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PRASA PROJECT

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# SELF INSPECTION SHEET

## CONFIDENTIAL INFORMATION

This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

## APPLICATION REFERENCE

MOUNTING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?	
			TC1	M4	M1	M2	M3	TC2			
<input type="checkbox"/>	DTR3-PROCE-14	LEVELLING, WEIGHTING AND BALANCING M CAR	FT1140	1	1	1	1	1	PRA.FT1140.04	YES	
<input type="checkbox"/>	DTR3-PROCE-14	LEVELLING, WEIGHTING AND BALANCING TC CAR	FT1140	1				1	PRA.FT1140.05	YES	
<input type="checkbox"/>	DTR3-PROCE-17	LEVELLING, WEIGHTING AND BALANCING TC CAR	FT1140	1	1	1	1	1	PRA.FT1140.05	YES	
<input type="checkbox"/>	DTR3-PROCE-17	LEVELLING, WEIGHTING AND BALANCING TC CAR	FT1140	1	1	1	1	1	PRA.FT1140.05	YES	
<input type="checkbox"/>											
<input type="checkbox"/>											
<input type="checkbox"/>											

REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
7	2/11/2020	UPDATE OF AIR TIGHTNESS TEST TIME FROM 4 MIN TO 5 MIN. ADD PANTOGRAPH AIR TIGHTNESS.	APPROVER	GIVEN SILOWA	2/11/2020
			CHECKER	SIMON MOKOENA	2/11/2020
			COMPILER	COMFORT MALATJI	2/11/2020
8	9/13/2021	ADDING GAUGE MEASUREMENT CHECK ON THE SI.	APPROVER	MAKOFANE LUCY	9/13/2021
			CHECKER	RATAU EDISON	9/13/2021
			COMPILER	TSAKANI KHOSA	9/13/2021
9	5/31/2022	pressure valve (APV) Isolation	APPROVER	MAKHURUPETJI THABANG	5/31/2022
			CHECKER	HAZEL MGIBA	5/31/2022
			COMPILER	RATAU EDISON	5/31/2021

TUE	CAR	OPERATOR NAME	DATE	SELF INSPECTION NUMBER	PAGES
TS215	TC2	CH 1PU	21/03/24	SI.FT1140.52	01/08

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SELF INSPECTION  
INDUSTRIAL QUALITY

Rev:09

Date:

5/31/2022

Projct:  
PRASA

SI.FT1140.52

Car:

NCR:

Work Station

FT1140



Safety Related

## I - Document and Instrument Control

## I.1 - Documents control

Document	TC1	M1	M2	M3	M4	TC2	Revision	Remark	OK	NO	Signature/Date
PRA.FT1140.04											
PRA.FT1140.05											
PRA.FT1140.05											

## I.2 - Instruments Control - Monitoring and Measuring Instrument Control (Used for all instrument with calibration needed)

Instruments description	Serial number	Calibration or Verification Validation Date	OK	NO	Signature/Date
Measuring tape	C113TA028	23/11/23-23/11/24			
Vernier Caliper	C113V12 0050	21/11/23-21/11/24			
Torque wrench 320NM	A9630027	21/08/23-21/08/24			
Torque wrench 150NM	B7217S66	07/08/23-07/08/24			
Torque wrench 35NM	D2511023	07/08/23-07/08/24			
Torque wrench 520NM	A9630053	21/08/23-21/08/24			
Torque wrench 17NM	D2861617	13/07/23-13/07/24			

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## II - Self Inspection - Items to Check




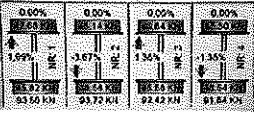

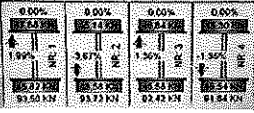
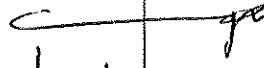
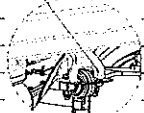
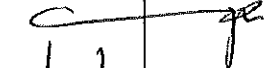


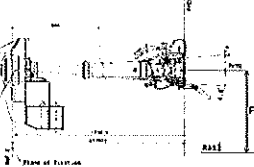

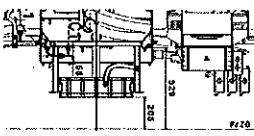

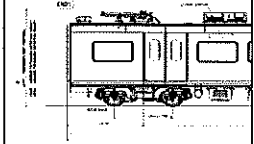

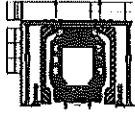

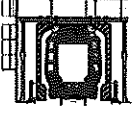

### II.1 - Items to Check

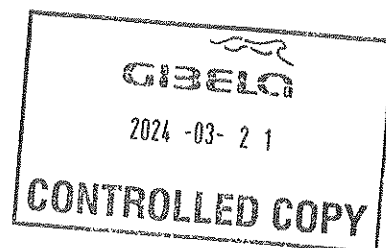
IL1 - Items to Check															
Item	Picture/Sketch	Description	Criteria/Record	OK	NOT OK	Remarks	Signature/Date								
01		Ensure that the average pressure valve (APV) is isolated by capping the two input pipes at the fittings installing the blanking fitting on the pipes highlighted		<input checked="" type="checkbox"/>			 21/03/24								
02		Check underframe pipe system Air tightness. Test performance according to WI PRA.FT1130.15.	The test was performed and no leak was observed. Initial pressure (IP): 1009 bar Final pressure (FP): 999 bar FP - IP = 010 bar APPROVAL CRITERIA: After 5 minutes the pressure cannot drops more than 0,2 bar	<input checked="" type="checkbox"/>			 21/03/24								
03		Movement performed at least 50m to shudder the car. And position on the leveled load cell, with wheels on the center.		<input checked="" type="checkbox"/>			 21/03/24								
04		Measurement inspection was done with car on condition AW0 and the rail leveled. (The load cells system must be leveled and calibrated)	Calibration Validation Date 19/12/2023	<input checked="" type="checkbox"/>			 21/03/24								
05		In case of the equipments not installed, equivalent weight of the item should be added in the same place to simulate the equipment. (Any simulated weight, add on pending test)	<table><thead><tr><th>EQUIPMENT DESCRIPTION</th><th>WEIGHT (kg)</th></tr></thead><tbody><tr><td>Driver's Seat</td><td>60</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table>	EQUIPMENT DESCRIPTION	WEIGHT (kg)	Driver's Seat	60					<input checked="" type="checkbox"/>			 21/03/24
EQUIPMENT DESCRIPTION	WEIGHT (kg)														
Driver's Seat	60														
06		The pressure difference between air spring on each bogie when raise the pressure was maintained < 0.3 bar.		<input checked="" type="checkbox"/>			 21/03/24								
07		Measurement recorded with empty suspension and loaded are on conformity with tolerances of the project.		<input checked="" type="checkbox"/>			 21/03/24								
08		All leveling measurements are according to the reference. (Values out of reference must be recorded on "Description of defects")		<input checked="" type="checkbox"/>			 21/03/24								

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		<b>SELF INSPECTION INDUSTRIAL QUALITY</b>		Rev:09	Project: PRASA	SI.FT1140.52
				Date: 2022/05/31		
Item	Picture/Sketch	Description	Criteri/Record	OK	NO	Signature/Date
09		Check that the leveling rods are torqued and have torque marker.		✓		 21/03/24
10		The difference of weight between the left and right wheels of each axle, must be $\leq 4\%$ . (Verify on the T&C equipment if all arrows are in green).		✓		 21/03/24
11		Remove the car, move back onto the load cells and repeat the step 09. Confirm if both are in the tolerance of $\leq 4\%$ .		✓		 21/03/24
12		1 - Record shims thickness used on rod. 2 - All screws were torqued and have torque marker.	THICKNESS (mm) I <u>0</u> II <u>0</u> III <u>0</u> IV <u>0</u>	✓		 21/03/24
13		Pivot fixation	1- M20 x 90 screws with application of torque according to PRA FT1140.04 / 05	✓		 21/03/24
14		FOR TC CARS F= Height of the center of Automatic coupler F = 895mm (+5/-10mm) (Using levelled rail)	TC CAB #1= <u>897</u> mm	✓		 21/03/24
15		FOR TC CARS Height of Eurobalise Antenna = 205mm (+/-10mm) (Using levelled rail)	TC CAB #1= <u>197</u> mm	✓		 21/03/24
16		Check pantograph piping air tightness. Test performance according to WI PRA FT1140.17.	The test was performed and no leak was observed. -Roof piping connection fittings. -Room piping connection fittings(Roof arch and door binning)			 W/h
17		Pantograph does not come in contact with the higher height gauge when passing through.	No Contact with Pantograph and Gauge -GO Contact with Pantograph and Gauge - NO GO			 W/h
18		Car does not come into contact with the gauge.	No Contact with Car and Gauge -GO Contact with Car and Gauge - NO GO	✓		 21/03/24





# SELF INSPECTION INDUSTRIAL QUALITY

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## DRAFT TO MEASUREMENTS DURING LEVELLING (ALL UNITS MUST BE IN mm/bar/kg)

		LEFT SIDE						RIGHT SIDE								
DESCRIPTION	TOLERANCE		6	5	4	3	2	1		1	2	3	4	5	6	
AIR SPRING HEIGHT (EMPTY)	N/A	A'II														A'
AIR SPRING HEIGHT (FULL)	min 254 max 261	AII					257 255	255 256								A
FLOOR COVERING HEIGHT	min 1096 max 1116	EII														E
AIR SPRING PRESSURE	≤ 0.3 (Ci - Cj)	CII					3.51 3.40	3.66 3.59								C
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D3														D3
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D4														D2
PIVOT VERTICAL GAP	min 25 max 32	KII														KI
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (Ji - Jj)	JII														Ji
QTY OF TURNS OF LEVELLING ROD	N/A	XII														Xi
SHIMS OF ANTI-ROLL BAR	N/A	YII														Yi
DESCRIPTION	TOLERANCE		6	5	4	3	2	1		1	2	3	4	5	6	
AIR SPRING HEIGHT (EMPTY)	N/A	A'III														A'iv
AIR SPRING HEIGHT (FULL)	min 254 max 261	AIII					256 255	257 257								Aiv
FLOOR COVERING HEIGHT	min 1096 max 1116	EIII														Eiv
AIR SPRING PRESSURE	≤ 0.3 (Civ - Cii)	CIII					289 3.01	267 2.79								Civ
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D5														D7
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D6														D8
PIVOT VERTICAL GAP	min 25 max 32	KIII														Kiv
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (Jiv - Jii)	JIII														Jiv
QTY OF TURNS OF LEVELLING ROD	N/A	XIII														Xiv
SHIMS OF ANTI-ROLL BAR	N/A	YIII														Yiv

COMPARE EACH TENTATIVE WITH  
THE TOLERANCE AND IDENTIFY  
EACH MEASURE AS BELOW

GOOD LOWER HIGHER

WEIGHT  
COMPENSATION

EQUIPMENT

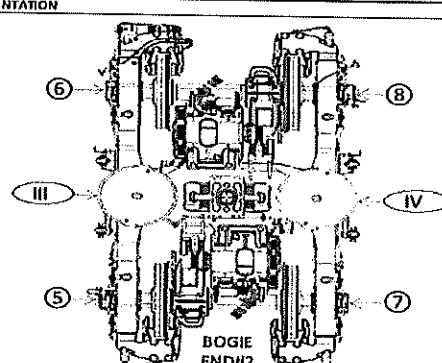
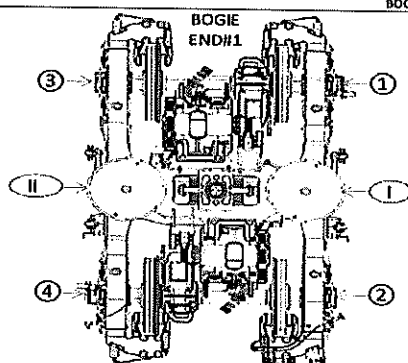
WEIGHT

EQUIPMENT

WEIGHT

SECONDARY MEASUREMENTS  
(ONLY TC CARS)AUTOMATIC COUPLER  
HEIGHT

ANTENNA HEIGHT



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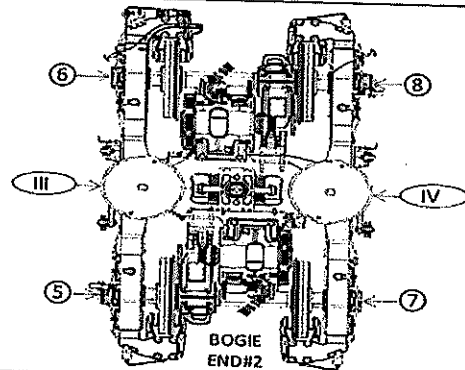
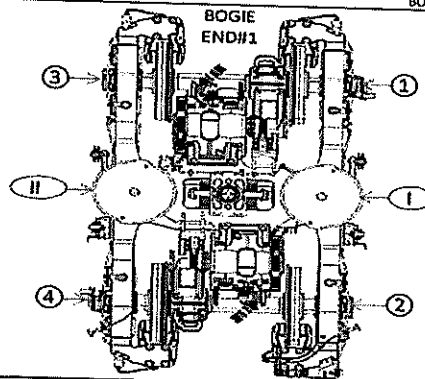
SI.FT1140.52

## DRAFT TO MEASUREMENTS DURING LEVELLING (ALL UNITS MUST BE IN mm/bar/kg)

CHECKING (ALL UNITS MUST BE IN mm/bar/kg)														
DESCRIPTION	TOLERANCE	LEFT SIDE						RIGHT SIDE						
		6	5	4	3	2	1	1	2	3	4	5	6	
AIR SPRING HEIGHT (EMPTY)	N/A	A'II												
AIR SPRING HEIGHT (FULL)	min 254 max 261	AII											A'I	
FLOOR COVERING HEIGHT	min 1096 max 1116	EII											AI	
AIR SPRING PRESSURE	≤ 0.3 (OI - O)	CII											EI	
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D3											CI	
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D4											D1	
PIVOT VERTICAL GAP	min 25 max 32	KII											D2	
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (AI - A)	JII											KI	
QTY OF TURNS OF LEVELLING ROD	N/A	XII											J1	
SHIMS OF ANTI-ROLL BAR	N/A	YII											XI	
DESCRIPTION	TOLERANCE		6	5	4	3	2	1	1	2	3	4	5	6
AIR SPRING HEIGHT (EMPTY)	N/A	A'III												
AIR SPRING HEIGHT (FULL)	min 254 max 261	AIII												A'IV
FLOOR COVERING HEIGHT	min 1096 max 1116	EIII												AIV
AIR SPRING PRESSURE	≤ 0.3 (OV - OI)	CIII												EIV
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D5												CIV
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D6												D7
PIVOT VERTICAL GAP	min 25 max 32	KIII												D8
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (AI - A)	JIII												KIV
QTY OF TURNS OF LEVELLING ROD	N/A	XIII												JIV
SHIMS OF ANTI-ROLL BAR	N/A	YIII												XIV
														YIV

COMPARE EACH TENTATIVE WITH  
THE TOLERANCE AND IDENTIFY  
EACH MEASURE AS BELOW

GOOD	LOWER	HIGHER
✓	↓	↑
WEIGHT COMPENSATION		
EQUIPMENT		
WEIGHT		
EQUIPMENT		
WEIGHT		
SECONDARY MEASUREMENTS (ONLY TO CARS)		
AUTOMATIC COUPLER HEIGHT		
ANTENNA HEIGHT		



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## DRAFT TO MEASUREMENTS DURING LEVELLING (ALL UNITS MUST BE IN mm/bar/kg)

DESCRIPTION	TOLERANCE	END#1												RIGHT SIDE					
		LEFT SIDE						RIGHT SIDE											
AIR SPRING HEIGHT (EMPTY)	N/A	A <sub>II</sub>																	
AIR SPRING HEIGHT (FULL)	min 254 max 261	A <sub>II</sub>																	A <sub>I</sub>
FLOOR COVERING HEIGHT	min 1096 max 1116	E <sub>II</sub>																	A <sub>I</sub>
AIR SPRING PRESSURE	≤ 0.3 (Q <sub>I</sub> - Q)	C <sub>II</sub>																	E <sub>I</sub>
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D <sub>3</sub>																	C <sub>I</sub>
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D <sub>4</sub>																	D <sub>1</sub>
PIVOT VERTICAL GAP	min 25 max 32	K <sub>II</sub>																	D <sub>2</sub>
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (A <sub>I</sub> - A)	J <sub>II</sub>																	K <sub>I</sub>
QTY OF TURNS OF LEVELLING ROD	N/A	X <sub>II</sub>																	J <sub>I</sub>
SHIMS OF ANTI-ROLL BAR	N/A	Y <sub>II</sub>																	X <sub>I</sub>
DESCRIPTION	TOLERANCE		6	5	4	3	2	1		1	2	3	4	5	6				Y <sub>I</sub>
AIR SPRING HEIGHT (EMPTY)	N/A	A <sub>III</sub>																	A <sub>IV</sub>
AIR SPRING HEIGHT (FULL)	min 254 max 261	A <sub>III</sub>																	A <sub>IV</sub>
FLOOR COVERING HEIGHT	min 1096 max 1116	E <sub>III</sub>																	E <sub>IV</sub>
AIR SPRING PRESSURE	≤ 0.3 (Q <sub>V</sub> - Q <sub>I</sub> )	C <sub>III</sub>																	C <sub>IV</sub>
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D <sub>5</sub>																	D <sub>7</sub>
PRIMARY SUSPENSION	SEE TABLE (ONLY REF)	D <sub>6</sub>																	D <sub>8</sub>
PIVOT VERTICAL GAP	min 25 max 32	K <sub>III</sub>																	K <sub>IV</sub>
PIVOT LATERAL STOP GAPS DIFFERENCE	≤ 4 (A <sub>V</sub> - A)	J <sub>III</sub>																	J <sub>IV</sub>
QTY OF TURNS OF LEVELLING ROD	N/A	X <sub>III</sub>																	X <sub>IV</sub>
SHIMS OF ANTI-ROLL BAR	N/A	Y <sub>III</sub>																	Y <sub>IV</sub>

COMPARE EACH TENTATIVE WITH THE TOLERANCE AND IDENTIFY EACH MEASURE AS BELOW

GOOD LOWER HIGHER



WEIGHT COMPENSATION

EQUIPMENT

WEIGHT

EQUIPMENT

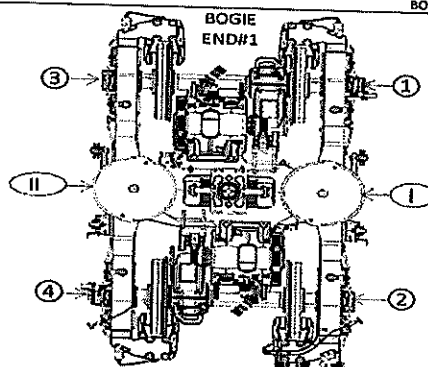
WEIGHT

SECONDARY MEASUREMENTS (ONLY TC CARS)

AUTOMATIC COUPLER

HEIGHT

ANTENNA HEIGHT



BOGIE ORIENTATION

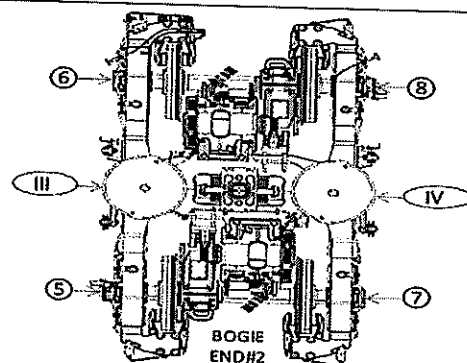


Table 1 - Reference Values and Measurement Tolerances for the Car Levelling.

ITEM		THEORETICAL VALUES											
		TCL CAR		M4 CAR		M1 CAR		M2 CAR		M3 CAR		TCL CAR	
		TBlnt	TBlnt	MB1	MB1	MB1	MB1	MB2	MB2	MB1	MB1	TBlnt	TBlnt
Pivot lateral stop gap difference [mm]	Fig. 4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4
Air Spring height [mm]	Fig. 5	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>	255 <sup>+4</sup> <sub>-4</sub>
Air spring pressure at AWD [Bar]	Fig. 5	3,76 (Ref.)	2,82 (Ref.)	2,87 (Ref.)	2,83 (Ref.)	3,02 (Ref.)	2,91 (Ref.)	3,07 (Ref.)	2,85 (Ref.)	2,83 (Ref.)	2,87 (Ref.)	2,83 (Ref.)	3,76 (Ref.)
C <sub>1</sub> -C <sub>10</sub> C <sub>9</sub> -C <sub>10</sub>	Fig. 5	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.	0,3 Máx.
Primary Suspension gap [mm]	Fig. 6	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>	35 <sup>+30</sup> <sub>-3</sub>
Carbody Floor height [mm]	Fig. 7	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>	1106 <sup>+10</sup> <sub>-10</sub>
Bolster height [mm]	Fig. 7	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>	850 <sup>+3</sup> <sub>-3</sub>
Coupling End height [mm]	Fig. 8 Fig. 9	895 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)	895 (Ref.) 760 (Ref.)	760 (Ref.) 760 (Ref.)
Pivot Vertical gap [mm]	Fig. 10	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>	30 <sup>+30</sup> <sub>-3</sub>





# SELF INSPECTION INDUSTRIAL QUALITY

Rev:09

Date:

5/31/2022

Project:  
PRASA

SI.FT1140.52

Levelling report from Production (Final measurements after Levelling and Weighing fine)

References for secondary suspension empty  
A'n Air spring height empty

References for secondary suspension full

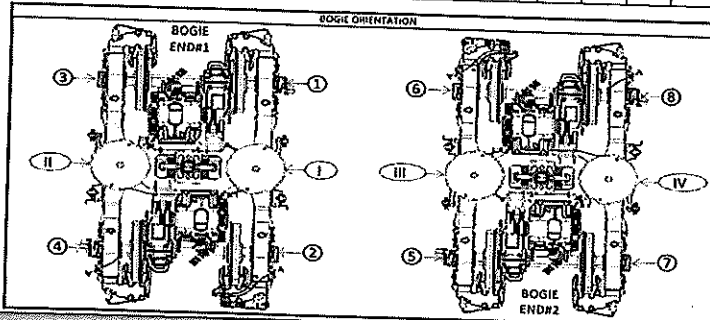
An Air spring height  
Bn Difference between measurement A'n and An  
En Floor covering height  
Cn Air spring pressure  
Dn Primary suspension  
Kn Pivot Vertical gap  
Jn Pivot Lateral stop gaps difference

Item	Reference [mm]	END#1		END#2	
		Right Side	Left Side	Left Side	Right Side
A'n	N/A	A'i 232	A'v 23	A'm 238	A'v 240
An	254 to 261	Ai 255	Av 258	Am 256	Av 257
Bn = An - A'n	N/A	Bi 23	Bv	Bm 18	Bv 17
En	1106 ±10 mm	Ei 1105	Ev 1109	Em 1107	Ev 1114
Item	Reference [bar]	END#1		END#2	
		Right Side	Left Side	Left Side	Right Side
Cn	Table 02 (*)	Ci 3.57	Cv 3.55	Cm 2.78	Cv 2.78
Cn - Cn+1	Difference ≤ 0,3	Ci - Cv 0,02		Cm - Cv 0	
Gauge serial number	N/A	GIB05875	GIB05875	GIB05875	GIB05875
Item	Reference [mm]	END#1		END#2	
		Right Side	Left Side	Left Side	Right Side
Dn	Table 01 (*)	D1 44.00	D3 44.08	D5 44.41	D7 45.61
		D2 44.40	D4 44.10	D6 44.31	D8 44.71
Kn	25 to 45	Ki 31.33		Kv 31.62	
Jn	Difference ≤ 4	Ji 24.40	Jv 26.50	Jm 26.84	Jv 25.00

(\*) Reference, only include values, isn't approval criteria.

Table 01 D Theoretical Values	TC1		M4		M1		M2		M3		TC2	
	Tbex	TBin	Mb1	Mb1	Mb1	Mb2	Mb1	Mb1	Mb1	Mb1	Tbin	Tbex
D=	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$	$35^{+12}_{-5}$

Table 02 C Theoretical Values	TC1		M4		M1		M2		M3		TC2	
	Tbex	TBin	Mb1	Mb1	Mb1	Mb2	Mb1	Mb1	Mb1	Mb1	Tbin	Tbex
C=	3.76	2.82	2.87	2.83	3.02	2.91	3.07	2.85	2.83	2.87	2.83	3.76



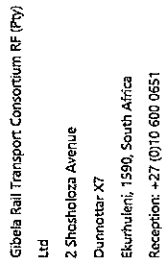
Weighing report from Test and Commissioning (Final measurements after Levelling and Weighing fine)

GIBELQ

2024 -03- 21

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	Front Bogie [Tons]	Rear Bogie [Tons]	Longitudinal Imbalance [%]	Criteria: Longitudinal Imbalance ≤ 10%	
TC2	Balance across front and rear bogies	18.49	15.60	PASS	
	Weight Measured vs Predicted	Weight Measured [Tons]	Weight Predicted [Tons]	Weight Difference [%]	Tolerance [%]
		34.09	34.45	1.07%	1.62%
					Criteria: MinDiffMax
					PASS

Test Participants			
Name	Company	Department	Date
Deborah	Gibela	EOC	
N.N.			23/03/24