



# Heavy Vehicle Specialist Certificate

Heavy Vehicle Specialist Inspector and Inspecting Organisation

Heavy Vehicle Specialist Inspector's Name (PRINT IN CAPS)

RONALD STUART PRATT

ID

TRSP

Vehicle Registration\*

VIN / Chassis Number

7A9D15010G1023038

Component being certified:

Chassis Modification

Load Anchorage

Log Bolsters

Certification Category

HVEK

Towing Connection

✓ Brakes

SRT

Description of Work

Certify to Broke Rule 32015/2

Code/Standard Certified to

NZHB Rule Schedule 5

Component Load Rating(s)

General Drawing Number(s)

NA

Supporting Documents

Broke cert No JH120407

PREU value exempt No HVB12/052

\*Special Conditions

EBB Control - Warning lamp must illuminate when ignition switched on and extinguish immediately or when vehicle reaches 7kph.

Certification Expiry Date (if applicable)

NA

or

Hubodometer Reading (whichever comes first)

### Declaration

I the undersigned, declare that I am the Heavy Vehicle Specialist Inspector identified above 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 Deed of Appointment. To the best of my knowledge the information contained in this Certificate is true and correct.

Designer's ID (if certified by a manufacturer)

Inspector's / Delegate's Signature

*RSP Pratt*

\*Delegate's Name (PRINT IN CAPS)

Date

07/05/2012

Number

404060

COF Vehicle Inspector ID:

COF Vehicle Inspector Signature:

Date

All fields excluding those marked with \* must be completed before this certificate can be accepted.



Testing SRN copy

NZ TRANSPORT AGENCY  
WAKA KOTAHI

Level 9, PSIS House  
20 Ballance Street  
PO Box 5084  
Lambton Quay  
Wellington 6145  
New Zealand  
T 64 4 894 5200  
F 64 4 894 3305  
[www.nzta.govt.nz](http://www.nzta.govt.nz)

Document: B1193636  
Exemption: HVB12/052

**EXEMPTION FROM SPECIFIED REQUIREMENTS OF LAND TRANSPORT RULE:  
Heavy-vehicle Brakes 2006, Rule 32015**

Pursuant to Section 166(1) of the Land Transport Act 1998, and pursuant to the powers delegated to me, I Jackie Hartley, Administrator (Assessments) hereby exempt the motor vehicle specified in Schedule 1 hereto from the section of Land Transport Rule: Heavy-vehicle Brakes 2006 (the Rule) listed in Schedule 2, subject to the conditions specified in Schedule 3.

**SCHEDULE 1:**

Make/Model: **Domett Truck & Trailer Ltd, 4 axle full-trailer**  
VIN/CHASSIS: **7A9D15010C1023038**

**SCHEDULE 2: - Exempted Requirement**

**Section 2.3(9);** The parking brake of a vehicle, whether or not it is being operated as a combination vehicle, must be able to be applied by the driver from the normal driving position using one control only.

**SCHEDULE 3: - Conditions of this exemption:**

- 1) The vehicle must be fitted with a Wabco park-release emergency valve (PREV), Part Number: 971 002 900 0.
- 2) The vehicle must be fitted with the Wabco PREV name plate, Part Number 971 002 103 4, adjacent to the PREV.
- 3) The vehicle must still be fitted with a parking brake that complies with all parking brake requirements in the Rule other than the requirement in Clause 2.3(9) of the Rule.
- 4) The installation of the PREV must be approved in writing by Transport Specialties Limited (Transpecs) or an NZ Transport Agency appointed HVEK certifier acting on behalf of, and under instruction from, Transpecs; Transpecs must keep a written record of all approvals.
- 5) An HVEK certifier in 4) must be fully trained in end of line procedures for Wabco electronically controlled braking systems
- 6) Transpecs must provide full operator training in the use of the PREV and furnish the operator with full written operating instructions for the PREV.
- 7) The vehicle must not be modified in any way while operating under this exemption.
- 8) This original exemption must be kept by Transport Specialties Ltd.
- 9) A copy of this exemption (printed on a silver WABCO Sticker) must be affixed to the exempted vehicle as close to the WABCO PREV as possible.
- 10) The sticker in 8) must be legible and include all printed areas of this original exemption letter.
- 11) This exemption can be revoked at any time in writing by the NZ Transport Agency.

Signed at Wellington this 22<sup>nd</sup> day of March 2012.

Jackie Hartley  
Administrator (Assessments)



Statement of Design Compliance  
S.O.D.C. number: JH120407  
For Heavy vehicle brake specification  
(schedule 5) of HV Brake Rule 32015/2

Vehicle details:

Make: Domett Trailers  
Model: D1501  
VIN#: 7A9D15010C1023038  
Chassis#: 1038  
GCM (kgs): N/A  
GVM (kgs): 30000  
Wheelbase (mm): 7295  
Axle test report #: ROR REPORT 36107104  
Type: 4 Axle Platform deck trailer

Component Details:

	<u>Front</u>	<u>Rear</u>
Slack adjuster length:	DISC	DISC
Brake chamber size:	16(FM0305S16E)	16/24(1624HTLD64)
Tyre size:	265 70 R 19.5	265 70 R 19.5
Drawing number: (for component reference)	D1501	
Brake calculation#:	TP50618	

I declare that I am a Heavy Vehicle Specialist Certifier – Engineer and I hold a current valid appointment. I certify that this vehicle component design and this certification comply in all respects with the Land Transport Rule: **Vehicle Standards Compliance 2002**; my Deed of Appointment and applicable requirements. To the best of my knowledge the information contained in this certificate is true and correct.

Date: 23 Apr 2012

s

Name: John Hirst (HVEK)

Certifier ID: JEH

I, Ron PRATT, certify that the braking system has been assembled and programmed\*) to the requirements of this Design Certificate.

Signed:

Dated: 07/05/2012

\*) Programmed according to Wabco's End of Line protocol requirements where applicable.

LT400 NO 404060

**HVBR WORKSHEET**  
(PROCEDURE & COMPLIANCE DOCUMENTATION SHEET)

CERTIFICATE No. JH120407

CUSTOMER NAME DOMETT T&T

CUSTOMER ORDER No. 3738 DATE RECEIVED 17.02.12

VEHICLE TYPE 4 AXLE FULL TRAILER

REG No.  CHASSIS No. 7A9D15010C1023038

**BRIEF SPECIFICATION AS CERTIFIED TO HVBR**

<b>BRAKE CHAMBERS:</b> Type: 16 (MASTER): Max stroke = 67 mm    Lever length = 74 mm Type: 1624 (TSE) : Max stroke = 64 mm    Lever length = 74 mm	
<b>BRAKE VALVES:</b>	Ratio Valve Setting:    EBS CONTROL Test Points:            3 4 5 7
<b>FRICITION LINING:</b> (All) Lining Brand	<u>OEM</u> Aftermarket ROR 8616AF
<b>EBS CONTROL:</b> IF SPECIAL CONDITIONS APPLY – SEE INSTRUCTION ON LT400 <b>VALVES:</b> AS PER BRAKE CALCULATION# TP50618 <b>TYRE SIZE:</b> 265 70 R 19.5	
<b>NOTES</b> PACKING SLIP NO. <span style="border: 1px solid black; padding: 2px; display: inline-block; width: 100px;"></span>	<b>PROCESS TIME:</b> <span style="border: 1px solid black; padding: 2px; display: inline-block; width: 40px; text-align: center;">1</span>
MERITOR CHAMBERS IN TP50618 ARE MASTERS AT THE FRONT – TSE AT THE REAR.	
<b>COMPLETION DATE :</b> 23 <sup>rd</sup> Apr 2012 <b>SIGNATURE (pp.):</b>	

## Statement of Compliance with the New Zealand Heavy Brake Rule

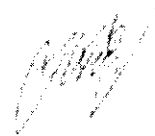
Documentation required supporting Statements of Compliance with the New Zealand Heavy Brake Rule, to be made available to the Statutory Authority on request, must include all calculations and test reports.

### Confirmation of compliance

I confirm that the vehicle identified on page 1 of this Statement of Compliance complies with all relevant requirements of the current New Zealand Heavy Vehicle Brake Rule 32015/2, Schedule 5.

Date: 23<sup>rd</sup> Apr 2012

Signed (pp.):



### Certifier's identification

Name: J E Hirst

Phone (bus): (09) 980 7300 Fax (bus): (09) 980 7306

Postal address: Transport Specialties, Cnr Kerrs & Ash Roads  
Wiri, Auckland, PO Box 98 971 Manukau City 2241

Position: JEH

### Confirmation of continued compliance of modification

I confirm the brake system of the vehicle identified on page 1 of this Statement of Compliance as modified by myself, continues to comply with all the relevant requirements of the current New Zealand Heavy Vehicle Brake Rule 32015/2, Schedule 5.

Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Certifier's identification: JEH

Name:

Phone (bus): (09) 980 7300 Fax (bus): (09) 980 7306

Postal address: Transport Specialties Ltd  
Cnr Kerrs & Ash Roads, Wiri, Auckland  
PO Box 98 971, Manukau City 2241

## **NOTICE TO VEHICLE OPERATOR**

**This trailer is equipped with an Electronic Brake System.**

To comply with the New Zealand Heavy Vehicle Brake RULE, 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.

### **NB:**

If this vehicle is fitted with mechanical (spring) suspension, the load sense valving has been adjusted to suit exactly the performance of the original springs. In event of replacement being required, original equipment springs **must** be fitted to ensure correct ongoing operation. Fitment of non genuine springs can affect operation and therefore, compliance.

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



---

R S Pratt  
(TRSP HVEK 09 980 7300)

## **NOTICE TO VEHICLE OPERATOR**

***THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015: SCHEDULE 5.***

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

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

### **EXCERPT FROM NZ HEAVY VEHICLE BRAKE 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 the rule : and*
- (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 a person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.*

#### **10.5 Responsibilities of manufactures and retailers**

*A person may manufacture, stock, or offer for sale a brake or its components. Intended for fitting to a vehicle to be used on New Zealand roads, only if that brake or component:*

- (a) complies with this Rule: and*
- (b) does not prevent a repair to a vehicle, its structure, systems, components and equipment from complying with this Rule.*

***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 Land Transport Safety Authority if dissatisfied with a Compliance issue. (refer LTNZ Deed Of Appointment Para 47.4) Land Transport NZ Helpdesk 0800 699 000***

.....  
**R S PRATT**  
**(TRSP HVEK)**



P.O.Box 98-971

South Auckland Mail Centre

J.HIRST (JEH)

DATE 23-Apr-12 BRAKE SYSTEM 24V EBS

CERT. NO. JH120407 PREV EXEMPTION HVB12/052

VIN / CHASSIS 7A9D15010C1023038

BRAKE CHAMBERS FRONT 16 (MASTERFM0305S16E - 67mm)

BRAKE CHAMBERS REAR 1624 (TSE 1624HTLD64 - 64mm)

SLACK LENGTH FRONT 74mm TYRE SIZE FRONT 265 70 R 19.5

SLACK LENGTH REAR 74mm TYRE SIZE REAR 265 70 R 19.5

THIS VEHICLE COMPLIES WITH THE NZ LINING MATERIAL FRONT ROR 8616AF

HVBR 32015/2 - SCHEDULE 5 LINING MATERIAL REAR ROR 8616AF





NZ TRANSPORT AGENCY  
WAKA KOTAHI

Level 9, PSIS House  
20 Ballance Street  
PO Box 5084  
Lambton Quay  
Wellington 6145  
New Zealand  
T 64 4 894 5206  
F 64 4 894 3305  
[www.nzta.govt.nz](http://www.nzta.govt.nz)

Document: B1193636  
Exemption: HVB12/052

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Signed at Wellington this 22<sup>nd</sup> day of March 2012.

A handwritten signature in black ink, appearing to read 'Jackie Hartley'.

Jackie Hartley  
Administrator (Assessments)

# WABCO

## START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 064 0
Production date	2011-11-25	Serial number	896004792200D
Fingerprint Customer EOL / Customer Development / Flash Program	W 033869 / 2012-05-07 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

<b>WABCO</b>		<b>TRAILER EBS-E</b>		GGVS/ADR TUEH TB 2007 - 019.00 36107104 ECE											
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT T&T			GIO	Pin1	Pin3	Pin4								
TYP TYPE TYPE	4AX F/T			1	---	---	---								
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9D15010C1023038			2	---	---	---								
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP50618			3	ALS2	ALS2	---								
POLRADZÄHNEZÄHL. 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	Einfa <b>ch</b> ber <b>e</b> it <b>u</b> ng Single Tire Monte simple		Lenk <b>ach</b> se Steering axle Essieu vireur	5	DIAG	DIAG	DIAG								
	Zwilling <b>u</b> ber <b>e</b> it <b>u</b> ng Twin Tire Monte jumetée	X	Kl <b>ip</b> p <b>er</b> it <b>is</b> ch <b>e</b> Fahr <b>z</b> eug Critical Trailer Véhicule critique	6	---	---	---								
Subsystems	---		I/O	7	---	---	---								
ACHSE AXLE ESSIEU		pm (bar)	6.5	pm (bar)	0.7	2.0	---	6.5		TYP TYPE	(mm)	(mm)	(bar)	1.0	Pz
		TR (daN)													
1	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773
2	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773
3	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586
4	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light power supply	Not tested
EBS pressure test	OK	Lifting axle test	Not tested
Redundancy test	OK	ECAS distance sensor calibration	Not tested
ABS sensor assignment	OK	Distance sensor Axle load calibr.	Not tested
RTR check	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs TEBS	Not tested

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

Manufacturer	DOMETT T&T	Vehicle ident. no	7A9D15010C1023038
Vehicle type	4AX F/T	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tested by	Ron Pratt	Signature	
Date	2012-05-07 1:59:57 PM		

trailer (full, semi-, centre-axle) with air brake system acc. to 71/320/EEC, last amended by 98/12/EC and 2006/96/EC or UN/ECE-R.13.11

distribution: DOMETT T&T  
 7A9D15012C1023039 - JH120406  
 7A9D15010C1023038 - JH120407

please note!

This brake calculation is made under consideration of  
 -the legal precriptions mentioned above in the version valid all the time of making the program (V6.10.05.21).  
 -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 V6.10.05.21 db 26.05.2010

vehicle manufacturer: DOMETT T&T  
 trailer model : 4AX F/T  
 trailer type : 4-axle-full-trailer  
 remarks : air / hydraulic / VA suspension  
 WABCO TRAILER - EBS  
 TRISTOP 3+4: T.16/24  
 265/70 R 19,5

axle 1 + 2 + 3 + 4 : ROR, Elsa 195 LE, 36107104 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	5600	30000
axle 1	P1 in kg	1400	7500
axle 2	P2 in kg	1400	7500
axle 3	P3 in kg	1400	7500
axle 4	P4 in kg	1400	7500
wheel base	E in mm	7295 - 7295	
centre of gravity height	h in mm	1110	2132

	<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>
no. of combined axles	1	1	1	1
no. of brake chambers per axle line KDZ	2	2	2	2
The power output corresponds to	BZ 163.1	BZ 163.1	BZ 119.6	BZ 119.6
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor
chamber size	16	16	T.16/24	T.16/24
lever length 1Bh in mm	74	74	74	74
brake factor [-]	20.26	20.26	20.26	20.26
dyn. rolling radius rdyn min in mm	421	421	421	421
dyn. rolling radius rdyn max in mm	421	421	421	421
threshold torque Co Nm	6.0	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.7	2.7	2.5	2.5
chamber pressure(rdyn max)pH at z=22,5%bar	2.7	2.7	2.5	2.5
chamber press.(servo)pcha at pm6,5bar bar	6.5	6.5	5.8	5.8
piston force ThA at pm6,5bar N	6146	6146	5840	5840
brake force(rdyn min)T lad. at pm6,5bar N	43928	43928	41751	41751
brake force(rdyn max)T lad. at pm6,5bar N	43928	43928	41751	41751
brake force within 1 % rolling friction proportion %	24.1	24.1	25.9	25.9

braking rate z laden 0.582 for rdyn min  
 z = sum (TR)/PRmax 0.582 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  
          EBS relay valve

brake cylinder: Meritor   FM0305S16E

axle 2:

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

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

brake cylinder: Meritor   FM0305S16E

axle 3:

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

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

brake cylinder: Meritor   1624HTLD64

axle 4:

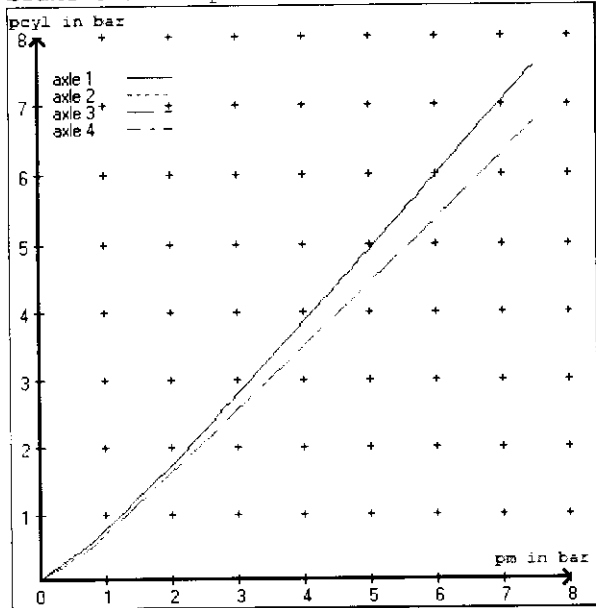
valve 1: 971 002 ... 0                   WABCO  
          EBS emergency valve

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

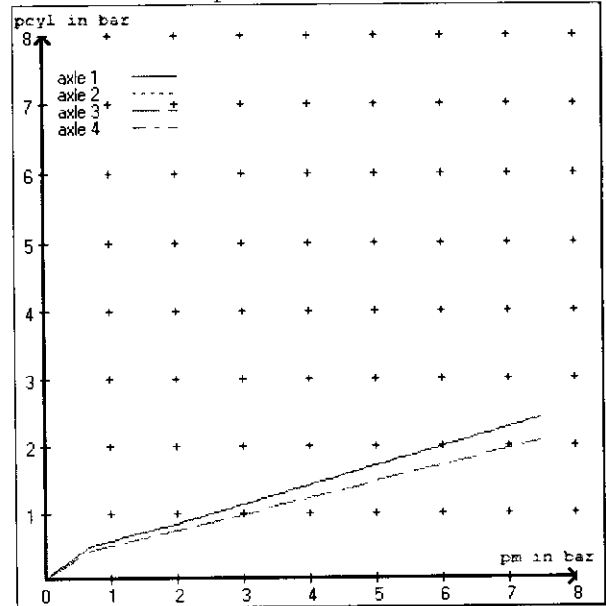
brake cylinder: Meritor 1624HTLD64

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3 axle4  
at pm 3.7 bar => pcha in bar : 3.5 3.5 3.2 3.2  
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3 axle4  
at pm 1.2 bar => pcha in bar : 1.0 1.0 0.9 0.9

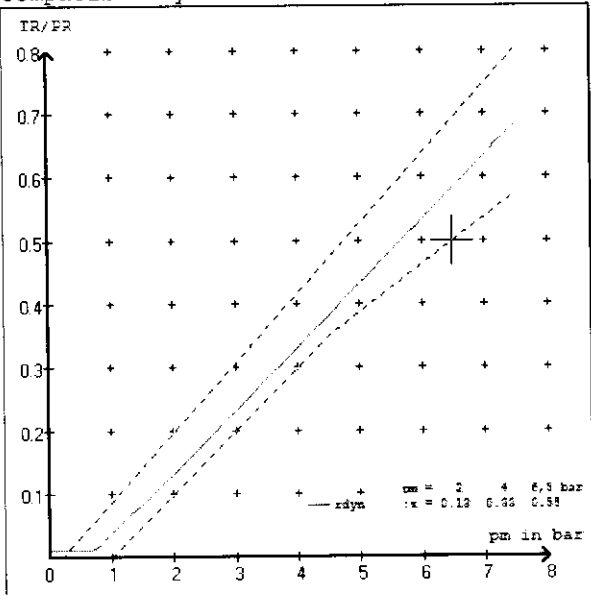
brake chamber pressure laden



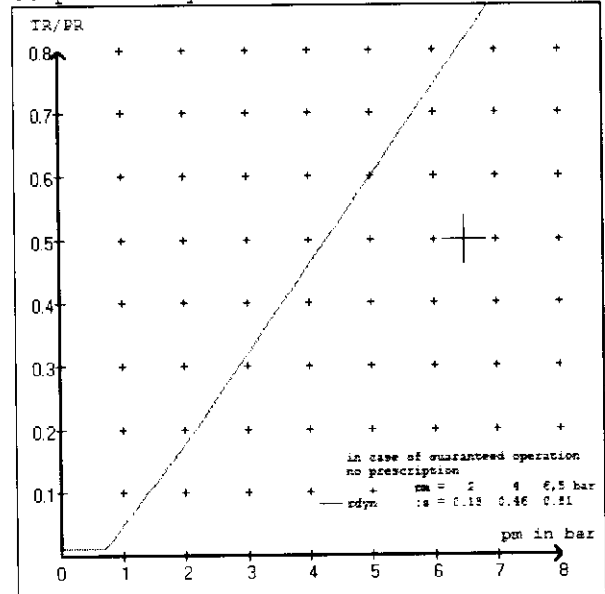
brake chamber pressure unladen



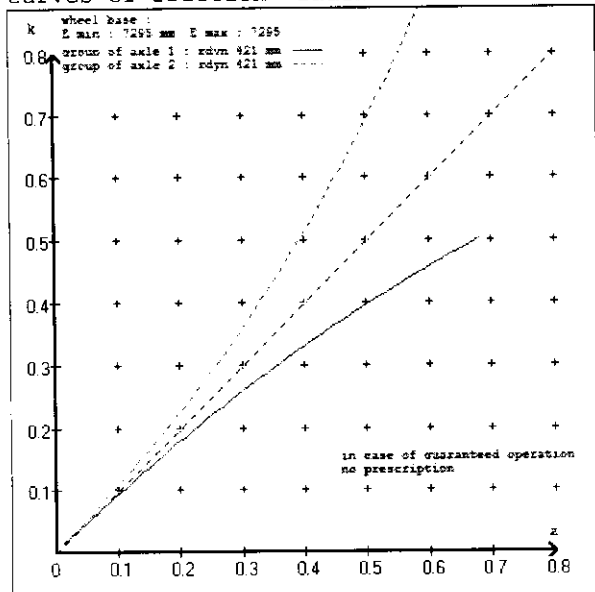
compatibility band laden



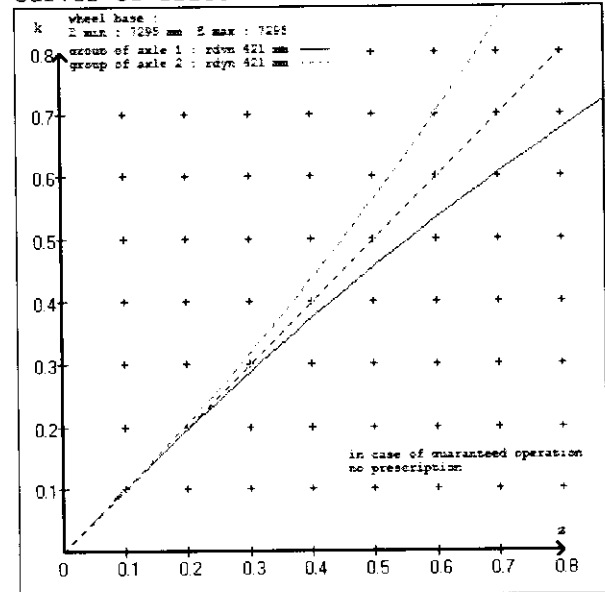
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT T&T  
 trailer model : 4AX F/T  
 trailer type : 4-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 16 (Meritor) lever length 74 mm  
 axle 2 : 2 x type/diameter 16 (Meritor) lever length 74 mm  
 axle 3 : 2 x type/diameter T.16/24 (Meritor) lever length 74 mm  
 axle 4 : 2 x type/diameter T.16/24 (Meritor) lever length 74 mm

brake diagram :

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

EBS input data

=====

vehicle manufacturer: DOMETT T&T  
 trailer model : 4AX F/T  
 trailer type : 4-axle-full-trailer  
 brake calculation no. : TP 50618A

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 = 0.000  
 (laden condition) 2.0 bar z = 0.132  
 6.5 bar z = 0.580

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	1400	to be	2.1	7500	to be	0.5	1.7	6.5
2	1400	entered by	2.1	7500	entered by	0.5	1.7	6.5
3	1400	the vehicle	1.8	7500	the vehicle	0.4	1.6	5.8
4	1400	manufact.	1.8	7500	manufact.	0.4	1.6	5.8
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	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1400	2.1	1400	2.1	1400	1.8	1400	1.8
1900	2.5	1900	2.5	1900	2.1	1900	2.1
2400	2.8	2400	2.8	2400	2.5	2400	2.5
2900	3.2	2900	3.2	2900	2.8	2900	2.8
3400	3.5	3400	3.5	3400	3.1	3400	3.1
3900	3.9	3900	3.9	3900	3.4	3900	3.4
4400	4.3	4400	4.3	4400	3.8	4400	3.8
4900	4.6	4900	4.6	4900	4.1	4900	4.1
7500	6.5	7500	6.5	7500	5.8	7500	5.8

data sheet to EC/ECE vehicle type-approval certificate concerning braking equipment: according to 98/12/EC annex IX 2.7.4 / ECE R13 annex 11

axle 1	: reference axle: ROR	.../... .../K brake lining: ROR 8616 AF
	test report :	36107104 ECE date : 30.10.2006
axle 2	: reference axle: ROR	.../... .../K brake lining: ROR 8616 AF
	test report :	36107104 ECE date : 30.10.2006
axle 3	: reference axle: ROR	.../... .../K brake lining: ROR 8616 AF
	test report :	36107104 ECE date : 30.10.2006
axle 4	: reference axle: ROR	.../... .../K brake lining: ROR 8616 AF
	test report :	36107104 ECE date : 30.10.2006

calc. verif. of residual (hot) braking force type III  
(item 4.2 of appendix I to annex VII)

axle 1	(rdyn 421 mm)	T = 20.8 % Fe
axle 2	(rdyn 421 mm)	T = 20.8 % Fe
axle 3	(rdyn 421 mm)	T = 20.2 % Fe
axle 4	(rdyn 421 mm)	T = 20.2 % Fe

calculated actuator stroke in mm  
(item 4.3.1.1 of appendix I to annex VII)

axle 1	(sp = 52 mm)	s = 40 mm
axle 2	(sp = 52 mm)	s = 40 mm
axle 3	(sp = 57 mm)	s = 40 mm
axle 4	(sp = 57 mm)	s = 40 mm

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

axle1	ThA = 6146 N
axle2	ThA = 6146 N
axle3	ThA = 5840 N
axle4	ThA = 5840 N

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

axle 1	(rdyn 421 mm)	T = 47003 N
axle 2	(rdyn 421 mm)	T = 47003 N
axle 3	(rdyn 421 mm)	T = 44672 N
axle 4	(rdyn 421 mm)	T = 44672 N

	basic test	type III
	of subject	(calculated)
braking rate of the vehicle	trailer (z)	residual
(item 4.3.2 to appendix I to annex VII)	0.58	(hot)braking
		0.62

required braking rate >= 0,4 and  
(items 1.3.3 and 1.6.2 to annex II) >= 0,6\*z (0.35)

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

axle 1	(rdyn 421 mm)	T = 47003 N
axle 2	(rdyn 421 mm)	T = 47003 N
axle 3	(rdyn 421 mm)	T = 44672 N
axle 4	(rdyn 421 mm)	T = 44672 N

	basic test	type III
	of subject	(calculated)
braking rate of the vehicle	trailer (z)	residual
(item 4.3.2 to appendix I to annex VII)	0.58	(hot)braking
		0.62

required braking rate >= 0,4 and  
(items 1.3.3 and 1.6.2 to annex II) >= 0,6\*z (0.35)



spring parking brake

	<u>axle 3</u>	<u>axle 4</u>
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	T.16/24	T.16/24
lever length                                      lBh in mm	74	74
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	7605	7605
sp.brake chamber no Meritor.....	4	4
release pressure                                    pLs in bar	4.8	4.8

calculation:

ratio until road	3.7388	3.7388
$iFb = lBh * \eta * C * rBt / (rBn * rstat)$		
for rstat    in mm	401	401
brake force of spring br. Tf    in N	56260	56260
$Tf = (TFZ * KDZ - 2 * Co / lBh) * iFb$		
braking rate                                      zf laden	0.392	
$zf = \text{sum}(Tf) / P + 0,01$		

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 = 5202 mm    for E = 7295 mm  
 =====  
 min Ef = 5202 mm    for E = 7295 mm  
 =====

min Ef =                    minimum distance between front axle(s) (trailer) or support (semitrailer) 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            =            2132 mm    height of center of gravity - laden  
 PR          =            15000 kg    maximum bogie mass - laden  
 P            =            30000 kg    maximum total mass - laden  
 nf           =            2            no. of axle(s) with TRISTOP spring brake actuators  
 ng           =            2            no. of bogie axle(s)

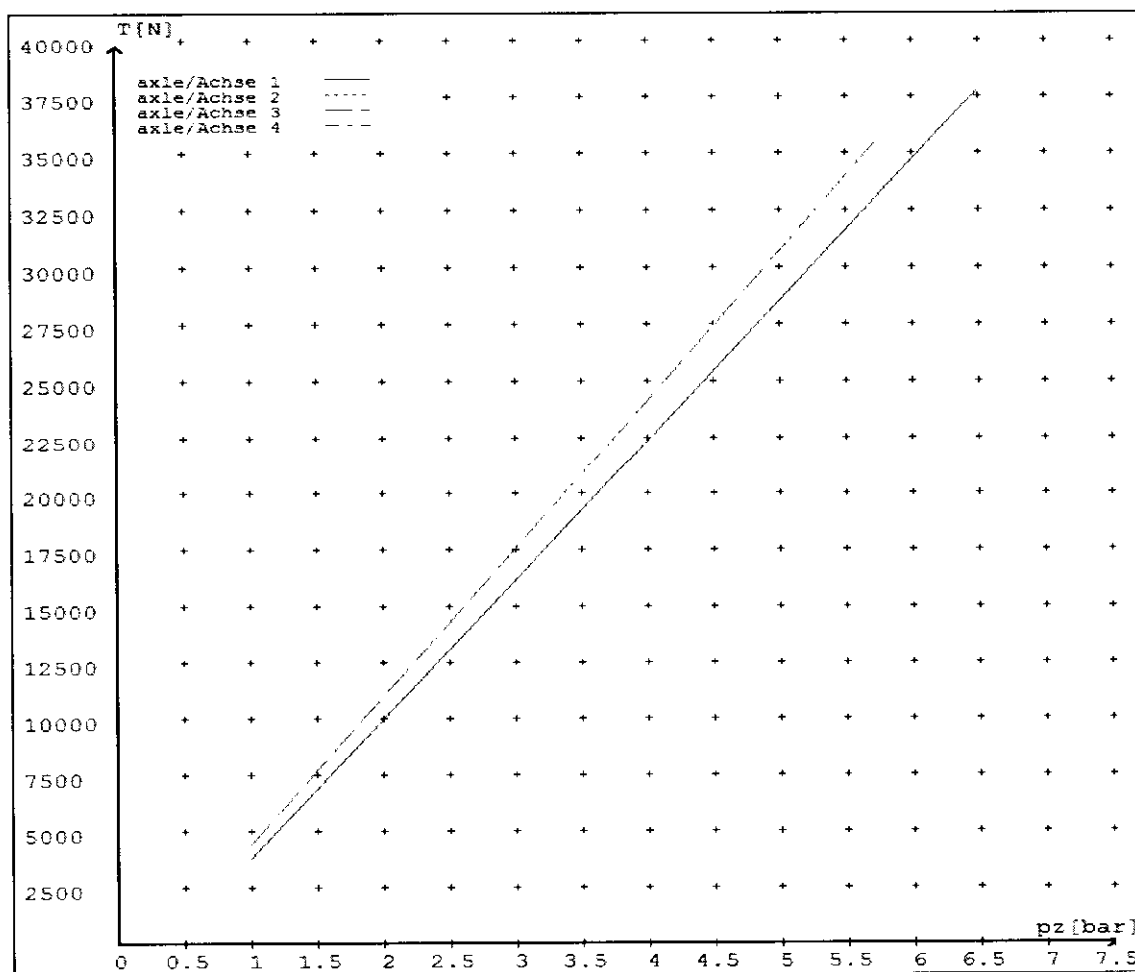
**reference values**

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	3783	
	6.5	37739	
axle 2	1.0	3783	
	6.5	37739	
axle 3	1.0		4413
	5.8		35869
axle 4	1.0		4413
	5.8		35869

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	16/	16/	T.16/24	T.16/24	/
Maximum stroke smax = ...mm maximaler Hub smax = ....mm	67	67	64	64	
Lever length = ....mm Hebellänge = ....mm	74	74	74	74	

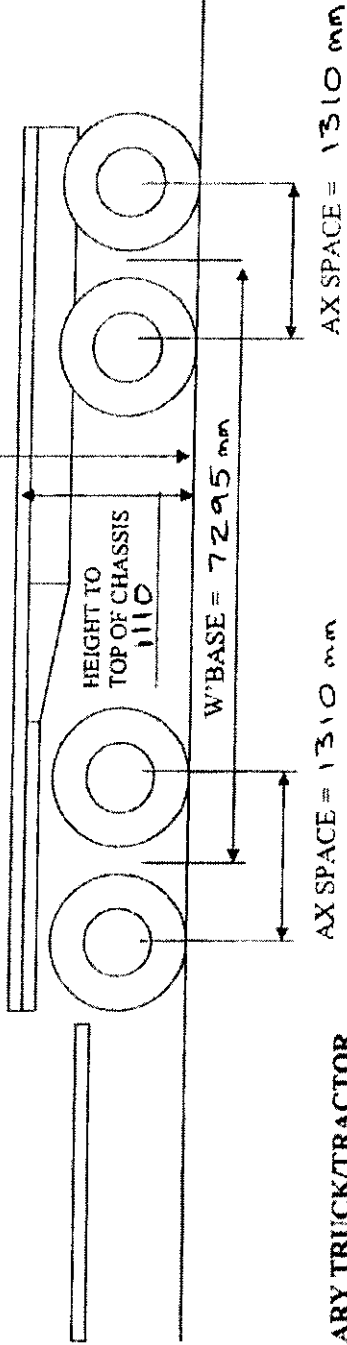




**Transpecs**  
QUALITY ON THE MOVE

HEIGHT TO  
TOP OF BODY  
4250

JH1205107  
HH84/052



PRIMARY TRUCK/TRACTOR  
MAKE/MODEL

EXPECTED  
DELIVERY DATE

BRAKE KIT ORDERED  
ON ORDER NO. 3738

VIN 7A9D15010C1023038

ABS YES/NO

EBS YES/NO

VOLTAGE 12/24

MAKE	Domett
MODEL	D1501 H
CHASSIS NO.	1038
TYPE	4 Axle
GVM	30000
TARE WEIGHT FRONT	~ 2800
TARE WEIGHT REAR	~ 2800
AXLE TYPE/MAKE OR "TDB/RDW" # FROM ID PLATE ON AXLE	ROR LM/T9008 KMXA
SUSPENSION	ROR CS9
TYRE SIZE	265/70 R 19.5
BRAKE CHAMBER	

Master 16

? 16/24.

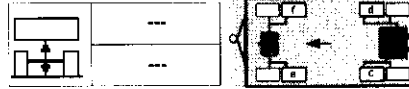
# WABCO

## TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00  
36107104 ECE

HERSTELLER MANUFACTURER CONSTRUCTEUR		<b>DOMETT T&amp;T</b>	
TYP TYPE TYPE		<b>4AX F/T</b>	
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS		<b>7A9D15010C1023038</b>	
BREMSENRECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.		<b>TP50618</b>	
POKRADZÄHNEZAHL c-d   e-f POLE WHEEL TEETH: c-d   e-f DENTS ROUE DENTÉE c-d   e-f		<b>90</b>	<b>90</b>
ABS-System ABS-System Systeme ABS		<b>4S/3M</b>	
RSS RSS RSS	Einfachbereifung Single Tire Munite simple	Lenkachse Steering axle Essieu steer	
	Zwillingsbereifung Twin Tire Munite jumelle	<b>X</b>	
Subsystems		<b>I/O</b>	

GIO	Pin1	Pin3	Pin4
1	---	---	---
2	---	---	---
3	ALS2	ALS2	---
4	---	---	---
5	DIAG	DIAG	DIAG
6	---	---	---
7	---	---	---



ACHSE AXLE ESSIEU	pm (bar)		pm (bar)				pz	TYP TYPE	(mm)	(mm)	(bar)		TR (daN)		
	1.0	Pz	0.7	2.0	---	6.5					1.0	Pz			
1	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773
2	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773
3	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586
4	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---

# WABCO

## TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00  
36107104 ECE

HERSTELLER MANUFACTURER CONSTRUCTEUR		<b>DOMETT T&amp;T</b>		<b>GIO</b>	<b>Pin1</b>	<b>Pin3</b>	<b>Pin4</b>
TYP TYPE TYPE		<b>4AX F/T</b>		1	---	---	---
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS		<b>7A9D15010C1023038</b>		2	---	---	---
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.		<b>TP50618</b>		3	<b>ALS2</b>	<b>ALS2</b>	---
POLRADZAHNZAHL c-d   e-f POLE WHEEL TEETH c-d   e-f DENTS ROUE DENTEE c-d   e-f		<b>90</b>	<b>90</b>	4	---	---	---
ABS-System ABS-System Systeme ABS		<b>4S/3M</b>		5	<b>DIAG</b>	<b>DIAG</b>	<b>DIAG</b>
RSS RSS RSS	Einfachbereifung Single Tire Monte simple		Lankachse Steering axle Essieu directeur	6	---	---	---
	Zwillingbereifung Twin Tire Monte jumete	<b>X</b>	Kipplöffelches Fahrzeug Critical Trailer Vehicule critique	7	---	---	---
Subsystems		I/O					

ACHSE AXLE ESSIEU	pm (bar)		6.5		pm (bar)		0.7		2.0		---		6.5		TYP TYPE	(mm)	(mm)	(bar)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14				1.0	Pz
1	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773				
2	1400	0.5	2.1	7500	4.9	0.5	1.7	---	6.5	-	16	67	74	378	3773				
3	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586				
4	1400	0.5	1.8	7500	4.9	0.4	1.6	---	5.8	-	16 / 24	64	74	441	3586				
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---				