

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name *(PRINT IN CAPS)* **CHRIS CLARKE** ID **CJC**

Vehicle registration *(optional)* VIN/chassis number **7A9E20014K1023868**

Make **DOMETT** Component being certified:  Chassis  Load anchorage  
 Model *(optional)* **E2001 PH**  Log bolsters  Towing connection  Brakes  
 Certification category **HVEK**  SRT  PSV stability  PSV rollover  
 Swept path  PBS

Description of work  
**CERTIFY TO SCHEDULE 5 OF LTR 32015/5**  
**NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.**  
**5AFT CURTAINSIDE** **RSS ON TYRE: 265 70 R19.5**

Code/standard/rule certified to **LTR 32015/5** Component load rating(s) **33 Tonnes GVM**  
**35 Tonnes (Group ratings)**  
 General drawing number(s) **N/A**

Supporting documents  
**BRAKE RULE CERTIFICATE JH190920**  
**BRAKE CALCULATION # TP51615**

Special conditions *(optional)*  
**WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN**  
**EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KM/H**

Certification expiry date *(if applicable)* **N/A [UNLESS MODIFIED]** or Hubodometer reading *(whichever comes first)*

**Declaration**

I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my appointment. To the best of my knowledge the information contained in the certificate is true and correct.

Designer's ID *(if different from inspector below)*  
 Inspector's signature  
 Inspector's name *(PRINT IN CAPS)* **CHRIS CLARKE** ID number **CJC**  
 Date **20-Sep-19** Number **718727**

CoF vehicle inspector ID *(if applicable)* CoF vehicle inspector signature *(if applicable)* Date

All fields are mandatory unless otherwise stated.

# WABCO START-UP LOG

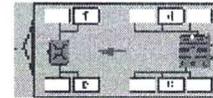
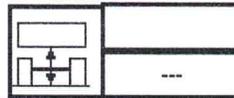
System	Trailer EBS-E	WABCO part number	480 102 084 0
Production date	2019-02-27	Serial number	437007220600C
Serial number (modulator)	000000500663		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2019-09-23 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

## WABCO TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00  
ATRP0185

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		
TYP TYPE TYPE	5AFT CURTAINSIDE		
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9E20014K1023868		
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51615A		
POLRADZAHNEZAHL c-d   e-f POLE WHEEL TEETH c-d   e-f DENTS ROUE DENTÉE c-d   e-f	100	100	ABS-System ABS-System Système ABS 4S/3M
RSS RSS RSS		Lenkachse Steering axle Essieu Vireur	
	X	Kippkritisches Fahrzeug Critical Trailer Véhicule critique	
Subsystems	SB	I/O	24N

GIO	Pin1	Pin3	Pin4
1	TAV1	MH	TAV1
2	eTASC	---	eTASC
3	ALS2	ALS2	---
4	---	---	LS1
5	DIAG	DIAG	DIAG
6	24V-O1	---	---
7	---	---	---



ACHSE AXLE ESSIEU	pm (bar)		6.5		pm (bar)		0.6		2.0		---		6.5		TYP TYPE	(mm)	(mm)	(bar)	
	1.0	Pz	TR (daN)																
1	1600	0.6	1.6	8000	4.7	0.4	1.3	---	5.7	-	20	65	69	514	4228				
2	1600	0.6	1.6	8000	4.7	0.4	1.3	---	5.7	-	20	65	69	514	4228				
3	1300	0.4	1.3	6400	3.5	0.3	1.4	---	4.8	-	14 / 16	64	69	495	2937				
4	1300	0.4	1.3	6400	3.5	0.3	1.4	---	4.8	-	14 / 16	64	69	495	2937				
5	1300	0.4	1.3	6400	3.5	0.3	1.4	---	4.8	1	14	64	69	495	2937				

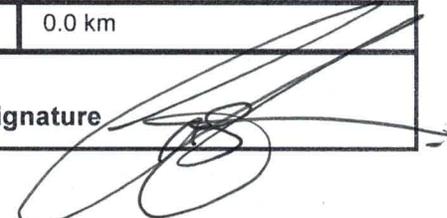
### TEBS-E

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light supply	OK
EBS pressure test	OK	Lifting axle test	Not tested
Redundancy test	OK	ECAS height sensor calibration	Not tested
ABS sensor assignment	OK	Height sensor axle load	Not tested
RTR test	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

### Electronic Extension Module

Diagnostic memory	Not tested	Signal outputs	Not tested
TailGUARDlight	Not tested	TailGUARD	Not tested

Manufacturer	DOMETT TRAILERS	Vehicle ident. no	7A9E20014K1023868
Vehicle type	5AFT CURTAINSIDE	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km

Tester	Chris Clarke	Signature 
Date	2019-09-23 11:06:09 AM	

trailer (full, semi-, centre-axle) with air brake system acc. to UN/ECE-R.13.11

distribution: DOMETT TRAILERS  
 7A9E20014K1023868  
 SODC: JH190920  
 LT400: CJC 718727

please note!

This brake calculation is made under consideration of  
 -the legal prescriptions mentioned above in the version valid at the time of making the program (V6.14.04.20).  
 -the functional characteristics of our products as well as the data of the brake out of the test approvals of the axle manufacturers, and  
 -the other vehicle data included in the brake calculation.  
 Please check whether these data correspond to the actual vehicle data. Our conditions of delivery apply (particularly section 9.0). In any case we commend to do a braking harmonisation!  
 WABCOBrake V6.14.04.20 db 03.11.2017

vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 5AFT CURTAINSIDE  
 trailer type : 5-axle-full-trailer  
 remarks : air / hydraulic / VA suspension  
 WABCO TRAILER - EBS  
 TRISTOP 3+4: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -  
 SEE PAGE 7 FOR PERFORMANCE DATA]  
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : HENDRICKSON, SBW 1937, AT0185,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	7100	35200
axle 1	P1 in kg	1600	8000
axle 2	P2 in kg	1600	8000
axle 3	P3 in kg	1300	6400
axle 4	P4 in kg	1300	6400
axle 5	P5 in kg	1300	6400
wheel base	E in mm	7800 - 8200	
centre of gravity height	h in mm	650	2098

		<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>	<u>axle 5</u>
no. of combined axles		1	1	1	1	1
no. of brake chambers per axle line	KDZ	2	2	2	2	2
The power output corresponds to		BZ 122.1	BZ 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer		Meritor	Meritor	Meritor	Meritor	Meritor
chamber size		20.	20.	T.14/24	T.14/24	14.
lever length	lBh in mm	69	69	69	69	69
brake factor	[-]	23.49	23.49	23.49	23.49	23.49
dyn. rolling radius	rdyn min in mm	421	421	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421	421	421
threshold torque	Co Nm	6.0	6.0	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar		2.2	2.2	2.1	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%bar		2.2	2.2	2.1	2.1	2.1
chamber press.(servo)pcha at pm6,5bar	bar	5.7	5.7	4.8	4.8	4.8
piston force	ThA at pm6,5bar N	6578	6578	4586	4586	4586
brake force(rdyn min)T lad. at pm6,5bar N		50826	50826	35307	35307	35307
brake force(rdyn max)T lad. at pm6,5bar N		50826	50826	35307	35307	35307
brake force within 1 % rolling friction proportion	%	22.3	22.3	18.5	18.5	18.5

braking rate z laden 0.601 for rdyn min  
 z = sum (TR)/PRmax 0.601 for rdyn max

Trailer may only be operated in combination with trucks/tractors with ISO 7638 supply (5 or 7 polar).

brake diagram :

maximum pressure: 8.5 bar

axle 1:

valve 1: 971 002 ... 0                      WABCO  
          EBS emergency valve

valve 2: 480 207 0.. 0                      WABCO        or 480 207 2.. 0  
          EBS relay valve

brake cylinder: Meritor    20HSCLD65

axle 2:

valve 1: 971 002 ... 0                      WABCO  
          EBS emergency valve

valve 2: 480 207 0.. 0                      WABCO        or 480 207 2.. 0  
          EBS relay valve

brake cylinder: Meritor    20HSCLD65

axle 3:

valve 1: 971 002 ... 0                      WABCO  
          EBS emergency valve

valve 2: 480 102 ... 0                      WABCO  
          EBS trailer modulator

brake cylinder: Meritor    1424HTLD64

axle 4:

valve 1: 971 002 ... 0 WABCO  
EBS emergency valve

valve 2: 480 102 ... 0 WABCO  
EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

axle 5:

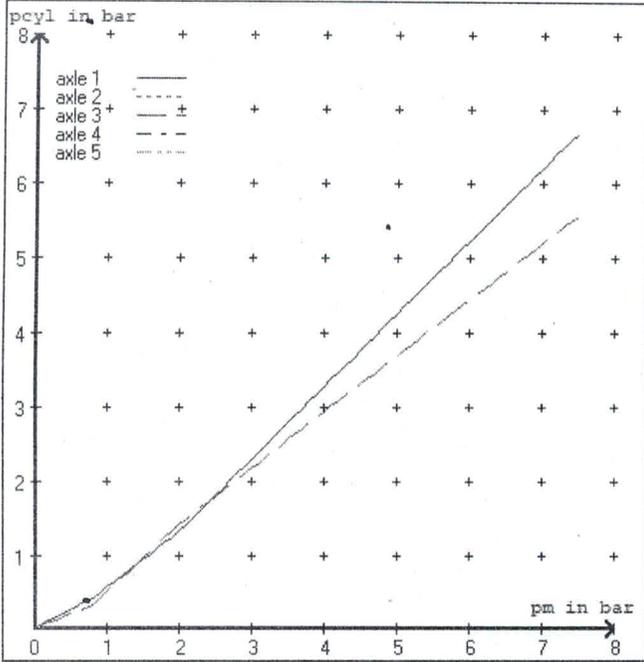
valve 1: 971 002 ... 0 WABCO  
EBS emergency valve

valve 2: 480 102 ... 0 WABCO  
EBS trailer modulator

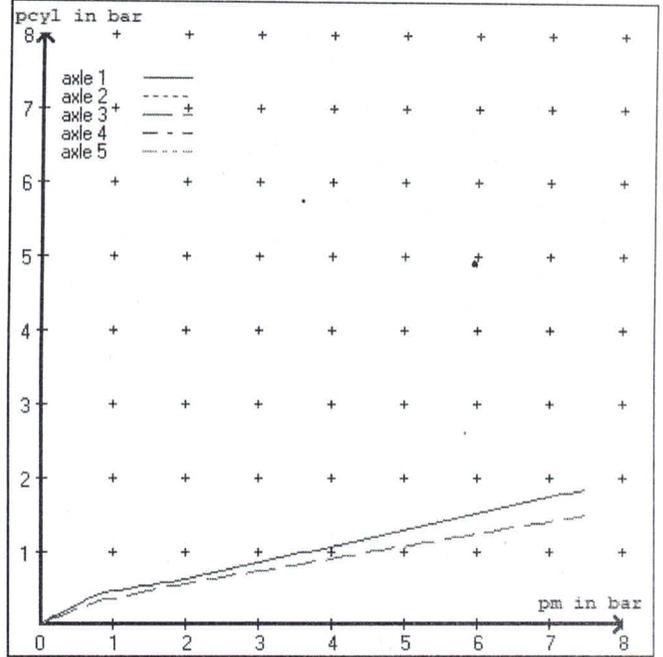
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5
at pm 3.6 bar =>	pcha in bar :	2.9	2.9	2.6	2.6	2.6
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5
at pm 1.3 bar =>	pcha in bar :	0.8	0.8	0.8	0.8	0.8

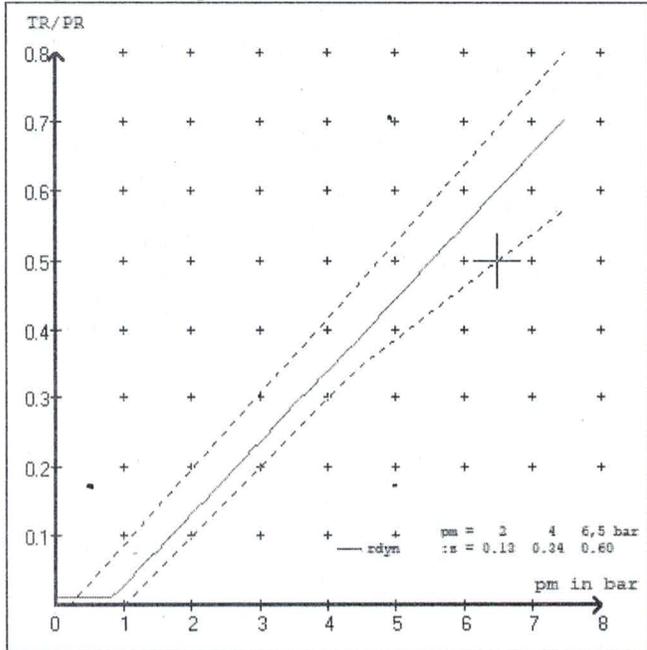
brake chamber pressure laden



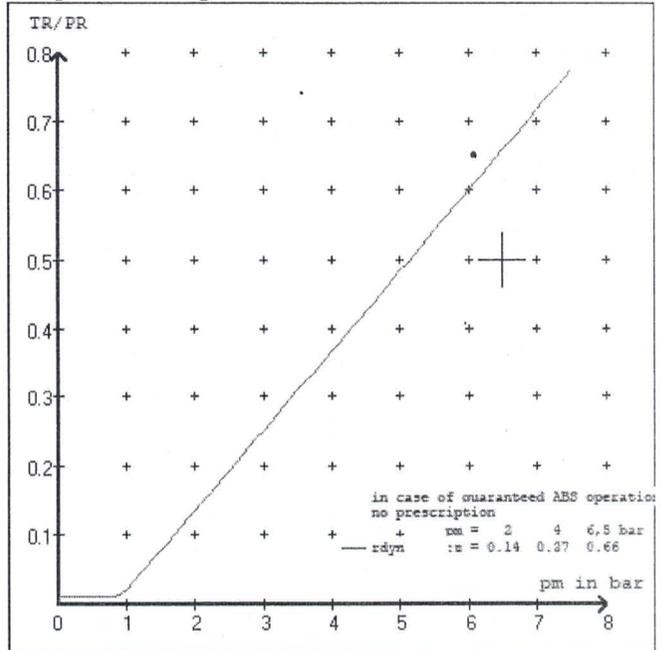
brake chamber pressure unladen



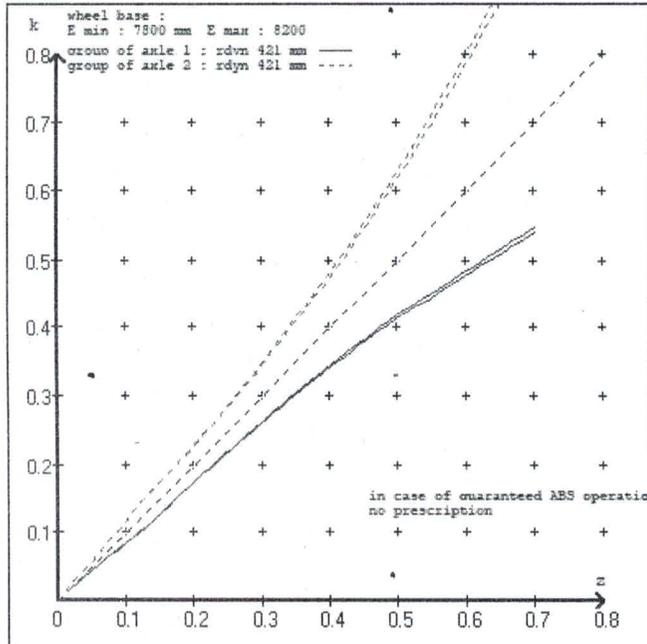
compatibility band laden



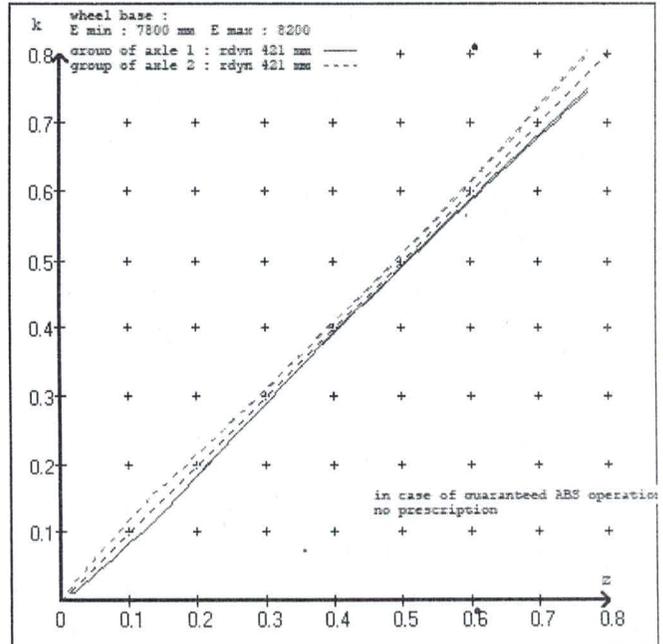
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 5AFT CURTAINSIDE  
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 69 mm  
 axle 2 : 2 x type/diameter 20. (Meritor) lever length 69 mm  
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm  
 axle 4 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm  
 axle 5 : 2 x type/diameter 14. (Meritor) lever length 69 mm

brake diagram :

valve :

971 002 ... 0 WABCO EBS emergency valve  
 480 207 0.. 0 WABCO EBS relay valve or 480 207 2.. 0  
 480 102 ... 0 WABCO EBS trailer modulator

EBS input data

=====

vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 5AFT CURTAINSIDE  
 trailer type : 5-axle-full-trailer  
 brake calculation no. : TP 51615A

tire circumference main axle : 2650 for rdyn max  
 tire circumference auxiliary axle : 2650 for rdyn max

assignment pm / deceleration z: pm 0.8 bar z = 0.010  
 (laden condition) 2.0 bar z = 0.134  
 6.5 bar z = 0.600

control pressure pm		6,5	control pressure pm		0.8	2.0	6.5	
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden		
1	1600	to be	1.6	8000	to be	0.4	1.3	5.7
2	1600	entered by the vehicle manufact.	1.6	8000	entered by the vehicle manufact.	0.4	1.3	5.7
3	1300		1.3	6400		0.3	1.4	4.8
4	1300		1.3	6400		0.3	1.4	4.8
5	1300		1.3	6400		0.3	1.4	4.8

The unladen values indicated in the above table are values for the basic parameter set. Higher unladen axle loads and liftaxles are automatically recognized and do not require separate adjustment. The above unladen axle loads must not be fallen below.

=====

axle 1	axle 2	axle 3	axle 4	axle 5
axle load pcyl				
1600 1.6	1600 1.6	1300 1.3	1300 1.3	1300 1.3
2100 1.9	2100 1.9	1800 1.6	1800 1.6	1800 1.6
2600 2.2	2600 2.2	2300 2.0	2300 2.0	2300 2.0
3100 2.6	3100 2.6	2800 2.3	2800 2.3	2800 2.3
3600 2.9	3600 2.9	3300 2.7	3300 2.7	3300 2.7
4100 3.2	4100 3.2	3800 3.0	3800 3.0	3800 3.0
4600 3.5	4600 3.5	4300 3.4	4300 3.4	4300 3.4
5100 3.8	5100 3.8	4800 3.7	4800 3.7	4800 3.7
8000 5.7	8000 5.7	6400 4.8	6400 4.8	6400 4.8

data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

axle 1 : reference axle: HENDRICKSONSBW 1937	brake lining: WABCO 230
test report : AT0185	date : 02.03.2017
axle 2 : reference axle: HENDRICKSONSBW 1937	brake lining: WABCO 230
test report : AT0185	date : 02.03.2017
axle 3 : reference axle: HENDRICKSONSBW 1937	brake lining: WABCO 230
test report : AT0185	date : 02.03.2017
axle 4 : reference axle: HENDRICKSONSBW 1937	brake lining: WABCO 230
test report : AT0185	date : 02.03.2017
axle 5 : reference axle: HENDRICKSONSBW 1937	brake lining: WABCO 230
test report : AT0185	date : 02.03.2017

calc. verif. of residual (hot) braking force type III  
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 24.0 % Fe
axle 2	(rdyn 421 mm)	T = 24.0 % Fe
axle 3	(rdyn 421 mm)	T = 18.5 % Fe
axle 4	(rdyn 421 mm)	T = 18.5 % Fe
axle 5	(rdyn 421 mm)	T = 18.5 % Fe

calculated actuator stroke in mm  
(item 4.3.1.1 of appendix 2 to annex 11)

axle 1	(sp = 58 mm)	s = 48 mm
axle 2	(sp = 58 mm)	s = 48 mm
axle 3	(sp = 56 mm)	s = 48 mm
axle 4	(sp = 56 mm)	s = 48 mm
axle 5	(sp = 56 mm)	s = 48 mm

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

axle1	ThA = 6578 N
axle2	ThA = 6578 N
axle3	ThA = 4586 N
axle4	ThA = 4586 N
axle5	ThA = 4586 N

calc. residual (hot) braking force in N  
(item 4.3.1.4 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 40650 N
axle 2	(rdyn 421 mm)	T = 40650 N
axle 3	(rdyn 421 mm)	T = 28257 N
axle 4	(rdyn 421 mm)	T = 28257 N
axle 5	(rdyn 421 mm)	T = 28257 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking

braking rate of the vehicle  
(item 4.3.2 to appendix 2 to annex 11)

0.60      0.48

required braking rate  
(items 1.5.3 and 1.7.2 to annex 11)

>= 0,4 and  
>= 0,6\*E (0.36)

axle 1	(rdyn 421 mm)	T = 40650 N
axle 2	(rdyn 421 mm)	T = 40650 N
axle 3	(rdyn 421 mm)	T = 28257 N
axle 4	(rdyn 421 mm)	T = 28257 N
axle 5	(rdyn 421 mm)	T = 28257 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking

braking rate of the vehicle  
(item 4.3.2 to appendix 2 to annex 11)

0.60      0.48

required braking rate  
(items 1.5.3 and 1.7.2 to annex 11)

>= 0,4 and  
>= 0,6\*E (0.36)



axle manufacturer  
type of brake  
type of axle

axle 1 + 2 + 3 + 4 + 5  
HENDRICKSON  
SBW 1937  
SBW 1937  
AT0185

test report of characteristic value

adm. stat. axle load  
tested axle load  
max. adm. tyre radius  
adm. cam. torque (6,5 bar)  
lining area per brake  
no. of brake cylinder  
brakefactor (SB) Bf  
brakefactor (PB) Bf  
threshold torque (Co,dec)

Pstat in kg 9000  
Pe in kg 10200  
Rezul in mm 999  
Czul in Nm 640  
AB in cm<sup>2</sup> 292  
- 2  
- 23.49  
- 23.49  
Mo in Nm 6

date  
brake lining  
cam torque  
brake force  
stroke  
tested tyre radius  
tested lever length  
threshold torque (Co,e)

02.03.2017  
WABCO 230  
Ce in Nm 638  
TeIII in daN 4649  
seIII in mm 48  
Re in mm 520  
le in mm 69  
in Nm 5

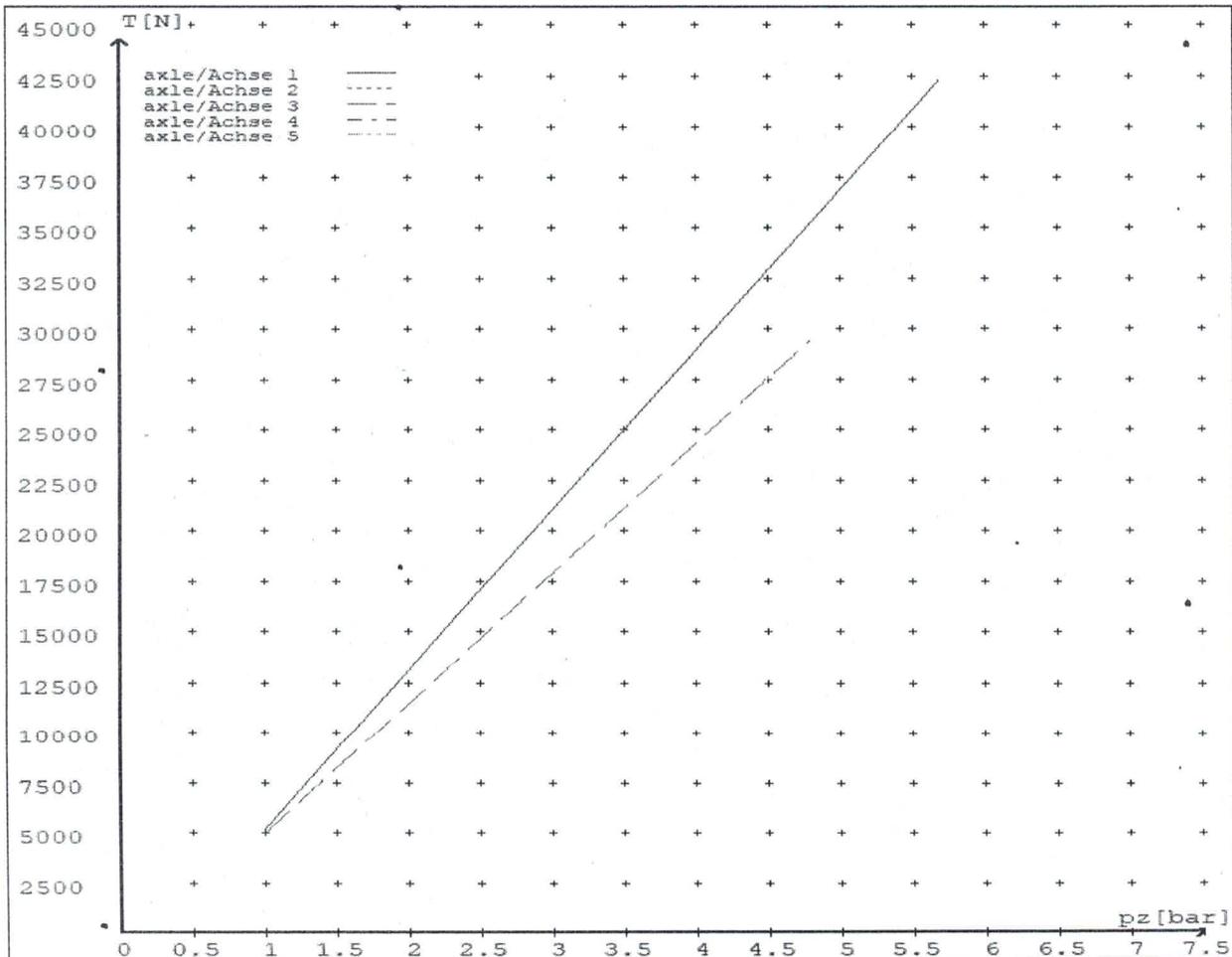
**reference values**

reference values for z = 50% for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	5150	
	5.7	42285	
axle 2	1.0	5150	
	5.7	42285	
axle 3	1.0		4955
	4.8		29374
axle 4	1.0		4955
	4.8		29374
axle 5	1.0		4955
	4.8		29374

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax = ....mm	65	65	64	64	64
Lever length = ....mm Hebellänge = ....mm	69.08	69.08	69.08	69.08	69.08



reference values for  $z = 0.5$

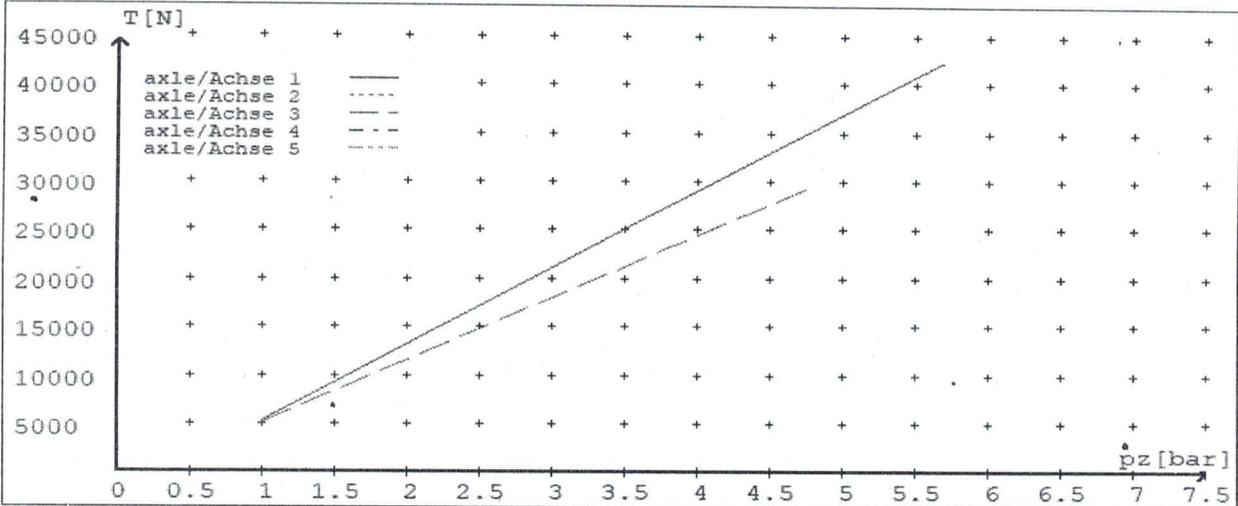
Angabe der Referenzwerte für  $z = 0.5$

for max rdyn: 421 mm

für max rdyn: 421 mm

brake calculation no: TP 51615A date 21.06.2019

Bremsberechnung Nr: TP 51615A vom 21.06.2019



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke $s_{max} = \dots$ mm maximaler Hub $s_{max} = \dots$ mm	65	65	64	64	64
Lever length = $\dots$ mm Hebellänge = $\dots$ mm	69.08	69.08	69.08	69.08	69.08

**NOTICE TO VEHICLE OPERATOR**

***THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE LAND TRANSPORT HEAVY VEHICLE BRAKE RULE 32015/5.***

***IF THIS VEHICLE IS OPERATED IN CONJUNCTION WITH NON-CERTIFIED VEHICLES, THERE MAY BE OPERATIONAL FACTORS WHICH NEED TO BE TAKEN INTO CONSIDERATION.***

***PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.***

**EXCERPT FROM LAND TRANSPORT RULE; HEAVY-VEHICLE BRAKES RULE 32015/5. SECTION 10,**

**10.1 RESPONSIBILITIES OF OPERATORS**

A person who operates a vehicle must ensure that the vehicle complies with this rule.

**10.2 RESPONSIBILITIES OF REPAIRERS**

A person who repairs or adjusts a brake must ensure that the repair or adjustment:

- a) does not prevent the vehicle from complying with this rule;
- b) complies with Land Transport Rule: Vehicle Repair 1998.

**10.3 RESPONSIBILITIES OF MODIFIERS**

A person who modifies a vehicle so as to affect the braking performance of the vehicle must:

- a) ensure that the modification does not prevent the vehicle from complying with this Rule; and
- b) notify the operator that the vehicle must be inspected and, if necessary, certified by person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.

***IF YOU ARE UNSURE ABOUT YOUR RESPONSIBILITIES, PLEASE CONTACT THE VEHICLE MANUFACTURER, OR MYSELF.***

***COMPLAINTS. Complaints and Warranty issues which relate to Brake Certification will be acknowledged within 7 working days and a resolution proposed within 25 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy. Customers have the right to appeal to the New Zealand Transport Authority if dissatisfied with a Compliance issue. (Refer NZTA Deed Of Appointment Para 47.4) NZTA Helpdesk 0800 699 000***

(p.p.).....  
(J Hirst (JEH) HVEK)

**NOTICE TO VEHICLE OPERATOR**

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015/5, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.

Failure to connect to such supply invalidates Brake Rule compliance.

The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

If the light does not illuminate when ignition is switched on, the system must be checked. If the light remains illuminated when the vehicle is in motion, Brake Rule compliance is compromised. Repairs must be made as soon as possible.

If you are unsure of your responsibilities and/or obligations, please contact either the vehicle manufacturer or myself.

(p.p.)  
J E Hirst  
(JEH HVEK)  
(09 980 7300)



**NOTICE TO VEHICLE OPERATOR**

**WABCO Park Release Emergency Valve**  
**(PREV)**

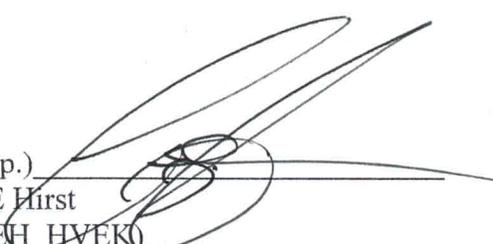
This trailer is equipped with a WABCO PREV  
Part # 971 002 900 0

Application of the park brake via the cab control valve will actuate and apply all service brakes on the trailer. In the event of a leak in the service brake system the Spring Brakes will automatically override and hold the vehicle in compliance to Land Transport Rule: Heavy-vehicle Brakes Rule 32015/5.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated mid way down the chassis rail. The cab control in the prime mover does not have to be applied for this test procedure.

**If you are unsure of any aspect relating to this instruction please contact either the vehicle manufacturer or myself.**

(p.p.)  
J E Hirst  
(JEH HVEKO)  
(09 980 7300)



**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-5  
WORKSHEET, PROCEDURE DOCUMENTATION SHEET  
& CONFIRMATION OF COMPLIANCE**

**CLIENT**

<b>MANUFACTURER:</b>	DOMETT TRAILERS
<b>ADDRESS:</b>	TAURIKURA DRIVE, TAURANGA 3173
<b>FLEET:</b>	BOOTH'S TRANSPORT

**VEHICLE DETAILS**

<b>VEHICLE TYPE:</b>	5AFT CURTAINSIDE	<b>CERT #:</b>	JH190920
<b>YEAR:</b>	2019	<b>CALCULATION #:</b>	TP51615
<b>MAKE:</b>	DOMETT	<b>REGO:</b>	N/A
<b>MODEL:</b>	E2001 PH	<b>LT400 #:</b>	718727
<b>CHASSIS #:</b>	1868	<b>ORDER NUMBER:</b>	6615
<b>VIN #:</b>	7A9E20014K1023868		
<b>GVM: TONNES</b>	33	<b>PRIME MOVER:</b>	EBS / EUROPEAN
<b>LOAD CONFIGURATION:</b>	MIXED FREIGHT		
<b>GROUP RATINGS: TONNES</b>	<b>FRONT</b>	<b>REAR</b>	
	16	19	
<b>WHEEL BASE: METRES</b>	8.15		
	<b>UNLADEN COG</b>	<b>MAX HEIGHT</b>	<b>HEIGHT DECK</b>
	0.675	4.3	1.09
<b>COG: METRES</b>	2.008		
	<b>FRONT</b>	<b>REAR</b>	<b>TOTAL</b>
<b>TARE: TONNES</b>	3.2	3.9	7.1
	<b>FRONT</b>	<b>REAR</b>	
<b>TYRE SIZE:</b>	265 70 R19.5	265 70 R19.5	
<b>ROLLING CIRCUMFERENCE: MM</b>	2645	2645	
<b>AXLE SPACING: METRES</b>	1.31	2.51	

**BRAKE & AXLE DETAILS**

	MAKE	MODEL	TEST REPORT
AXLE:	HENDRICKSON	HND-PAN 19 DISC	ATRP0185
POLE WHEEL FRONT:	100	POLE WHEEL REAR:	100
LINING MATERIAL:	WABCO 230	BRAKE FACTOR:	23.49
SENSED AXLES:	2 + 4		
SERIAL NUMBERS:	1	N/A	
	2	N/A	
	3	N/A	
	4	N/A	
	5	N/A	

**CHAMBER AND VALVING DETAILS**

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	TSE_CHAMBERS
SIZE:	20HSCLD	1416HTLD	14HSCLD
STROKE: MILLIMETRES	65	64	64
TEST REPORT #:	BC 0041.0 Jul '07	BC0143.0	BZ 122.1 Sep '00
SPRINGBRAKE FORCE: kN	N/A	6.16	N/A
HOLDOFF PRESSURE: kPa	N/A	4.5	N/A
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	WABCO PAN19
LEVER LENGTH: MILLIMETRES	69	69	69
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. kPa
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	80 kPa
ANTI-COMPOUNDING:	YES	ELEX:	N/A
SPRING BRAKE RELAY:	WABCO_PREV	971 002 900 0	
YARD RELEASE VALVE:	WABCO-PREV	971 002 900 0	
INLINE RELAY FITTED:	N/A	N/A	

ECU DIRECTION:

FRONT

REAR

FRONT FRICTION:  $\mu$

0.48

SMARTBOARD/OPTILINK:

SMARTBOARD

OPTI-LINK

**SUSPENSION**

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	ELECTRONIC
MAKE:	HENDRICKSON_AIR	HENDRICKSON_AIR
MODEL:	HENDRICKSON_INTRAX	HENDRICKSON_INTRAX
BELLOW SIZE:	HND SHOCKLESS	HND SHOCKLESS
HEIGHT CONTROL VALVE:	464 008 011 0	441 050 100 0
OTHER VALVES:	N/A	463 090 500 0 (eTASC)
RIDE HEIGHT <i>MM</i> :	255	255
HANGER HEIGHT <i>MM</i> :	200	200
PEDESTAL HEIGHT <i>MM</i> :	40	40
LIFTAXLE:		YES 5TH AXLE
TIPPING DUMP SWITCH:		N/A
LIFTAXLE VALVE:		472 195 052 0

**AIR TANKS**

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: <i>L</i>	46	71
AUXILLARY TANK SIZE: <i>L</i>	N/A	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

**AIR LINES**

TEST POINTS:

CONTROL LINE:

X 1

TANK:

X 1

REAR CHAMBER:

X 2

FRONT CHAMBER:

X 1

DUOMATIC COLOUR CODED:

YES

**ELECTRONIC HEIGHT SENSOR CALIBRATION**

	TIMER TICKS [F/R]	MILLIMETRE [F / R]
UPPER LEVEL:	1307	315
NORMAL LEVEL:	1265	255
LOWER LEVEL:	1213	180

**CHECKS AT COMMISSION OF VEHICLE**

CHAMBER BUNGS REMOVED:  VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME:	MODULATOR 2.1	MODULATOR 2.2	RELAY VALVE
ms:	200	205	370

**NOTES AND SPECIAL CONDITIONS**

---



---



---



---



---

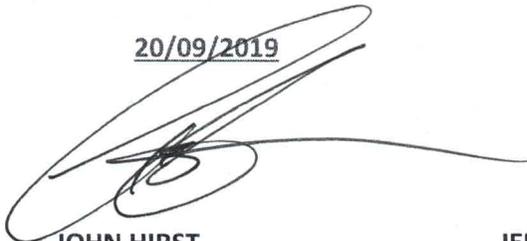


---

*I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN AND THIS CERTIFICATION COMPLIES IN ALL RESPECTS WITH THE LAND TRANSPORT RULE VEHICLE STANDARDS COMPLIANCE 2002 AND MY DEED OF APPOINTMENT. TO THE BEST OF MY KNOWLEDGE THE INFORMATION CONTAINED IN THIS CERTIFICATE IS TRUE AND CORRECT.*

**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015/5, SCHEDULE 5.**

DATE: 20/09/2019

SIGNED: 

CERTIFIER NAME & ID: JOHN HIRST JEH

SODC ENDORSED BY: CHRIS CLARKE CJC

PHONE (BUS): 09-980-7300