

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

Plate number (optional) \_\_\_\_\_ VIN/chassis number **7A9C20033P2023256**

Make **DOMETT** Component being certified:  Chassis  Load anchorage

Model (optional) **C2003 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: NZ HEAVY VEHICLE BRAKE SPECIFICATION.

CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.

3ASBTF CURTAINSIDE **RSS ON TYRE: 265 70 R19.5**

FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

**REASON FOR CERTIFICATION: NEW TRAILER BUILD**

Code/standard/rule certified to **LTR 32015** Component load rating(s) **33 Tonnes GVM**

General drawing number(s) **N/A** **19 Tonnes (Rear group rating)**

Supporting documents

**BRAKE RULE CERTIFICATE JH230713**

**BRAKE CALCULATION # TP52694**

Special conditions (optional)

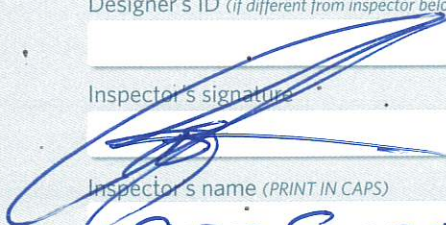
**WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KM/H**

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 **19.07.2023** Number **880231**

CoF vehicle inspector ID (if applicable) \_\_\_\_\_ CoF vehicle inspector signature (if applicable) \_\_\_\_\_ Date \_\_\_\_\_

All fields are mandatory unless otherwise stated.



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

distribution: DOMETT TRAILERS  
 7A9C20033P2023256  
 SoDC: JH230713  
 LT400: CJC 880231

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 (V6.18.07.12).  
 -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 V6.18.07.12 db 13.10.2020

vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 3ASBTF CURTAINSIDE  
 trailer type : 3-axle-semi-trailer  
 remarks : air / hydraulic / VA suspension  
 kc < 0,95 => new kc = 0,95  
 WABCO TRAILER - EBS E  
 TRISTOP 1+2: T.14/24 [TSE1416HTLD ACTUALLY FITTED - SEE PAGE 6 FOR PERFORMANCE DATA]  
 265/70 R 19,5

axle 1 + 2 + 3 : SAF, SBW 1937, TDB 0749 ECE,

		<u>unladen</u>		<u>laden</u>	
total mass	P in kg	5000	- 6000	33000	- 34000
king-pin	PS kg	1400	- 2400	13950	- 14950
axle 1	P1 in kg		1200		6350
axle 2	P2 in kg		1200		6350
axle 3	P3 in kg		1200		6350
total axle mass	PR in kg		3600		19050
wheel base	E in mm	6850	- 6950		
centre of gravity height	h in mm		820		2240
K-factor		Kv min	2.0711	Kc min	0.9500
K-factor		Kv max	2.0954	Kc max	0.9630

		<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>
no. of combined axles		1	1	1
no. of brake chambers per axle line	KDZ	2	2	2
The power output corresponds to		BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer		Meritor	Meritor	Meritor
chamber size		T.14/24	T.14/24	14.
lever length	lBh in mm	69	69	69
brake factor	[-]	23.03	23.03	23.03
dyn. rolling radius	rdyn min in mm	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421
threshold torque	Co Nm	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar		2.1	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%bar		2.1	2.1	2.1
chamber press.(servo)pcha at pm6,5bar	bar	5.2	5.2	5.2
piston force	ThA at pm6,5bar N	4986	4986	4986
brake force(rdyn min)T lad. at pm6,5bar	N	37653	37653	37653
brake force(rdyn max)T lad. at pm6,5bar	N	37653	37653	37653
Brake force incl. 1 % rolling resistance				
proportion	%	33.3	33.3	33.3

braking rate z laden 0.604 for rdyn min  
 z = sum (TR)/PRmax 0.604 for rdyn max

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

brake diagram : 841 701 101 0

maximum pressure: 8.5 bar

axle 1:

valve 1: 971 002 ... 0 WABCO  
EBS emergency valve  
valve 2: 480 102 ... 0 WABCO  
EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

axle 2:

valve 1: 971 002 ... 0 WABCO  
EBS emergency valve  
valve 2: 480 102 ... 0 WABCO  
EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

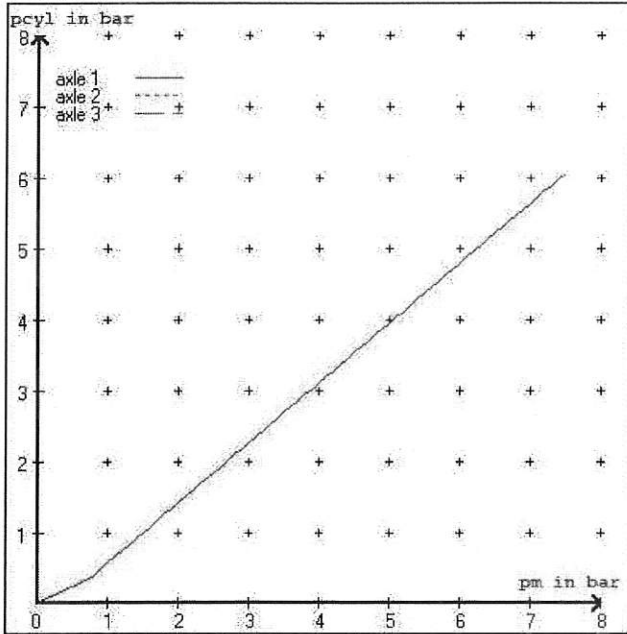
axle 3:

valve 1: 971 002 ... 0 WABCO  
EBS emergency valve  
valve 2: 480 102 ... 0 ( ) WABCO or 480 207 0.. 0 / 2.. 0  
EBS trailer modulator

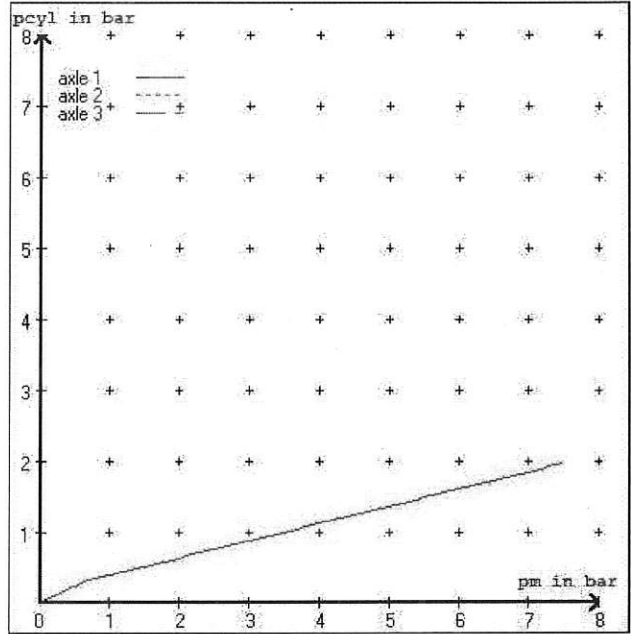
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3  
at pm 3.5 bar => pcha in bar : 2.7 2.7 2.7  
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3  
at pm 1.2 bar => pcha in bar : 0.7 0.7 0.7

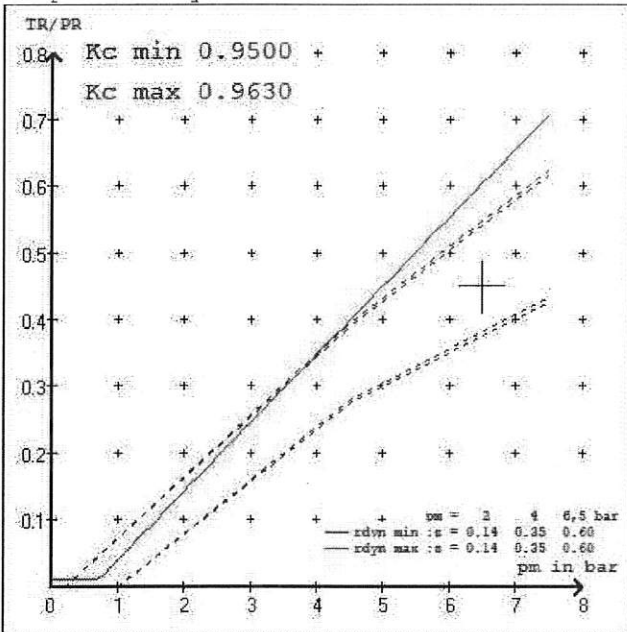
brake chamber pressure laden



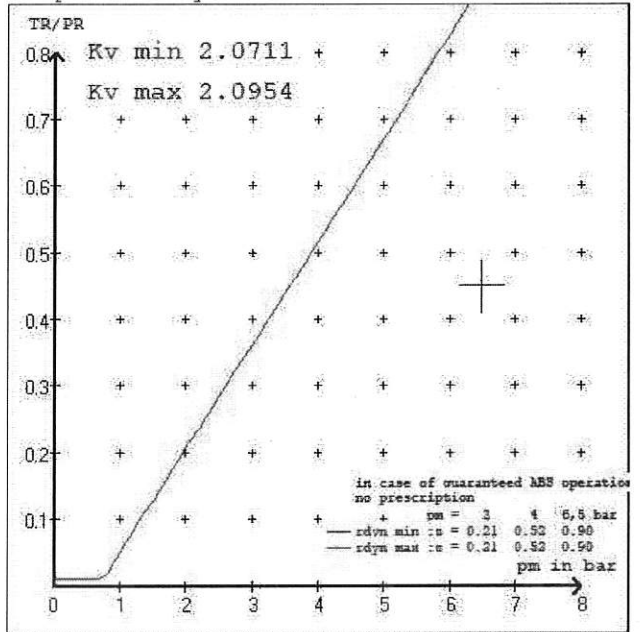
brake chamber pressure unladen



compatibility band laden



compatibility band unladen



vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 3ASBTF CURTAINSIDE  
 trailer type : 3-axle-semi-trailer

brake chamber and lever length :

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

brake diagram : 841 701 101 0

valve :

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

EBS input data

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vehicle manufacturer: DOMETT TRAILERS  
 trailer model : 3ASBTF CURTAINSIDE  
 trailer type : 3-axle-semi-trailer  
 brake calculation no. : TP 52694S

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

assignment pm / deceleration z: pm 0.7 bar z = 0.010  
 (laden condition) 2.0 bar z = 0.142  
 6.5 bar z = 0.600

control pressure pm			6,5	control pressure pm			0.7	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden			
1	1200	to be	1.7	6350	to be	0.3	1.4	5.2	
2	1200	entered by the vehicle manufact.	1.7	6350	entered by the vehicle manufact.	0.3	1.4	5.2	
3	1200		1.7	6350		0.3	1.4	5.2	
4	0		0,0	0		0,0	0,0	0,0	
5	0		0,0	0		0,0	0,0	0,0	

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 load pcyl	axle load pcyl	axle load pcyl
1200	1.7	1200 1.7
1700	2.0	1700 2.0
2200	2.4	2200 2.4
2700	2.7	2700 2.7
3200	3.1	3200 3.1
3700	3.4	3700 3.4
4200	3.7	4200 3.7
4700	4.1	4700 4.1
6350	5.2	6350 5.2

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

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 = 18.7 % Fe
axle 2	(rdyn 421 mm)	T = 18.7 % Fe
axle 3	(rdyn 421 mm)	T = 18.7 % Fe

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

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

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

axle1	ThA = 4986 N
axle2	ThA = 4986 N
axle3	ThA = 4986 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 = 29448 N
axle 2	(rdyn 421 mm)	T = 29448 N
axle 3	(rdyn 421 mm)	T = 29448 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 = 29448 N
axle 2	(rdyn 421 mm)	T = 29448 N
axle 3	(rdyn 421 mm)	T = 29448 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)



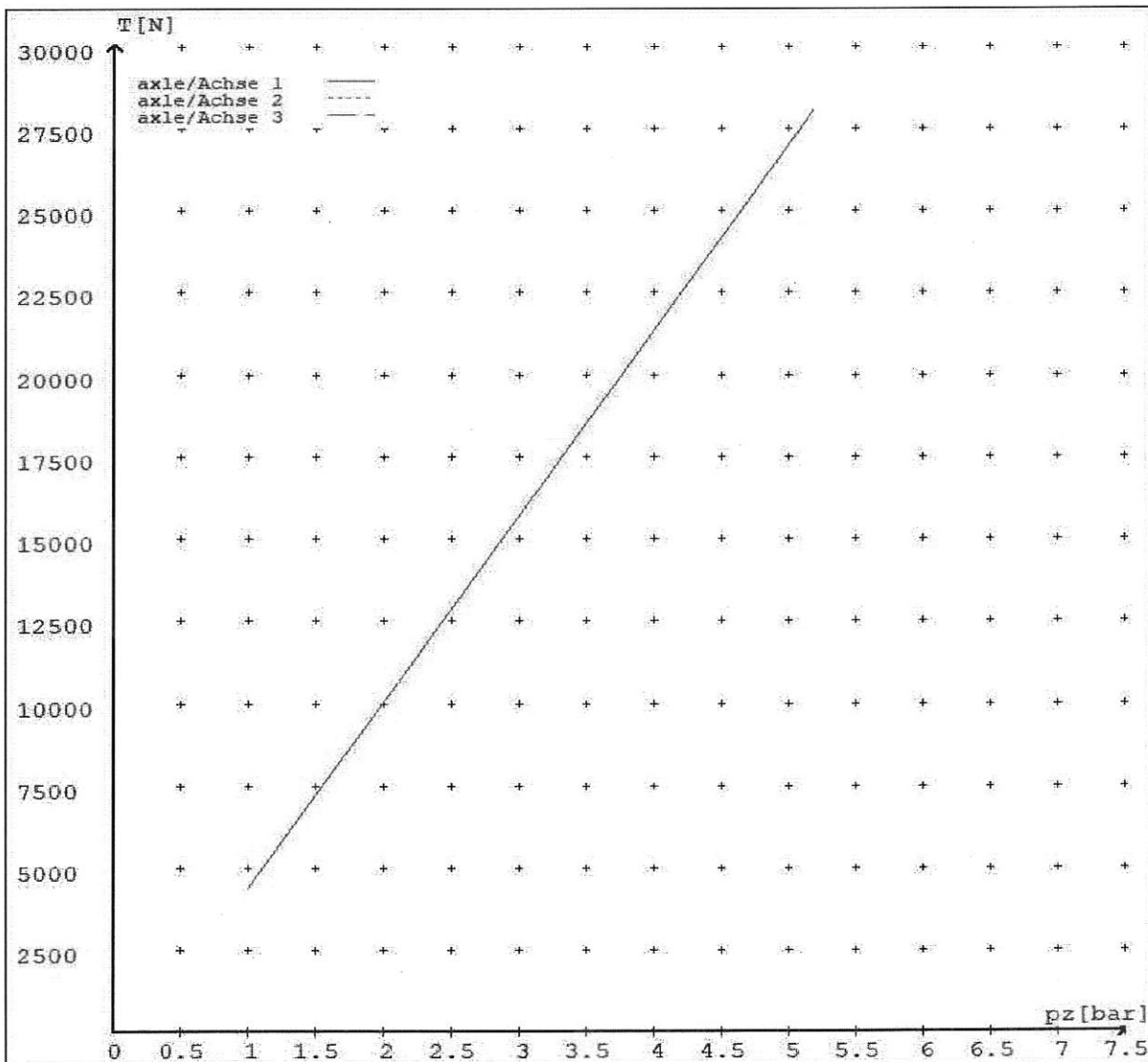
reference values

reference values for z = 45% for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0		4356
	5.2		28052
axle 2	1.0		4356
	5.2		28052
axle 3	1.0		4356
	5.2		28052

VIN - no.:

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





reference values for  $z = 0.45$

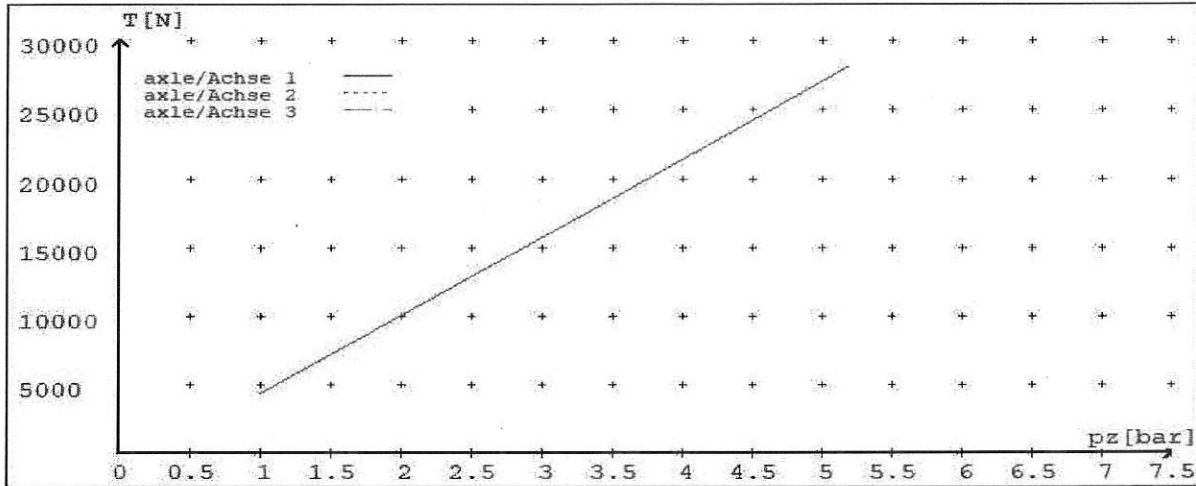
for max rdyn: 421 mm

Angabe der Referenzwerte für  $z = 0.45$

für max rdyn: 421 mm

brake calculation no: TP 52694S date 11.07.2023

Bremsberechnung Nr: TP 52694S vom 11.07.2023



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

***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.**

### **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 Agency if dissatisfied with a Compliance issue. (Refer NZTA Notice Of Appointment Para 47.4) NZTA Helpdesk 0800 108 809***

**(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, 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.**

A handwritten signature in black ink, appearing to read 'J E Hirst', written over a faint horizontal line.

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.

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.**

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





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

**CLIENT**

<b>MANUFACTURER:</b>	DOMETT TRAILERS
<b>ADDRESS:</b>	TAURIKURA DRIVE, TAURANGA 3110
<b>FLEET:</b>	MAINROAD

**VEHICLE DETAILS**

<b>VEHICLE TYPE:</b>	3ASBTF CURTAINSIDE	<b>CERT #:</b>	JH230713
<b>YEAR:</b>	2023	<b>CALCULATION #:</b>	TP52694
<b>MAKE:</b>	DOMETT	<b>REGO #:</b>	N/A
<b>MODEL:</b>	C2003 PH	<b>LT400 #:</b>	880231
<b>CHASSIS #:</b>	2256	<b>ORDER #:</b>	9357
<b>VIN #:</b>	7A9C20033P2023256		
<b>GVM: t</b>	33	<b>PRIME MOVER:</b>	UNKNOWN
<b>LOAD CONFIGURATION:</b>	MIXED FREIGHT		
<b>GROUP RATINGS: t</b>	<b>FRONT</b>	<b>REAR</b>	
	14	19	
<b>WHEEL BASE: m</b>	6.9		
	<b>UNLADEN COG m</b>	<b>MAX HEIGHT m</b>	<b>HEIGHT DECK m</b>
	0.82	4.3	1.42
<b>COG: m</b>	2.240		
	<b>FRONT</b>	<b>REAR</b>	<b>TOTAL</b>
<b>TARE: t</b>	1.8	3.6	5.4
		<b>REAR</b>	
<b>TYRE SIZE:</b>	265 70 R19.5		
<b>ROLLING CIRCUMFERENCE: mm</b>	2645		
<b>AXLE SPACING: m</b>	3		

### BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9W	TDB0749
STEER AXLE[S]:	NO	POLE WHEEL:	90
LINING MATERIAL:	JURID 539	BRAKE FACTOR:	23.03
SENSED AXLES:	#2	NOTES:	
SERIAL NUMBERS:	1		NG-IU25-ZI9
	2		NG-IU25-ZI9
	3		NG-IU25-ZI9
	4	N/A	N/A

### CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3	
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	
SIZE:	1416HTLD	14HSCLD	
STROKE: <i>mm</i>	64	64	
TEST REPORT #:	BC0143.0	BZ 122.1 Sep '00	
SPRINGBRAKE FORCE: <i>kN</i>	6.16	N/A	
HOLDOFF PRESSURE: <i>Bar</i>	4.8	N/A	
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	
LEVER LENGTH: <i>mm</i>	69	69	
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	70 kPa
3RD MODULATOR #:	N/A	N/A	N/A
ANTI-COMPOUNDING:	YES		
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:	<input checked="" type="checkbox"/> FRONT	<input type="checkbox"/> REAR	
SUBSYSTEMS:	<input type="checkbox"/> SMARTBOARD	<input type="checkbox"/> OPTI-LINK	<input type="checkbox"/> CAN R/R 446 122 050/051 0
	<input type="checkbox"/> ELEX 446 122 070 0	<input type="checkbox"/> TAILGUARD	

## SUSPENSION

	REAR
SUSPENSION TYPE:	PNEUMATIC
MAKE:	SAF_AIRSPRING
MODEL:	SAF_INTRA
BELLOW SIZE:	2619, 300mm
HEIGHT CONTROL VALVE:	HALDEX 90554950
OTHER VALVES:	N/A
RIDE HEIGHT <i>mm</i> :	230
HANGER HEIGHT <i>mm</i> :	200
PEDESTAL HEIGHT <i>mm</i> :	5
LIFTAXLE:	N/A
DUMP SWITCH:	N/A
LIFTAXLE VALVE:	N/A

## AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2
	REAR
BRAKE TANK SIZE: L	46 + 25
AUXILLARY TANK SIZE: L	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0

## AIR LINES

TEST POINTS:	
CONTROL LINE:	X 1
FIXED AXLE CHAMBERS:	X 2
STEER AXLE CHAMBERS:	N/A
DUOMATIC COLOUR CODED:	YES
TANK:	X 1

