | Siphesihle Mchunu - 491465 | Train |
| 10288 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10289 | I | Emergency brake @ 60kh/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10290 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10291 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10292 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10293 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10294 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 60 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10295 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10296 | R | Result Max [TT] SBK_BrakeDist: x <= 121 | | OK | 121 | Siphesihle Mchunu - 491465 | Train |
| 10297 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10298 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10299 | A | Put the train at the end of the line | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10300 | I | Remember to save the .csv result file on the local drive of the PC used | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10301 | I | Emergency brake @ 60km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10302 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10303 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10304 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10305 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10306 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 60 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10307 | A | Push the emergency brake mushroom button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10308 | R | Result Max [TT] SBK_BrakeDist: x <= 121 | | OK | 118 | Siphesihle Mchunu - 491465 | Train |
| 10309 | A | Release the emergency brake button 44S1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10310 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10311 | I | Remember to save the .csv result file on the local drive of the PC used | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10312 | I | Degraded mode @60 km/h TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10313 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10314 | I | Degraded mode simulation | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10315 | A | Force [TT] (TBCU1) f55_b_br_auth = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10316 | A | Force [TT] (TBCU2) f55_b_br_auth = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10317 | A | Force [TT] (TBCU3) f55_b_br_auth = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10318 | A | Force [TT] (TBCU4) f55_b_br_auth = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10319 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10320 | R | Lamp 31H1 is "ON" on the alarm module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10321 | R | TA appears on DDU screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10322 | A | Prepare the dashboard on Train Tracer to record the train performance | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10323 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10324 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10325 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 60 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10326 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10327 | R | Result Max [TT] SBK_BrakeDist: x <= 171 | | OK | 162 | Siphesihle Mchunu - 491465 | Train |
| 10328 | A | Put the train at the end of the line | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10329 | I | Remember to save the .csv result file on the local drive of the PC used | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10330 | I | Degraded mode @ 60km/h TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10331 | A | Use maintenance code (70979080) to log into DMI screen and do start of mission | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10332 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10333 | R | Lamp 31H1 is ON on the alarm module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10334 | R | TA appears on DDU screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10335 | A | Prepare the dashboard on Train Tracer to record the train performance | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10336 | A | Force [TT] SBK_BrakeDist = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10337 | A | Release [TT] SBK_BrakeDist | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10338 | A | Put the Master Controller in MAX TRACTION position until the train speed reaches 60 +/- 2 km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10339 | A | Put the Master Controller in 100% BRAKE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10340 | R | Result Max [TT] SBK_BrakeDist: x <= 171 | | OK | 161 | Siphesihle Mchunu - 491465 | Train |
| 10341 | A | Release [TT] (TBCU1) f55_b_br_auth | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10342 | A | Release [TT] (TBCU2) f55_b_br_auth | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10343 | A | Release [TT] (TBCU3) f55_b_br_auth | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10344 | A | Release [TT] (TBCU4) f55_b_br_auth | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10345 | I | Remember to save the .csv result file on the local drive of the PC used | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10346 | A | Put the train at the end of the line | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10347 | I | Normal service brake operation | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10348 | A | Active cab on TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10349 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10350 | R | Lamp 31H1 is "ON" on the alarm module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10351 | R | TA appears on DDU screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10352 | A | Put the Master controller in TRACTION position until the train speed reaches 10km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10353 | A | Put the Master controller in LOW BRAKE position until the train reaches a speed less than 3km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10354 | R | Read Defined Variable [TT] (BCU1) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10355 | R | Read Defined Variable [TT] (BCU2) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10356 | R | Read Defined Variable [TT] (TBCU1) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10357 | R | Read Defined Variable [TT] (TBCU2) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10358 | R | Read Defined Variable [TT] (TBCU3) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10359 | R | Read Defined Variable [TT] (TBCU4) LI_NOT_INHIB = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10360 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10361 | R | Observe that the train continues to brake until it comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10362 | R | Read Min [TT] (BCU1) AO_SERV_BRAKE: 1.2<= x | | OK | 38.27 | Siphesihle Mchunu - 491465 | Train |
| 10363 | R | Read Min [TT] (BCU2) AO_SERV_BRAKE: 1.2<= x | | OK | 38.25 | Siphesihle Mchunu - 491465 | Train |
| 10364 | R | Read Min [TT] (TBCU1) AO_SERV_BRAKE: 1.2<= x | | OK | 38.26 | Siphesihle Mchunu - 491465 | Train |
| 10365 | R | Read Min [TT] (TBCU2) AO_SERV_BRAKE: 1.2<= x | | OK | 38.25 | Siphesihle Mchunu - 491465 | Train |

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| 10366 | R | Read Min [TT] (TBCU3)<br>AO_SERV_BRAKE: 1.2<= x | | OK | 38.25 | Siphesihle Mchunu - 491465 | Train |
| 10367 | R | Read Min [TT] (TBCU4)<br>AO_SERV_BRAKE: 1.2<= x | | OK | 38.27 | Siphesihle Mchunu - 491465 | Train |
| 10368 | A | Put the ERTMS switch 62S1 in ISOLATION position in both TC cars | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10369 | I | Brake Distances Results | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10370 | A | Zip All the recorded CSV files of Braking distances into one folder and upload on teams "shifts reports" channel under a specific train folder.<br><br>Rename the folder as:<br>TSXX_Braking_Distances | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10371 | I | Train Acceleration Results | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10372 | A | Use the following spreadsheet to calculate the acceleration | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10373 | A | | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10374 | A | On the recorded dashboard, check how long it takes to reach 55km/h from Rec_speed>0 using Trace CSV software.<br><br>Delta T (s)<br>Delta V (km/h) | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10375 | R | TC1 Acceleration<br>Result Min: 0.85<= x (m/s²) | | OK | 0.867 | Siphesihle Mchunu - 491465 | Train |
| 10376 | R | TC2 Acceleration<br>Result Min: 0.85<= x (m/s²) | | OK | 0.908 | Siphesihle Mchunu - 491465 | Train |
| 10377 | I | 25km/h Speed limit in Reverse Direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10378 | A | Active Cab in TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10379 | A | Select Driving Mode to EFFORT position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10380 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10381 | A | Put the Master controller in 100% Traction position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10382 | R | The maximum train speed reached is 25km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10383 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10384 | R | The train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10385 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10386 | A | Remove active cab in TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10387 | I | 25km/h Speed limit in Reverse Direction | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10388 | A | Active Cab in TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10389 | A | Select Driving Mode to EFFORT position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10390 | A | Put the direction selector switch in REVERSE position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10391 | A | Put the Master controller in 100% Traction position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10392 | R | The maximum train speed reached is 25km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10393 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10394 | R | The train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10395 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10396 | I | DEPOT mode speed limit TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10397 | A | Put the driving mode switch in DEPOT position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10398 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10399 | A | Put the Master controller in 100% Traction position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10400 | R | The maximum train speed reached is 15km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10401 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10402 | R | The train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10403 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10404 | I | DEPOT mode speed limit TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10405 | A | Active cab on TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10406 | A | Put the driving mode switch in DEPOT position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10407 | A | Put the direction selector switch in FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10408 | A | Put the Master controller in 100% Traction position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10409 | R | The maximum train speed reached is 15km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10410 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10411 | R | The train comes to a complete stop | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10412 | A | Put the direction selector switch in NEUTRAL position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10413 | A | Remove active cab on TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10414 | I | Doors | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10415 | I | Test 04 - PEA activation and override within timeout [PRASA-40-Val-2] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10416 | A | Put the Master controller in TRACTION position and accelerate the train up to 10km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10417 | A | Press Left and Right Door Authorization Buttons (50S6 and 50S5) | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10418 | R | When train is running above 5km/h it is not possible to get Door Authorization. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10419 | A | Pull any PEA on the train | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10420 | A | Before 10s elapses with PEA pulled, press the button 44S5 to override the PEA | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10421 | R | TA lamp is ON | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10422 | A | Apply brake until the complete stop of the Train. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10423 | A | Reset PEA using the switch 44S6 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10424 | I | Test 06 - PEA activation with timeout respected [PRASA-40-Val-1] | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10425 | A | Put the Master controller in TRACTION position and accelerate the train up to 10km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10426 | A | Pull another PEA on the train | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10427 | R | After 10s with PEA pulled, Emergency Brakes should be applied. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10428 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10429 | A | Press the button 54S3 twice to acknowledge the PEA | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10430 | A | Reset PEA using the switch 44S6 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10431 | A | Release Emergency Brakes | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10432 | I | Test 05 - PEA activation with Train speed lower than 5 km/h [PRASA-40-Val-4] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10433 | A | Put the Master controller in TRACTION position, pull any PEA on the train before the train speed reaches 5km/h | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10434 | R | An alarm appears on DDU screen warning that a PEA was pulled | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10435 | R | TA lamp turns OFF | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10436 | R | Emergency Brake is applied | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10437 | A | Press the button 54S3 twice to acknowledge the PEA | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10438 | A | Reset the PEA using switch 44S6 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10439 | A | Open and close the doors on the side where the PEA was pulled | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10440 | R | All doors are closed on DDU screen | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10441 | A | Put the Master controller in OFF position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10442 | A | Reset Emergency Brakes | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10443 | I | Test 07 - PEA activation with reset PEA switch permanently active [PRASA-40-Val-3] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10444 | A | Force [TT] (MPU1) lo_ubk_tc1resetpea = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10445 | A | Accelerate the train up to 10 km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10446 | A | Pull any in TC1 car, but not till its final position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10447 | I | The lamp 44H1 (Emergency Brake Interlock Open) turns ON. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10448 | R | Read Defined Variable [TT] (MPU1) li_ubk_tc1pealoop = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10449 | R | Read Defined Variable [TT] (MPU1) li_dor_tc1alldoorsclosedr1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10450 | R | Read Defined Variable [TT] (MPU1) li_dor_tc1alldoorsclosedr2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10451 | R | An alarm appears on DDU screen warning that a PEA was pulled. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10452 | I | The lamp 31H1 (Traction Authorized) turns OFF. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10453 | R | Traction effort bar graph is indicating no effort on the line voltage module | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10454 | R | Read Defined Variable [TT] (MPU1) lo_drc_tc1tractionloopr2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10455 | R | Read Defined Variable [TT] (MPU1) lo_drc_tc1tractionloopr1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10456 | A | After 10 seconds that PEA has been pulled check that: | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10457 | R | Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10458 | I | The lamp 44H4 (Emergency Brake Loop) turns ON. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10459 | R | Read Defined Variable [TT] (MPU1) bcu1_tlneb = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10460 | A | Release [TT] (MPU1) lo_ubk_tc1resetpea | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10461 | R | The lamp 51H1 turns OFF (door closed and locked). | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10462 | A | Set Passenger Emergency Alarm Reset Switch (44S6) to "Reset" position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10463 | R | PEA alarm signal is reset. | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10464 | A | Move Master Controller Handle (30A1) to "OFF" position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10465 | A | Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" and then to "FORWARD" position again. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10466 | R | Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10467 | I | The lamp 44H4 (Emergency Brake Loop) turns OFF. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10468 | R | Read Defined Variable [TT] (MPU1) bcu1_tlneb = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10469 | I | The lamp 31H1 (Traction Authorized) turns ON. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10470 | R | Read Defined Variable [TT] (MPU1) lo_drc_tc1tractionloopr1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10471 | R | Read Defined Variable [TT] (MPU1) lo_drc_tc1tractionloopr2 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10472 | I | Test 08 - Safety Requirement [PRASA-34A-a] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10473 | I | On the beginning the Train shall be stationary. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10474 | A | Force [TT] (MPU1) lo_ets_tc2rstotdrr1 = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10475 | A | Force [TT] (MPU1) lo_ets_tc2rstotdrr2 = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10476 | R | Check on DDU that the On-board Train Data Recorder is offline | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10477 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10478 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10479 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10480 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10481 | R | Read Defined Variable [TT] (BCU2) LO_SPEED_THRSLD1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |

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| 10482 | A | Accelerate the Train up to 4km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10483 | R | Read Defined Variable [TT] (BCU2) LO_SPEED_THRSLD1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10484 | A | Accelerate the Train up to 10km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10485 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10486 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10487 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10488 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10489 | R | Read Defined Variable [TT] (BCU2) LO_SPEED_THRSLD1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10490 | R | Read Defined Variable [TT] (MPU1) REC_Speed5ThresholdFail = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10491 | A | Apply brake until the complete stop of the Train. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10492 | R | Read Defined Variable [TT] (BCU2) LO_SPEED_THRSLD1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10493 | R | The OTDR is maintained OFF. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10494 | A | Release [TT] (MPU1) lo_ets_tc2rstotdrr1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10495 | R | The OTDR is turned ON. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10496 | I | Test 09 - Safety Requirement [PRASA-23-Val-2] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10497 | I | On the beginning the Train shall be stationary. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10498 | A | Force [TT] (BCU2) LO_SPEED_THRSLD1 = 0.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10499 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 136756 | Siphesihle Mchunu - 491465 | Train |
| 10500 | I | TrainTracer gives a numerical information through the variable "DCU1_TC1_HwIOStatus". In order to check the state of the bits 2 and 8, with the help of a programable calculator (use the computer's one), change the | | OK | | Siphesihle Mchunu - 491465 | Train |

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| | | numerical information to a word information and read the state of these bits. | | | | | |
| 10501 | R | DCU1_TC1_HwIOStatus.bit2 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10502 | R | DCU1_TC1_HwIOStatus.bit8 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10503 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10504 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10505 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10506 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive2 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10507 | A | Accelerate the Train up to 10km/h and check the variable "DCU1_TC1_HwIOStatus" as soon as the speed overpasses 5km/h (according to DDU's speed value). | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10508 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 136756 | Siphesihle Mchunu - 491465 | Train |
| 10509 | R | DCU1_TC1_HwIOStatus.bit2 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10510 | R | DCU1_TC1_HwIOStatus.bit8 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10511 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10512 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive2 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10513 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10514 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive2 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10515 | I | Test 10 - Safety Requirement [PRASA-23-Val-1] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10516 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 137008 | Siphesihle Mchunu - 491465 | Train |
| 10517 | R | DCU1_TC1_HwIOStatus.bit2 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10518 | R | DCU1_TC1_HwIOStatus.bit8 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10519 | A | Release [TT] (BCU2) LO_SPEED_THRSLD1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10520 | I | Test 11 - Safety Requirement [PRASA-23-Val-4] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10521 | I | In case it is not possible to go further at the same direction, change cab and perform the tests with the opposite cab active. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10522 | A | Force [TT] (BCU1) LO_SPEED_THRSLD1 = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10523 | A | Force [TT] (BCU2) LO_SPEED_THRSLD1 = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10524 | R | Relay 61k3 permanently supplied in all cars. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10525 | R | DCU1_TC1_HwIOStatus.bit2 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10526 | R | DCU1_TC1_HwIOStatus.bit8 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10527 | I | TrainTracer gives a numerical information through the variable "DCU1_TC1_DiagData1". In order to check the state of the bits 22 and 23, with the help of a programable calculator (use the computer's one), change the numerical information to a Dword information and read the state of these bits. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10528 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_DiagData1 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10529 | R | DCU1_TC1_DiagData1.bit22 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10530 | R | DCU1_TC1_DiagData1.bit23 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10531 | A | Accelerate the Train up to 10km/h and check the status of the variables "DCU1_TC1_HwIOStatus" and "DCU1_TC1_DiagData1" when the speed overpasses 5km/h (according to DDU's speed value). | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10532 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 136756 | Siphesihle Mchunu - 491465 | Train |
| 10533 | R | DCU1_TC1_HwIOStatus.bit2 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10534 | R | DCU1_TC1_HwIOStatus.bit8 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10535 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_DiagData1 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10536 | R | DCU1_TC1_DiagData1.bit22 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10537 | R | DCU1_TC1_DiagData1.bit23 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10538 | A | Force [TT] (MPU1) OTDR_5kphSpeedFlt = 1.0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10539 | R | Check on DDU screen the appearance of an IOS (838) requiring a reparation at the end of the day. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10540 | A | Release [TT] (MPU1) OTDR_5kphSpeedFlt | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10541 | A | Release [TT] (BCU1) LO_SPEED_THRSLD1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10542 | A | Release [TT] (BCU2) LO_SPEED_THRSLD1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10543 | A | Break the train until its complete stop. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10544 | I | Test 12 - Safety Requirement [PRASA-23-Val-5] | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10545 | A | For the following test use OTDR web portal to force the speed of above 5km/h ***[11-45-13-350574_Dynamic speed threshold test.pdf]*** | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10546 | R | Relays 61k1 permanently supplied in all cars plus relays 61k2 in TC1 and TC2 cars. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10547 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 137008 | Siphesihle Mchunu - 491465 | Train |
| 10548 | R | DCU1_TC1_HwIOStatus.bit2 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10549 | R | DCU1_TC1_HwIOStatus.bit8 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10550 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10551 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10552 | R | Check on DDU screen the appearance of an IOS (839) requiring a reparation at the end of the day. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10553 | R | Read Defined Variable [TT] (MPU1) DOR_FDcuSpeedThr = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |

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| 10554 | A | Accelerate the Train up to 10km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10555 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 137008 | Siphesihle Mchunu - 491465 | Train |
| 10556 | R | DCU1_TC1_HwIOStatus.bit2 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10557 | R | DCU1_TC1_HwIOStatus.bit8 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10558 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_DiagData1 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10559 | R | DCU1_TC1_DiagData1.bit22 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10560 | R | DCU1_TC1_DiagData1.bit23 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10561 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10562 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 1.0 | | OK | 1 | Siphesihle Mchunu - 491465 | Train |
| 10563 | A | Decelerate the Train until comes to a complete stop and check the status of the variables "DCU1_TC1_HwIOStatus" and "DCU1_TC1_DiagData1" as soon as the speed is below 5km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10564 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_HwIOStatus | | OK | 137008 | Siphesihle Mchunu - 491465 | Train |
| 10565 | R | DCU1_TC1_HwIOStatus.bit2 = 0, if 5km/h > train speed > 3km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10566 | R | DCU1_TC1_HwIOStatus.bit2 = 1, if train speed < 3km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10567 | R | DCU1_TC1_HwIOStatus.bit8 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10568 | R | Read Undefined Variable [TT] (MPU1) DCU1_TC1_DiagData1 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10569 | R | DCU<i>_<car>_DiagData1.bit22 = 0 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10570 | R | DCU<i>_<car>_DiagData1.bit23 = 1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10571 | R | Read Defined Variable [TT] (MPU1) li_rec_tc1thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10572 | R | Read Defined Variable [TT] (MPU1) li_rec_tc2thresholdfive1 = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |
| 10573 | R | Read Defined Variable [TT] (MPU1) DOR_FDcuSpeedThr = 0.0 | | OK | 0 | Siphesihle Mchunu - 491465 | Train |

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| 10574 | I | Rescue Mode and Emergency Disconnection | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10575 | I | BACKUP MODE | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10576 | A | Active cab in TC1 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10577 | A | Put the backup mode switch 27S1 in Backup position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10578 | A | Put the Driving Direction Switch to FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10579 | A | Hold pressed the "Master's Deadman Device (30A1.S4)" and move "Master Controller handle (30A1)" to initial "Traction" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10580 | I | Low tractive effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10581 | R | Although the low tractive effort demand has been requested, the Train moves with a standard tractive demand | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10582 | A | Move "Master Controller (30A1)" handle to extreme "Traction" zone position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10583 | R | Verify that there wasn't an impact on train movement and the tractive demand was maintained | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10584 | A | Release the Master's Deadman Device (30A1.S4) for more than 5 seconds | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10585 | R | Train applies emergency brake | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10586 | I | The Deadman device must remain pressed to allow traction in backup mode, otherwise the emergency brake loop is opened when the timer relay expire. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10587 | A | Set the master controller to "OFF" position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10588 | A | Set the Driving Direction Switch to NEUTRAL and then to FORWARD position again | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10589 | R | Emergency brake released on Train. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10590 | I | From now on, when operating the master controller don't forget to maintain anyone of the deadman devices pressed. | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10591 | A | Move "Master Controller (30A1)" handle to "Traction" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10592 | R | Train starts to move. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10593 | A | Keeping the Master's handle within traction zone, check that the train is capable to reach 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10594 | R | Verify that train reaches, but does not exceed the speed of 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10595 | I | On Backup mode, train speed is limited to 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10596 | A | Move "Master Controller (30A1)" handle to initial "Brake" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10597 | I | Low brake effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10598 | R | Verify that the train starts to brake with a standard brake effort. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10599 | A | Move "Master Controller (30A1)" handle to extreme "Brake" zone position (stop before achieving "Emergency Brake" position). | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10600 | I | High brake effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10601 | R | Verify that there wasn't an impact on train movement, and the brake demand was maintained. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10602 | I | On Backup Mode, brake system considers a single brake demand and disregards master controller handle position within brake zone. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10603 | R | Train stops. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10604 | I | BACKUP MODE TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10605 | A | Active cab in TC2 | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10606 | A | Press the automatic start button 20S1 to prepare the train in high voltage | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10607 | R | After few seconds, the train is prepared in high voltage with HSCBs closed | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10608 | A | Put the backup mode switch 27S1 in Backup position | | OK | | Siphesihle Mchunu - 491465 | Train |

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| 10609 | A | Put the Driving Direction Switch to FORWARD position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10610 | A | Hold pressed the "Master's Deadman Device (30A1.S4)" and move "Master Controller handle (30A1)" to initial "Traction" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10611 | I | Low tractive effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10612 | R | Although the low tractive effort demand has been requested, the Train moves with a standard tractive demand | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10613 | A | Move "Master Controller (30A1)" handle to extreme "Traction" zone position | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10614 | R | Verify that there wasn't an impact on train movement and the tractive demand was maintained | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10615 | A | Release the Master's Deadman Device (30A1.S4) for more than 5 seconds | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10616 | R | Train applies emergency brake | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10617 | I | The Deadman device must remain pressed to allow traction in backup mode, otherwise the emergency brake loop is opened when the timer relay expire. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10618 | A | Set the master controller to "OFF" position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10619 | A | Set the Driving Direction Switch to NEUTRAL and then to FORWARD position again | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10620 | R | Emergency brake released on Train. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10621 | I | From now on, when operating the master controller don't forget to maintain anyone of the deadman devices pressed. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10622 | A | Move "Master Controller (30A1)" handle to "Traction" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10623 | R | Train starts to move. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10624 | A | Keeping the Master's handle within traction zone, check that the train is capable to reach 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10625 | R | Verify that train reaches, but does not exceed the speed of 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10626 | I | On Backup mode, train speed is limited to 25km/h. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10627 | A | Move "Master Controller (30A1)" handle to initial "Brake" zone position. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10628 | I | Low brake effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10629 | R | Verify that the train starts to brake with a standard brake effort. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10630 | A | Move "Master Controller (30A1)" handle to extreme "Brake" zone position (stop before achieving "Emergency Brake" position). | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10631 | I | High brake effort demand is requested. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10632 | R | Verify that there wasn't an impact on train movement, and the brake demand was maintained. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10633 | I | On Backup Mode, brake system considers a single brake demand and disregards master controller handle position within brake zone. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10634 | R | Train stops. | | OK | | Siphesihle Mchunu - 491465 | Train |
| 10635 | I | End of Test | | OK | | Siphesihle Mchunu - 491465 | Train |

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# Section 3 – Report summaries

## 3.1 Results status

| Test Instruction Sheet | Compliant | Incomplete | Non-compliant |
|---|---|---|---|
| Dynamic | X | | |

## 3.2 Tools used.

| Function | Tool name | Tool number | Next Calibration date |
|---|---|---|---|

| Vehicle | Equipment | Expected version | Version loaded |
|---|---|---|---|
| Train | | | |

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