

Heavy vehicle specialist certificate

Must be presented to a CoF (heavy) inspecting organisation
Heavy vehicle specialist inspector and inspecting organisation

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

Vehicle registration <small>(optional)</small>	VIN/chassis number
	7 A 9 D 5 0 0 2 8 H 1 0 2 3 6 0 4
Make DOMETT TRAILERS	Component being certified: <input type="checkbox"/> Chassis <input type="checkbox"/> Load anchorage
Model <small>(optional)</small>	<input type="checkbox"/> Log bolsters <input type="checkbox"/> Towing connection <input checked="" type="checkbox"/> Brakes
Certification category HVEK	<input type="checkbox"/> SRT <input type="checkbox"/> PSV stability <input type="checkbox"/> PSV rollover
	<input type="checkbox"/> Swept path <input type="checkbox"/> PBS

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/4

RSS ACTIVATED & PARAMETERISED FOR TRAILERS WITH SINGLE TYRES

Code/standard/rule certified to	Component load rating(s)
LTR 32015/4	42 Tonnes GVM
General drawing number(s)	26 Tonnes Rear Group Rating
N/A	

Supporting documents

BRAKE CODE CERTIFICATE JH170413

BRAKE CALCULATION # TP51543

Special conditions (optional)

WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KPH

Certification expiry date <small>(if applicable)</small>	or	Hubodometer reading <small>(whichever comes first)</small>
N/A		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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) ID number

Date **20-Apr-17** Number **587554**

CoF vehicle inspector ID	CoF vehicle inspector signature	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
 7A9D50028H1023604
 SODC: JH170413
 LT400: CJC 587554

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 20.04.2016

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 4AS SKELETAL
 trailer type : 4-axle-semi-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 1+2: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -
 SEE PAGE 7 FOR PERFORMANCE DATA]
 355/50 R 22,5

axle 1 + 2 + 3 + 4 : SAF, SBW 1937, TDB 0678 ECE,

		unladen		laden	
total mass	P in kg	4500	- 5500	42000	- 42000
king-pin	PS kg	500	- 1500	16000	- 16000
axle 1	P1 in kg		1000		6500
axle 2	P2 in kg		1000		6500
axle 3	P3 in kg		1000		6500
axle 4	P4 in kg		1000		6500
total axle mass	PR in kg		4000		26000
wheel base	E in mm	9200	- 9200		
centre of gravity height	h in mm		1150		2477
K-factor		Kv min	1.9420	Kc min	1.0304
K-factor		Kv max	1.9441	Kc max	1.0304

	axle 1	axle 2	axle 3	axle 4
no. of combined axles	1	1	1	1
no. of brake chambers per axle line	2	2	2	2
The power output corresponds to	BZ 119.6	BZ 119.6	BZ 122.1	BZ 122.1
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor
chamber size	T.14/24	T.14/24	14.	14.
lever length	lBh in mm	69	69	69
brake factor	[-]	23.03	23.03	23.03
dyn. rolling radius	rdyn min in mm	449	449	449
dyn. rolling radius	rdyn max in mm	449	449	449
threshold torque	Co Nm	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.2	2.2	2.2	2.2
chamber pressure(rdyn max)pH at z=22,5%bar	2.2	2.2	2.2	2.2
chamber press.(servo)pcha at pm6,5bar	5.6	5.6	5.6	5.6
piston force	ThA at pm6,5bar	5387	5387	5387
brake force(rdyn min)T lad. at pm6,5bar	38198	38198	38198	38198
brake force(rdyn max)T lad. at pm6,5bar	38198	38198	38198	38198
brake force within 1 % rolling friction proportion	%	25.0	25.0	25.0

braking rate z laden 0.599 for rdyn min
 z = sum (TR)/PRmax 0.599 for rdyn max

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

brake diagram : 841 701 050 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
EBS trailer modulator

brake cylinder: Meritor 14HSCLD64

axle 4:

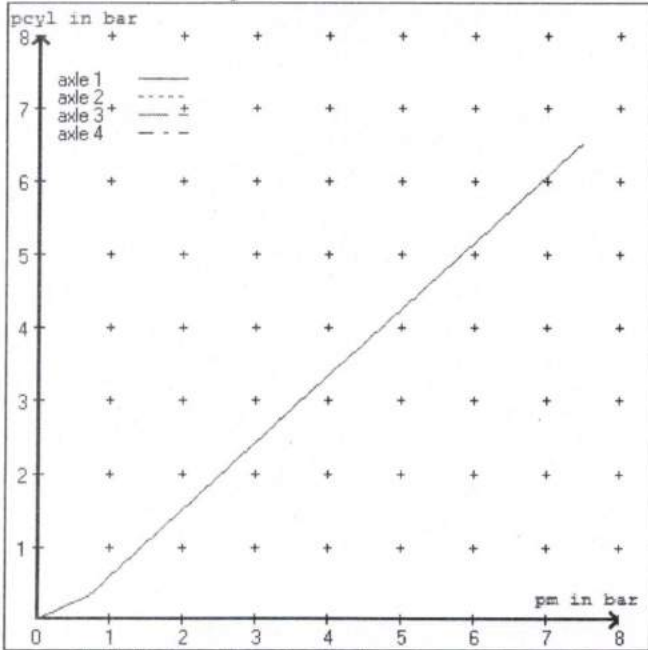
valve 1: 971 002 ... 0 WABCO
 EBS emergency valve

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

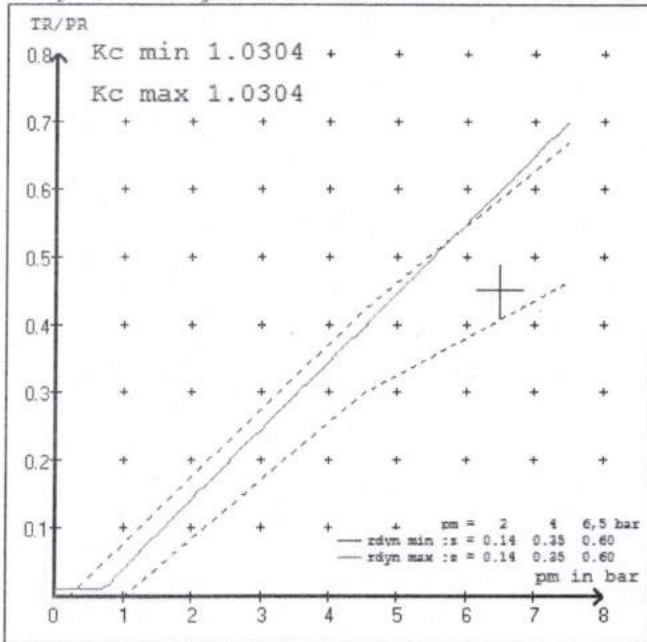
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 3.6 bar =>	pcha in bar :	2.9	2.9	2.9	2.9
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 1.2 bar =>	pcha in bar :	0.8	0.8	0.8	0.8

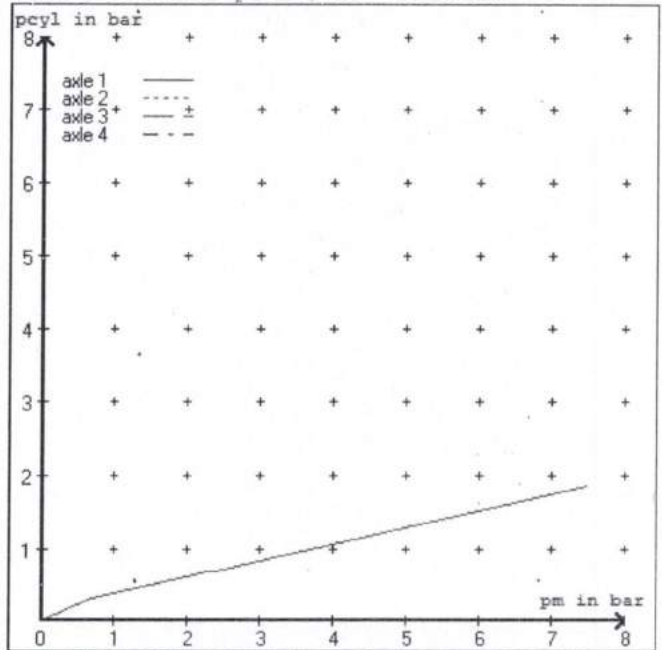
brake chamber pressure laden



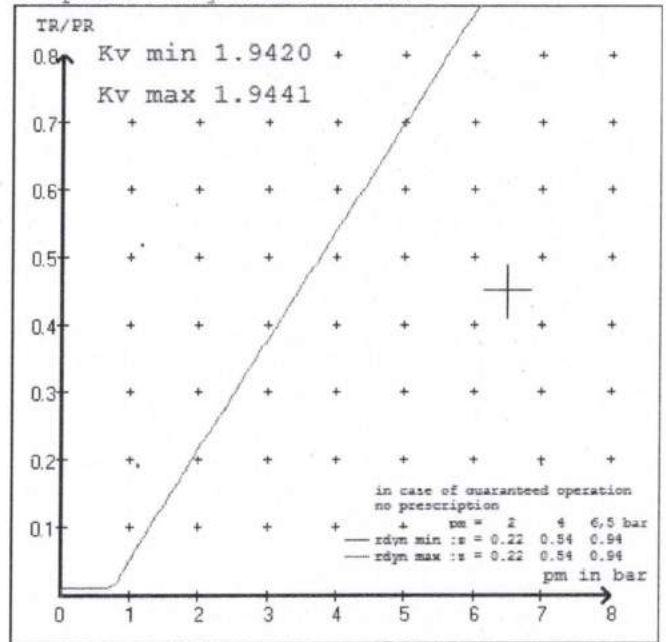
compatibility band laden



brake chamber pressure unladen



compatibility band unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 4AS SKELETAL
 trailer type : 4-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
 axle 4 : 2 x type/diameter 14. (Meritor) lever length 69 mm

brake diagram : 841 701 050 0

valve :

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

EBS input data

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 4AS SKELETAL
 trailer type : 4-axle-semi-trailer
 brake calculation no. : TP 51543S

tire circumference main axle : 2825 for rdyn max
 tire circumference auxiliary axle : 2825 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	1000	to be	1.6	6500	to be	0.3	1.5	5.6
2	1000	entered by the vehicle manufact.	1.6	6500	entered by the vehicle manufact.	0.3	1.5	5.6
3	1000		1.6	6500		0.3	1.5	5.6
4	1000		1.6	6500		0.3	1.5	5.6
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 4
axle load pcy1	axle load pcy1	axle load pcy1	axle load pcy1
1000	1.6	1000	1.6
1500	2.0	1500	2.0
2000	2.3	2000	2.3
2500	2.7	2500	2.7
3000	3.1	3000	3.1
3500	3.4	3500	3.4
4000	3.8	4000	3.8
4500	4.1	4500	4.1
6500	5.6	6500	5.6

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 0678 ECE	date : 20130927 27.09.2013
axle 2 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0678 ECE	date : 20130927 27.09.2013
axle 3 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0678 ECE	date : 20130927 27.09.2013
axle 4 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0678 ECE	date : 20130927 27.09.2013

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

axle 1	(rdyn 449 mm)	T = 19.1 % Fe
axle 2	(rdyn 449 mm)	T = 19.1 % Fe
axle 3	(rdyn 449 mm)	T = 19.1 % Fe
axle 4	(rdyn 449 mm)	T = 19.1 % Fe

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

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

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

axle1	ThA = 5387 N
axle2	ThA = 5387 N
axle3	ThA = 5387 N
axle4	ThA = 5387 N

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

axle 1	(rdyn 449 mm)	T = 31242 N
axle 2	(rdyn 449 mm)	T = 31242 N
axle 3	(rdyn 449 mm)	T = 31242 N
axle 4	(rdyn 449 mm)	T = 31242 N

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	basic test	type III
	of subject	(calculated)
0.60	trailer (E)	residual
		(hot)braking
		0.49

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and $\geq 0,6 \cdot E$ (0.36)

axle 1	(rdyn 449 mm)	T = 31242 N
axle 2	(rdyn 449 mm)	T = 31242 N
axle 3	(rdyn 449 mm)	T = 31242 N
axle 4	(rdyn 449 mm)	T = 31242 N

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	basic test	type III
	of subject	(calculated)
0.60	trailer (E)	residual
		(hot)braking
		0.49

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and $\geq 0,6 \cdot E$ (0.36)

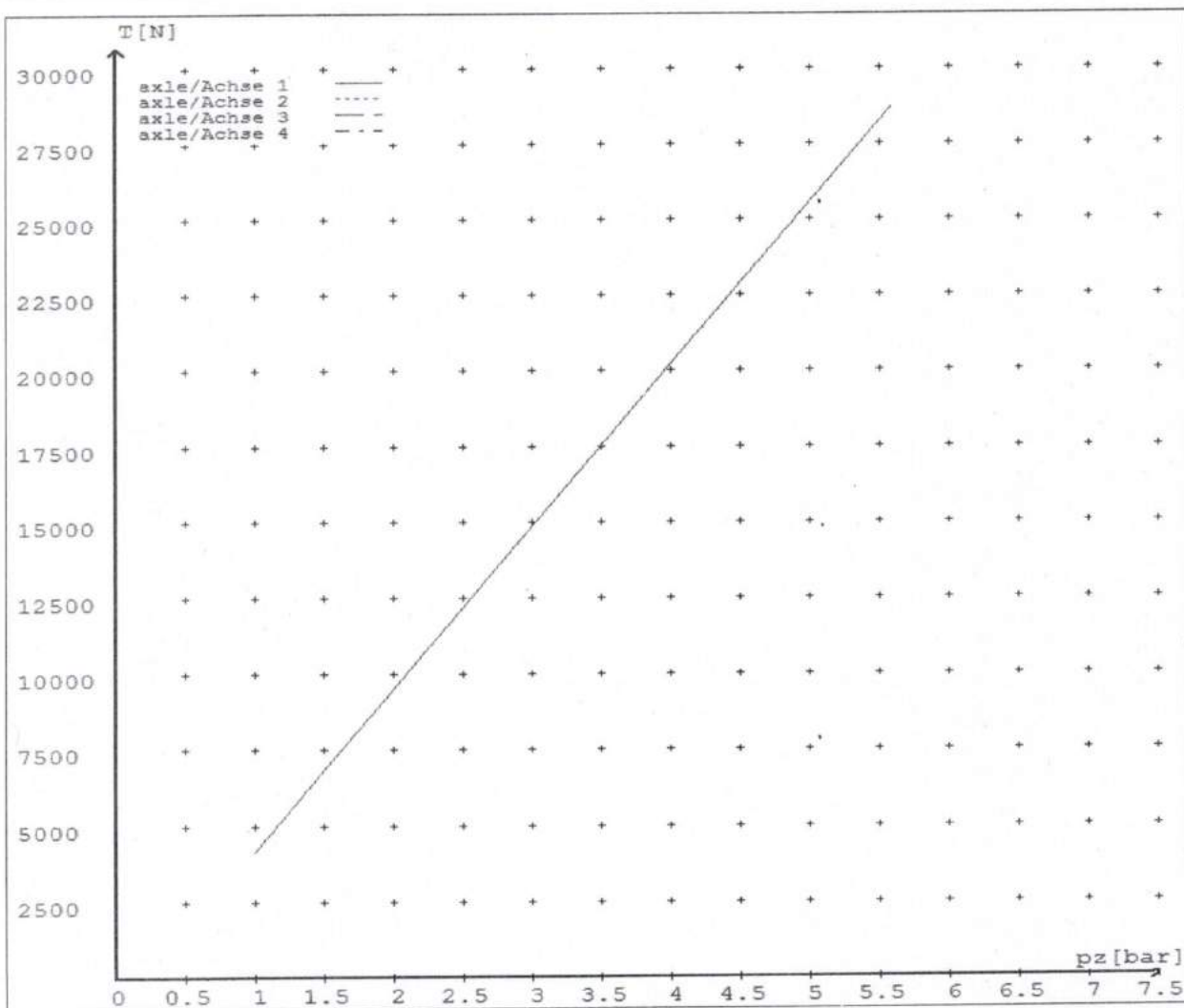
reference values

reference values for z = 45% for max rdyn: 449 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	4158	
	5.6	28697	
axle 2	1.0	4158	
	5.6	28697	
axle 3	1.0	4158	
	5.6	28697	
axle 4	1.0		4158
	5.6		28697

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	T.14/24	T.14/24	14./	14./	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	64	64	64	64	
Lever length =mm Hebellänge =mm	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 32015/4.

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 32015/4. 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

(D.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 32015/4, 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 32015/4.

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 HVEK)
(09 980 7300)





**HEAVY VEHICLE BRAKE RULE
32015/4 WORKSHEET
(PROCEDURE DOCUMENTATION SHEET-PDS)
&
CONFIRMATION OF COMPLIANCE**

CERTIFICATE NO. JH170413

CUSTOMER NAME DOMETT TRAILERS LTD

CUSTOMER ORDER NO. 4795 DATE RECEIVED 20-Apr-17

VEHICLE TYPE SKELETAL

VIN/ CHASSIS NO. 7A9D50028H1023604

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

<u>BRAKE VALVES</u>	<u>MAKE</u>	<u>TYPE</u>
PRIMARY RELAY	WABCO	480 102 080 0
SECONDARY RELAY	WABCO	480 207 202 0
YARD RELEASE VALVE	WABCO	971 002 900 0
PARK BRAKE VALVE	WABCO	971 002 900 0
<u>SUSP. VALVES [WABCO]</u>	<u>FRONT</u>	<u>REAR</u>
CONTROL	N/A	463 090 500 0
HEIGHT SENSOR	N/A	441 050 100 0

OTHER VALVES:

MAKE: <u> WABCO </u>	TYPE: <u> 472 102 040 0 </u>	SETTING: <u> REV. LOCK </u>
MAKE: <u> </u>	TYPE: <u> </u>	SETTING: <u> </u>
MAKE: <u> </u>	TYPE: <u> </u>	SETTING: <u> </u>
MAKE: <u> </u>	TYPE: <u> </u>	SETTING: <u> </u>

BRAKE CHAMBERS:

	AXLE 1 & 2	AXLE 3	AXLE 4
MAKE	TSE	TSE	TSE
SIZE	1416HTLD64	14HSCLD64	14HSCLD64
MAX STROKE (mm)	64	64	64
SLACK LENGTH (mm)	69	69	69

DRUM TYPE:

N/A	N/A	N/A
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OR**BRAKE CALIPER:**

SBW1937	SBW1937	SBW1937
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FRICITION MATERIAL: OEM AFTERMARKET**LINING BRAND****AXLE 1 & 2****AXLE 3****AXLE 4**

JURID 539

JURID 539

JURID 539

OTHERS:**TYRES:****FRONT****REAR**

N/A

355 50 R 22.5

BRAKE CALCULATION #:

TP51543

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 #

SALES ORDER #:

SO711942

PROCESS TIME:

1 HOUR

TRAILERS EQUIPPED WITH PREV: THE PARK BRAKE PERFORMANCE MUST BE**MEASURED BY PULLING THE RED ACTUATION KNOB ON THE PREV VALVE WHEN****THE AXLES - EQUIPPED WITH SPRING BRAKES - ARE IN THE BRAKE ROLLERS. THE****PARK BRAKE IN THE CAB MUST NOT BE APPLIED.****NOTES:****CHAMBERS & PARK BRAKE PERFORMANCE:**

BRAKE CALCULATION TP51543 USES THE TSE1424HTLD TO DETERMINE THE SERVICE BRAKE

PERFORMANCE & THE TSE1616HTLD64 TO MEASURE THE PARK BRAKE PERFORMANCE OF AXLES

1 & 2. THE ACTUAL CHAMBER USED (TSE1416HTLD64) IS NOT AVAILABLE IN THE WABCO

BRAKE CALCULATOR.

PARK BRAKE (z) = .361 @

CONFORMATION OF COMPLIANCE

I CONFIRM THAT THE VEHICLE IDENTIFIED IN PAGES 1 AND 2 OF THIS CONFORMATION OF COMPLIANCE COMPLIES WITH ALL RELEVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015/4, SCHEDULE 5.

DATE: 20-Apr-17

SIGNED: (pp)



NAME & ID: J HIRST (JEH)

PHONE (BUS): 09 980 7300

FAX (BUS) 09 980 7306

POSTAL ADDRESS:

TRANSPORT SPECIALTIES LTD
PO BOX 98-971,
MANUKAU CITY,
MANUKAU 2241

POSITION: BRAKE CERTIFIER HVEK

I CONFIRM THE BRAKE SYSTEM OF THE VEHICLE IDENTIFIED IN PAGE 1 OF THIS STATEMENT OF COMPLIANCE AS MODIFIED BY MYSELF, CONTINUES TO COMPLY WITH ALL THE RELIVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY BRAKE RULE 32015/4 SCHEDULE 5.

DATE:

SIGNED:

NAME:

CERTIFIERS ID:

POSITION:

PHONE (BUS):

FAX (BUS):

COMMENTS:
