

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS) <b>CHRIS CLARKE</b>	ID <b>CJC</b>
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Vehicle registration (optional)	VIN/chassis number <b>7A9E30014K1023883</b>												
Make <b>DOMETT</b>	Component being certified: <table border="0"> <tr> <td><input type="checkbox"/> Chassis</td> <td><input type="checkbox"/> Load anchorage</td> </tr> <tr> <td><input type="checkbox"/> Log bolsters</td> <td><input checked="" type="checkbox"/> Brakes</td> </tr> <tr> <td><input type="checkbox"/> SRT</td> <td><input type="checkbox"/> PSV stability</td> </tr> <tr> <td><input type="checkbox"/> Swept path</td> <td><input type="checkbox"/> PSV rollover</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Towing connection</td> </tr> <tr> <td></td> <td><input type="checkbox"/> PBS</td> </tr> </table>	<input type="checkbox"/> Chassis	<input type="checkbox"/> Load anchorage	<input type="checkbox"/> Log bolsters	<input checked="" type="checkbox"/> Brakes	<input type="checkbox"/> SRT	<input type="checkbox"/> PSV stability	<input type="checkbox"/> Swept path	<input type="checkbox"/> PSV rollover		<input type="checkbox"/> Towing connection		<input type="checkbox"/> PBS
<input type="checkbox"/> Chassis	<input type="checkbox"/> Load anchorage												
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<input type="checkbox"/> SRT	<input type="checkbox"/> PSV stability												
<input type="checkbox"/> Swept path	<input type="checkbox"/> PSV rollover												
	<input type="checkbox"/> Towing connection												
	<input type="checkbox"/> PBS												
Model (optional) <b>E3001</b>													
Certification category <b>HVEK</b>													

Description of work

**CERTIFY TO SCHEDULE 5 OF LTR 32015/5**

**NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.**

**5AFT DROP SIDE TIPPER** **RSS ON TYRE: 265 70 R19.5**

Code/standard/rule certified to <b>LTR 32015/5</b>	Component load rating(s) <b>32 Tonnes GVM</b>
General drawing number(s) <b>N/A</b>	<b>35 Tonnes (Group ratings)</b>

Supporting documents

**BRAKE RULE CERTIFICATE JH191012**

**BRAKE CALCULATION # TP51946**

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) <b>N/A [UNLESS MODIFIED]</b>	or Hubodometer reading (whichever comes first)
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**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 **16-Oct-19** Number **723591**

CoF vehicle inspector ID (if applicable)	CoF vehicle inspector signature (if applicable)	Date
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All fields are mandatory unless otherwise stated.

# WABCO START-UP LOG

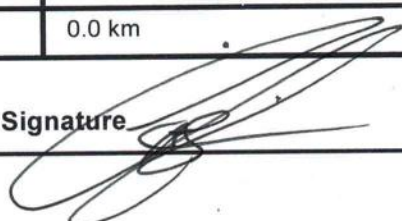
System	Trailer EBS-E	WABCO part number	480 102 084 0
Production date	2019-02-27	Serial number	437007277800K
Serial number (modulator)	000000500671		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2019-10-16 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

<b>WABCO</b>		<b>TRAILER EBS-E</b>		GGVS/ADR TUEH TB 2007 - 019.00 TDB0749																							
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS			GIO	Pin1	Pin3	Pin4																				
TYP TYPE TYPE	5AFT SIDE TIPPER			1	24V-O1	---	---																				
VEHICLE IDENT. NUMBER - CHASSIS NUMBER NUMERO DE CHASSIS	7A9E30014K1023883			2	---	---	---																				
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51946A			3	ALS2	ALS2	---																				
POLRADZAHNEZAHL c-d   e-f POLE WHEEL TEETH c-d   e-f DENTS ROUE DENTÉE c-d   e-f	90	90	ABS-System ABS-System Système ABS	4	---	---	---																				
RSS RSS RSS	Einachsbereifung Single Tire Monte simple	Lenkachse Steering axle Essieu vireur	4S/3M	5	DIAG	DIAG	DIAG																				
	Zwillingsbereifung Twin Tire Monte jumelée	X	Kippkritisches Fahrzeug Critical Trailer Véhicule critique	6	---	---	---																				
Subsystems	SB	I/O	24N	7	---	---	---																				
ACHSE AXLE ESSIEU		pm (bar)		6.5		pm (bar)		0.6		2.0		---		6.5		TYP TYPE		(mm)		(mm)		(bar)		1.0		Pz	
		p2																				TR (daN)					
1	1850	0.8	2.6	8000	5.1	0.4	1.5	---	6.6	-	20	65	69	506	4844												
2	1850	0.8	2.6	8000	5.1	0.4	1.5	---	6.6	-	20	65	69	506	4844												
3	1200	0.4	1.5	6350	3.9	0.3	1.6	---	4.2	-	14 / 16	64	69	486	2502												
4	1200	0.4	1.5	6350	3.9	0.3	1.6	---	4.2	-	14 / 16	64	69	486	2502												
5	1200	0.4	1.5	6350	3.9	0.3	1.6	---	4.2	-	14	64	69	486	2502												

## 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	7A9E30014K1023883
Vehicle type	5AFT SIDE TIPPER	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2019-10-16 3:16:29 PM		

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

distribution: DOMETT TRAILERS  
 7A9E30014K1023883  
 SODC: JH191012  
 LT400: CJC 723591

please note!

This brake calculation is made under consideration of  
 -the legal precriptions 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 SIDE TIPPER  
 trailer type : 5-axle-full-trailer  
 remarks : air / hydraulic / VA suspension  
 WABCO TRAILER - EBS E  
 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 : SAF, SBW 1937, TDB 0749 ECE,

		unladen	laden
total mass	P in kg	7300	35050
axle 1	P1 in kg	1850	8000
axle 2	P2 in kg	1850	8000
axle 3	P3 in kg	1200	6350
axle 4	P4 in kg	1200	6350
axle 5	P5 in kg	1200	6350
wheel base	E in mm	5950 - 6100	
centre of gravity height	h in mm	700	2280

	axle 1	axle 2	axle 3	axle 4	axle 5
no. of combined axles	1	1	1	1	1
no. of brake chambers per axle line	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	69	69	69	69	69
brake factor	23.03	23.03	23.03	23.03	23.03
dyn. rolling radius	421	421	421	421	421
dyn. rolling radius	421	421	421	421	421
threshold torque	6.0	6.0	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.3	2.3	2.0	2.0	2.0
chamber pressure(rdyn max)pH at z=22,5%bar	2.3	2.3	2.0	2.0	2.0
chamber press.(servo)pcha at pm6,5bar bar	6.6	6.6	4.2	4.2	4.2
piston force ThA at pm6,5bar N	7687	7687	3984	3984	3984
brake force(rdyn min)T lad. at pm6,5bar N	58227	58227	30080	30080	30080
brake force(rdyn max)T lad. at pm6,5bar N	58227	58227	30080	30080	30080
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).



## axle 4:

valve 1: 480 102 0.. 0 WABCO  
EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

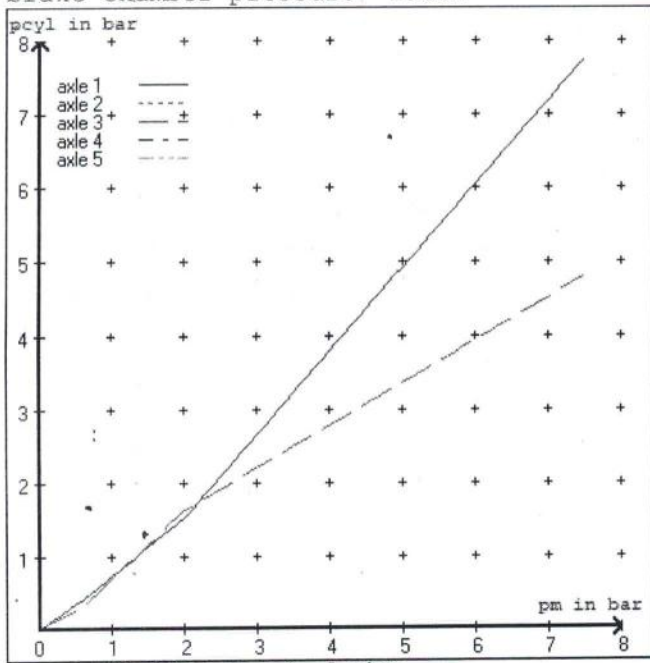
## axle 5:

valve 1: 480 102 0.. 0 WABCO  
: EBS trailer modulator

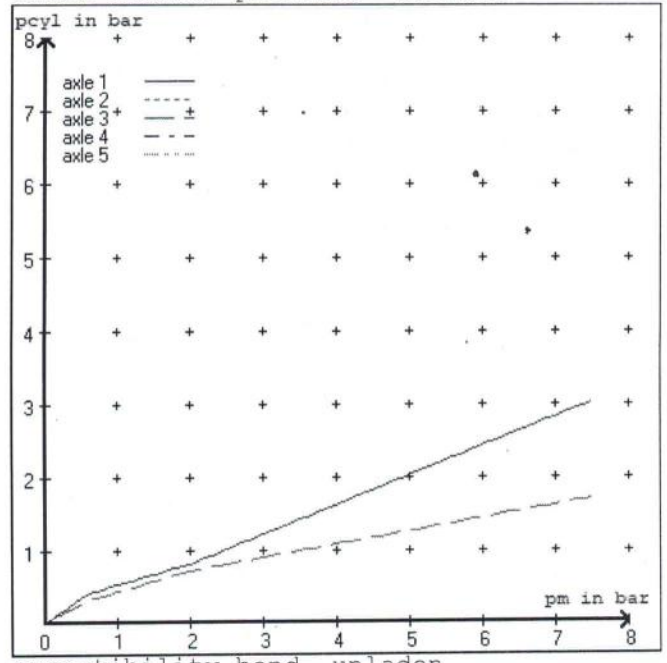
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.5 bar =>	pcha in bar :	3.2	3.2	2.5	2.5	2.5	2.5
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.1 bar =>	pcha in bar :	0.8	0.8	0.8	0.8	0.8	0.8

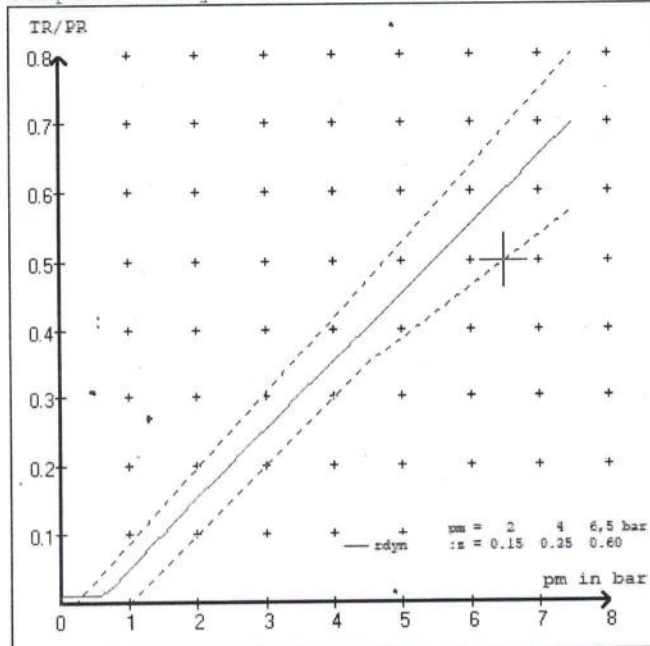
brake chamber pressure laden



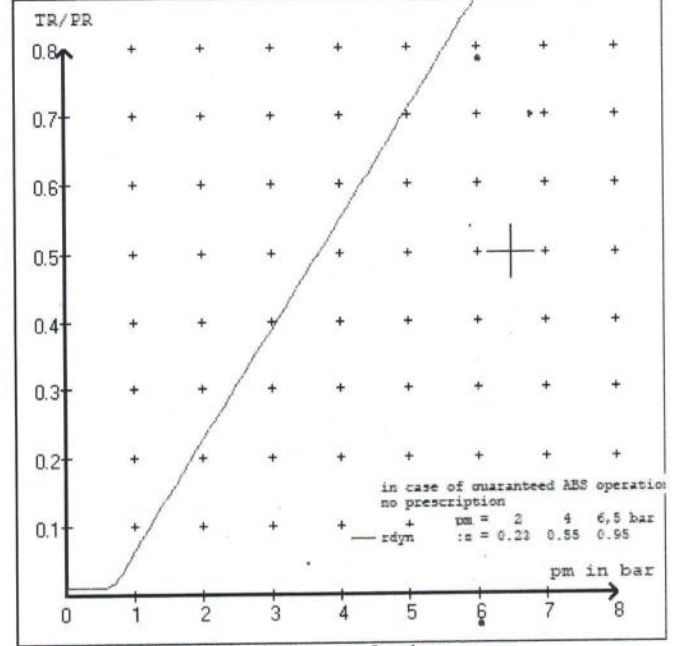
brake chamber pressure unladen



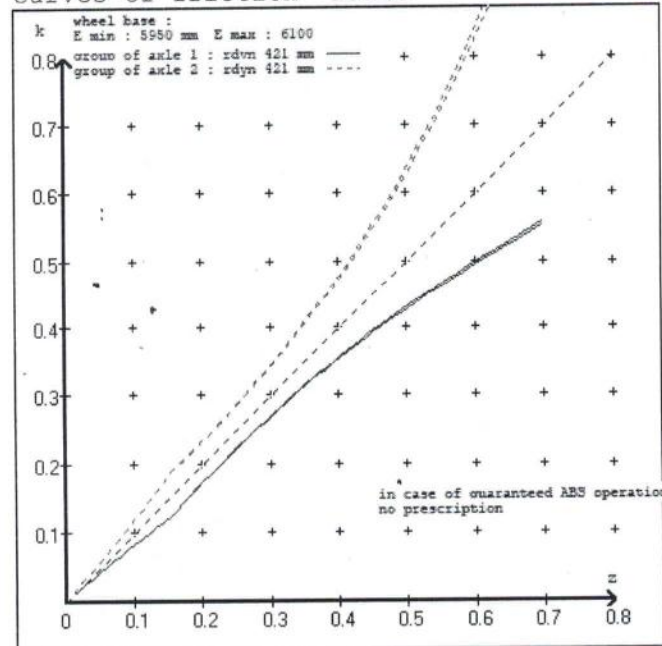
compatibility band laden



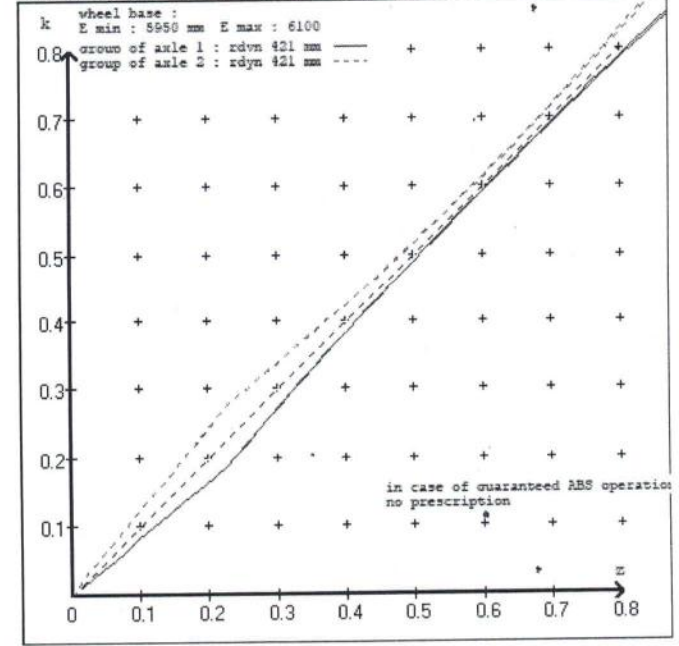
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 5AFT SIDE TIPPER  
 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 :  
 480 207 0.. 0 WABCO EBS relay valve or 480 207 2.. 0  
 480 102 0.. 0 WABCO EBS trailer modulator

EBS input data

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vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 5AFT SIDE TIPPER  
 trailer type : 5-axle-full-trailer  
 brake calculation no. : TP 51946A

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

assignment pm / deceleration z: pm 0.6 bar z = 0.010  
 (laden condition) 2.0 bar z = 0.150  
 6.5 bar z = 0.600

control pressure pm			6,5	control pressure pm			0.6	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden			
1	1850	to be	2.6	8000	to be	0.4	1.5	6.6	
2	1850	entered by	2.6	8000	entered by	0.4	1.5	6.6	
3	1200	the vehicle	1.5	6350	the vehicle	0.3	1.6	4.2	
4	1200	manufact.	1.5	6350	manufact.	0.3	1.6	4.2	
5	1200		1.5	6350		0.3	1.6	4.2	

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.

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axle 1		axle 2		axle 3		axle 4		axle 5	
axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1850	2.6	1850	2.6	1200	1.5	1200	1.5	1200	1.5
2350	2.9	2350	2.9	1700	1.8	1700	1.8	1700	1.8
2850	3.3	2850	3.3	2200	2.0	2200	2.0	2200	2.0
3350	3.6	3350	3.6	2700	2.3	2700	2.3	2700	2.3
3850	3.9	3850	3.9	3200	2.5	3200	2.5	3200	2.5
4350	4.2	4350	4.2	3700	2.8	3700	2.8	3700	2.8
4850	4.6	4850	4.6	4200	3.1	4200	3.1	4200	3.1
5350	4.9	5350	4.9	4700	3.3	4700	3.3	4700	3.3
8000	6.6	8000	6.6	6350	4.2	6350	4.2	6350	4.2

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

axle 1 :	reference axle: SAF	SBW 1937	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 2 :	reference axle: SAF	SBW 1937	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 3 :	reference axle: SAF	SBW 1937	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 4 :	reference axle: SAF	SBW 1937	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 5 :	reference axle: SAF	SBW 1937	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 20130930 30.09.2013

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

axle 1	(rdyn 421 mm)	T = 26.3 % Fe
axle 2	(rdyn 421 mm)	T = 26.3 % Fe
axle 3	(rdyn 421 mm)	T = 16.8 % Fe
axle 4	(rdyn 421 mm)	T = 16.8 % Fe
axle 5	(rdyn 421 mm)	T = 16.8 % Fe

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

axle 1	(sp = 58 mm)	s = 39 mm
axle 2	(sp = 58 mm)	s = 39 mm
axle 3	(sp = 56 mm)	s = 39 mm
axle 4	(sp = 56 mm)	s = 39 mm
axle 5	(sp = 56 mm)	s = 39 mm

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

axle1	ThA = 7687 N
axle2	ThA = 7687 N
axle3	ThA = 3984 N
axle4	ThA = 3984 N
axle5	ThA = 3984 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 = 45449 N
axle 2	(rdyn 421 mm)	T = 45449 N
axle 3:	(rdyn 421 mm)	T = 23573 N
axle 4	(rdyn 421 mm)	T = 23573 N
axle 5	(rdyn 421 mm)	T = 23573 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.47

required braking rate	>= 0,4 and
(items 1.5.3 and 1.7.2 to annex 11)	>= 0,6*E (0.36)

axle 1	(rdyn 421 mm)	T = 45449 N
axle 2	(rdyn 421 mm)	T = 45449 N
axle 3	(rdyn 421 mm)	T = 23573 N
axle 4	(rdyn 421 mm)	T = 23573 N
axle 5	(rdyn 421 mm)	T = 23573 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.47

required braking rate	>= 0,4 and
(items 1.5.3 and 1.7.2 to annex 11)	>= 0,6*E (0.36)



spring parking brake

	axle 3	axle 4
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	T.14/16	T.14/16
lever length                      lBh in mm	69	69
stat. tyre radius                      rstat max in mm	401	401
at a stroke of                      s                      in mm	30	30
min. force of spring brake                      TFZ in N	6160	6160
sp.brake chamber no Meritor.....	4	4
release pressure                      pLs in bar	4.5	4.5

calculation:

ratio until road	3.9674	3.9674
$iFb = lBh * \eta * C * rBt / (rBn * rstat)$ for rstat in mm	401	401
brake force of spring br. Tf in N	48188	48188
$Tf = (TFZ * KDZ - 2 * Co / lBh) * iFb$		
braking rate                      zf laden	0.290	
$zf = \sum (Tf) / P + 0,01$		

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width min Ef necessary to fulfil the regulations

$$\min Ef = E * (1 - PR/P + zferf * h/E) / (1 - zferf / (fzul * nf/ng))$$

min Ef = 4719 mm for E = 5950 mm

min Ef = 4823 mm for E = 6100 mm

min Ef = minimum distance between front axle(s) (trailer) or support (semitraile) and the rear axle(s) (resultant of the bogie)

E = wheel base

fzul = 0.80 maximum permissible frictional connection required

zferf = 0.18 maximum required braking ratio of the parking brake

h = 2280 mm height of center of gravity - laden

PR = 19050 kg maximum bogie mass - laden

P = 35050 kg maximum total mass - laden

nf = 2 no. of axle(s) with TRISTOP spring brake actuators

ng = 3 no. of bogie axle(s)

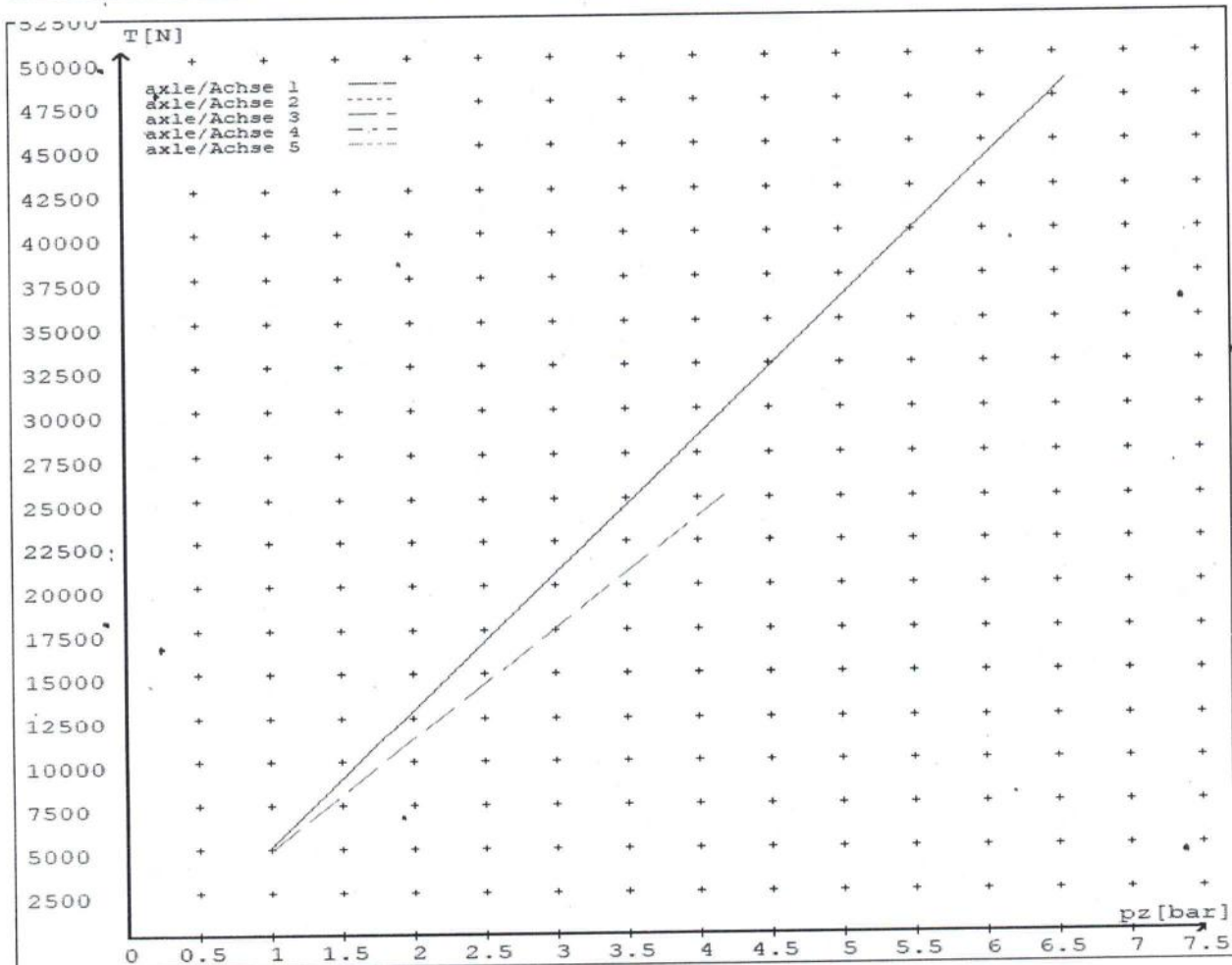
**reference values**

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5061	
	6.6	48441	
axle 2	1.0	5061	
	6.6	48441	
axle 3	1.0		4864
	4.2		25025
axle 4	1.0		4864
	4.2		25025
axle 5	1.0		4864
	4.2		25025

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



**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.

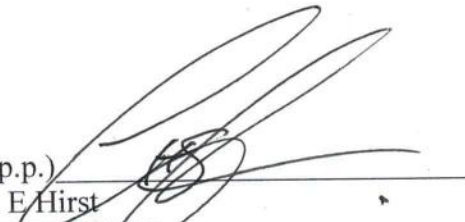
To comply with the New Zealand Heavy Vehicle Brake Rule 32015/5, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.

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)

**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>	NOT SPECIFIED

**VEHICLE DETAILS**

<b>VEHICLE TYPE:</b>	5AFT DROP SIDE TIPPER	<b>CERT #:</b>	JH191012
<b>YEAR:</b>	2019	<b>CALCULATION #:</b>	TP51946
<b>MAKE:</b>	DOMETT	<b>REGO:</b>	N/A
<b>MODEL:</b>	E3001	<b>LT400 #:</b>	
<b>CHASSIS #:</b>	1883	<b>ORDER NUMBER:</b>	6779
<b>VIN #:</b>	7A9E30014K1023883		
<b>GVM: TONNES</b>	32	<b>PRIME MOVER:</b>	NORTH AMERICAN
<b>LOAD CONFIGURATION:</b>	UNIFORM DENSITY		
<b>GROUP RATINGS: TONNES</b>	<b>FRONT</b>	<b>REAR</b>	
	16	19	
<b>WHEEL BASE: METRES</b>	5.975		
	<b>UNLADEN COG</b>	<b>MAX HEIGHT</b>	<b>HEIGHT DECK</b>
	0.7	4.3	1.21
<b>COG: METRES</b>	2.280		
	<b>FRONT</b>	<b>REAR</b>	<b>TOTAL</b>
<b>TARE: TONNES</b>	3.72	3.68	7.4
	<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	2.61	

**BRAKE & AXLE DETAILS**

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9W	TDB0749
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	JURID 539	BRAKE FACTOR:	23.03
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: <i>MILLIMETRES</i>	65	64	64
TEST REPORT #:	BC 0041.0 Jul '07	BC0143.0	BZ 122.1 Sep '00
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.16	N/A
HOLDOFF PRESSURE: <i>kPa</i>	N/A	4.5	N/A
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	WABCO PAN19
LEVER LENGTH: <i>MILLIMETRES</i>	69	69	69
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	60 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	60 kPa
ANTI-COMPOUNDING:	YES	ELEX:	N/A
SPRING BRAKE RELAY:	SEALCO_SBR	110701	
YARD RELEASE VALVE:	SEALCO_YR	17600B	
INLINE RELAY FITTED:	N/A	N/A	

ECU DIRECTION:

FRONT

REAR

FRONT FRICTION:  $\mu$

0.49

SMARTBOARD/OPTILINK:

SMARTBOARD

OPTI-LINK

### SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_INTRA	SAF_INTRA
BELLOW SIZE:	2619, 300mm	2619, 300mm
HEIGHT CONTROL VALVE:	464 008 011 0	464 008 011 0
OTHER VALVES:	N/A	216050
RIDE HEIGHT <small>MM</small> :	250	250
HANGER HEIGHT <small>MM</small> :	200	200
PEDESTAL HEIGHT <small>MM</small> :	5	5
LIFTAXLE:		N/A
TIPPING DUMP SWITCH:		PNEUMATIC
LIFTAXLE VALVE:		N/A

### AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: <small>L</small>	46	71
AUXILLARY TANK SIZE: <small>L</small>	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:	N/A	N/A
NORMAL LEVEL:	N/A	N/A
LOWER LEVEL:	N/A	N/A

**CHECKS AT COMMISSION OF VEHICLE**

CHAMBER BUNGS REMOVED:  VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME: MODULATOR 2.1 MODULATOR 2.2 RELAY VALVE

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**NOTES AND SPECIAL CONDITIONS**

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*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: 16/10/2019

SIGNED: 

CERTIFIER NAME & ID: JOHN HIRST JEH

SODC ENDORSED BY: CHRIS CLARKE CJC

PHONE (BUS): 09-980-7300