

HVBR WORKSHEET

(PROCEDURE & COMPLIANCE DOCUMENTATION SHEET)

CERTIFICATE No.

JH100604

CUSTOMER NAME

DOMETT TRUCK & TRAILER LTD

CUSTOMER ORDER No.

3372/BC

DATE RECEIVED

18.05.10

VEHICLE TYPE

4 AXLE FULL TRAILER

REG No.

CHASSIS No.

7A9D10012A0023872

BRIEF SPECIFICATION AS CERTIFIED TO HVBR

BRAKE CHAMBERS:

Type: 14HSCLD64-1604 (TSE): Max stroke = 64mm Lever length = 69mm
Type: 1416HTLD64-1606 (TSE): Max stroke = 64mm Lever length = 69mm

BRAKE VALVES:

Ratio Valve Setting: EBS CONTROL

Test Points: 3 4 5 7

FRICITION LINING:

(All) Lining Brand

OEM
JURID 539

Aftermarket

EBS CONTROL: SPECIAL CONDITIONS APPLY – SEE INSTRUCTION ON LT400 347653

VALVES: AS PER DATA SHEET ATTACHED

TYRE SIZE: 265 70 R 19.5

NOTES

PACKING SLIP NO.

501469774

PROCESS TIME:

1

THE TSE CHAMBERS (ABOVE) CORRESPOND TO THE MERITOR CHAMBER DETAILED IN BRAKE CALC #TP50420.

COMPLETION DATE:

10 June 2010

SIGNATURE



Statement of Compliance with the New Zealand Heavy Brake Rule

Documentation required to support 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: 10TH June 2010

Signed: 

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



Heavy Vehicle Specialist Certificate

Heavy Vehicle Specialist Inspector and Inspecting Organisation

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

JOHN HIRST

ID

JEH

Vehicle Registration*

VIN / Chassis Number

7 A 9 D 1 0 0 1 2 A 0 0 2 3 8 7 2

Component being certified:

Chassis Modification

Load Anchorage

Log Bolsters

Certification Category

Towing Connection

Brakes

SRT

HVEK

Description of Work

CERTIFY TO SCHEDULE 5

Code/Standard Certified to

HVBR 32015/2

Component Load Rating(s)

N/A

General Drawing Number(s)

N/A

Supporting Documents

BRAKE CODE CERTIFICATE - JH100604

PREV EXEMPTION REFERENCE - HVB10/153

*Special Conditions

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

Certification Expiry Date (if applicable)

N/A

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

*Delegate's Name (PRINT IN CAPS)

Date

10-Jun-10

Number

347653

COF Vehicle Inspector ID:

COF Vehicle Inspector Signature:

Date

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



Document: B1044811
Exemption: HVB10/153

**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 Andrew Tyacke, Vehicle Compliance Specialist, 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, D1001**
VIN/Chassis: **7A9D10012A0023872**

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); Transpecs must keep a written record of their approval.
- 5) Transpecs must provide full operator training in the use of the PREV and furnish the operator with full written operating instructions for the PREV.
- 6) The vehicle must not be modified in any way while operating under this exemption.
- 7) This original exemption must be kept by Transport Specialties LTD.
- 8) 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.
- 9) The sticker in 8) must be legible and include all printed area's of this original exemption letter.
- 10) This exemption can be revoked at any time in writing by the NZ Transport Agency.

Signed at Wellington this 15th day of April 2010

Andrew Tyacke
Vehicle Compliance Specialist
Vehicles Unit

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 32015/2.

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 32015/2. 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

.....
(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 32015/2, 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.



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 32015/2.

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)



NZ TRANSPORT AGENCY
WAKA KOTAHI

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20 Ballance Street
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Lambton Quay
Wellington 6145
New Zealand
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www.nzta.govt.nz

Document: B1044811
Exemption: HVB10/153

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Signed at Wellington this 15th day of April 2010

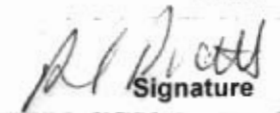
Andrew Tyacke
Vehicle Compliance Specialist
Vehicles Unit

WABCO START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 054 0
Production date	2009-11-03	Serial number	284007005100
Fingerprint Customer EOL / Customer Development / Flash Program	W 029383 / 2010-06-14 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO		TRAILER EBS-E		© WABCO TUEB TEL 2007 - 019.00 TDB0749			
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT			GIO	Pin1	Pin3	Pin4
TYP TYPE TYPE	4AX TANKER			1	---	---	---
FAHRZEUG IDENTIF. CHASSIS NUMBER NUMERO DE CHASSIS	7A9D10012A0023872			2	---	---	---
BREMSENRECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.	TP50420			3	ALS2	ALS2	---
POL RADZAPNEZAVL. (c-d) e-f POLE WHEEL TEETH (c-d) e-f DENTS ROUE DENTEE (c-d) e-f	90	90	ABS-System ABS-System Systeme ABS	4	---	---	---
ABS	Einachslenkung Single Tire Moulin simple		Leitachse Steering axle Essieu vitour	5	DIAG	DIAG	DIAG
Zweilachslenkung Twin Tire Moulin jumele	X		Kritischer Fahrzeug Critical Trailer Vehicule critique	6	---	---	---
Subsystems	I/O			7	---	---	---
pm (bar)		6.5	pm (bar)	0.7	2.0	6.5	(bar)
ACHSE -KLE ESSEU	↓ (kg)	⊙	↓ (kg)	⊙	⊙	pz	1.0 Fz
1	1400 0.6	1.5	7000 4.6	0.4	1.2	5.8	14 64 69
2	1400 0.6	1.5	7000 4.6	0.4	1.2	5.8	14 64 69
3	1200 0.5	1.2	7000 4.6	0.4	1.3	4.6	14 / 16 64 69
4	1200 0.5	1.2	7000 4.6	0.4	1.3	4.6	14 / 16 64 69
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		

Manufacturer	DOMETT	Vehicle ident. no	7A9D10012A0023872
Vehicle type	4AX TANKER	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tested by	Ron Pratt	 Signature	
Date	2010-06-14 9:59:46 AM		

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.13.10

distribution: DOMETT FONTERRA 2010

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 (V6.09.06.08).
 -the functional characteristics of our products, but not of those of other 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).
 WABCOBrake V6.09.06.08 db 08.06.2009

vehicle manufacturer: DOMETT
 trailer model : 4AX TANKER
 trailer type : 4-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 3+4: T.14/24
 265/70 R 19,5

axle 1 + 2 + 3 + 4 : SAF, PAN 19-1, TDB 0749 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	5040	28000
axle 1	P1 in kg	1360	7000
axle 2	P2 in kg	1360	7000
axle 3	P3 in kg	1160	7000
axle 4	P4 in kg	1160	7000
wheel base	E in mm	4800 - 4800	
centre of gravity height	h in mm	1170	1755

		<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 122.1	BZ 122.1	BZ 119.6	BZ 119.6
brake chamber manufacturer		Meritor	Meritor	Meritor	Meritor
chamber size		14.	14.	T.14/16	T.14/16
lever length	lBh in mm	69	69	69	69
brake factor	[-]	23.03	23.03	23.03	23.03
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		2.4	2.4	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%bar		2.4	2.4	2.1	2.1
chamber press.(servo)pcha at pm6,5bar bar		5.8	5.8	4.6	4.6
piston force ThA at pm6,5bar N		5588	5588	4385	4385
brake force(rdyn min)T lad. at pm6,5bar N		42260	42260	33173	33173
brake force(rdyn max)T lad. at pm6,5bar N		42260	42260	33173	33173
brake force within 1 % rolling friction					
proportion %		25.0	25.0	25.0	25.0

braking rate z laden 0.549 for rdyn min
 z = sum (TR)/PRmax 0.549 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

axle 2:

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

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

axle 3:

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

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

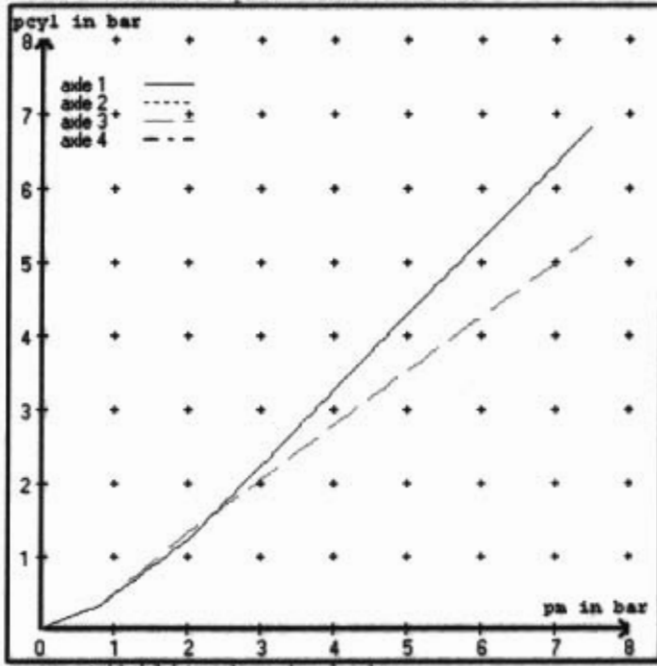
axle 4:

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

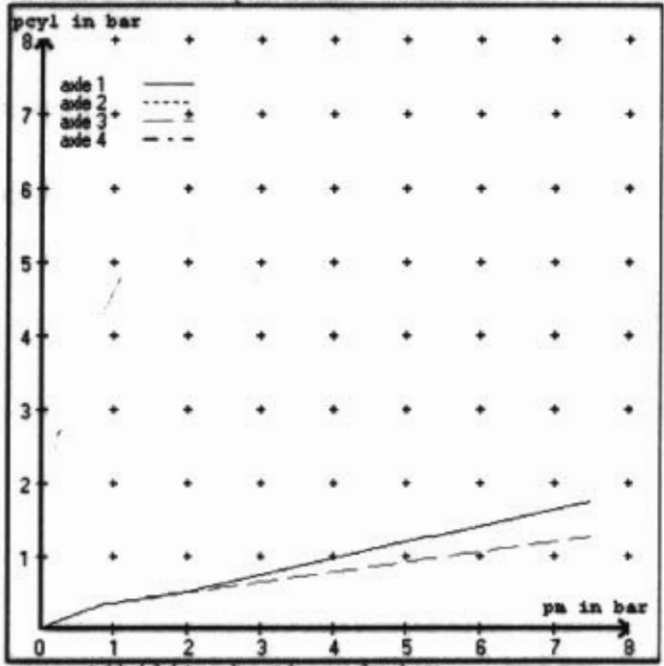
valve 2: 480 102 0.. 0 WABCO
 EBS trailer modulator

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 3.9 bar =>	pcha in bar :	3.2	3.2	2.7	2.7
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 1.4 bar =>	pcha in bar :	0.7	0.7	0.8	0.8

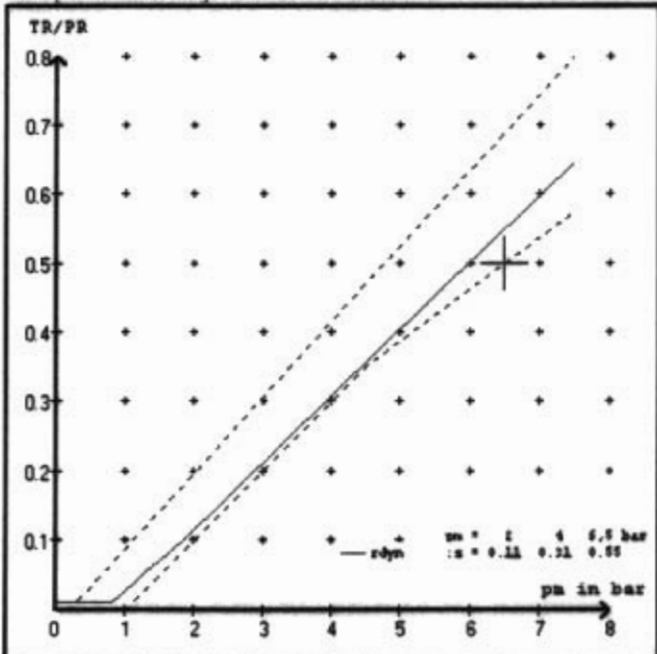
brake chamber pressure laden



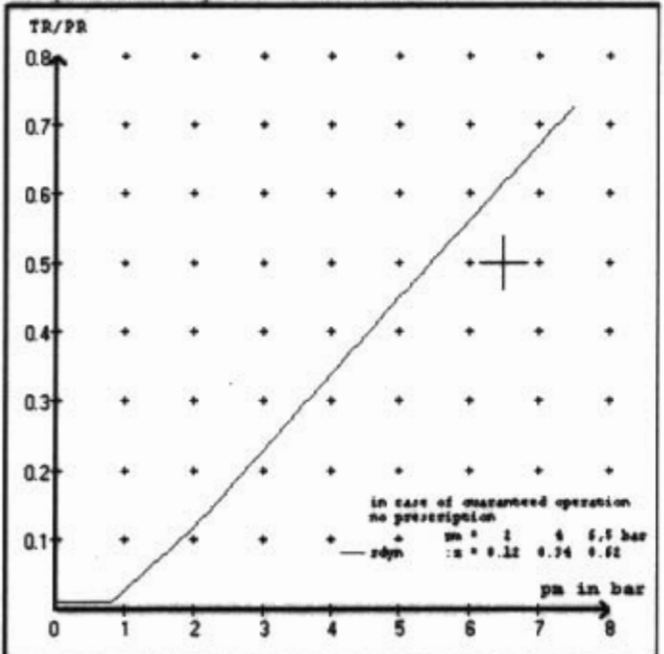
brake chamber pressure unladen



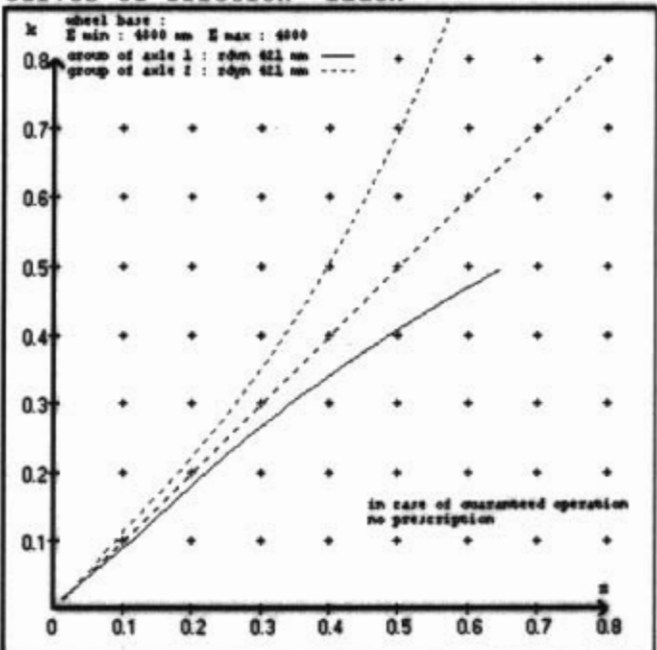
compatibility band laden



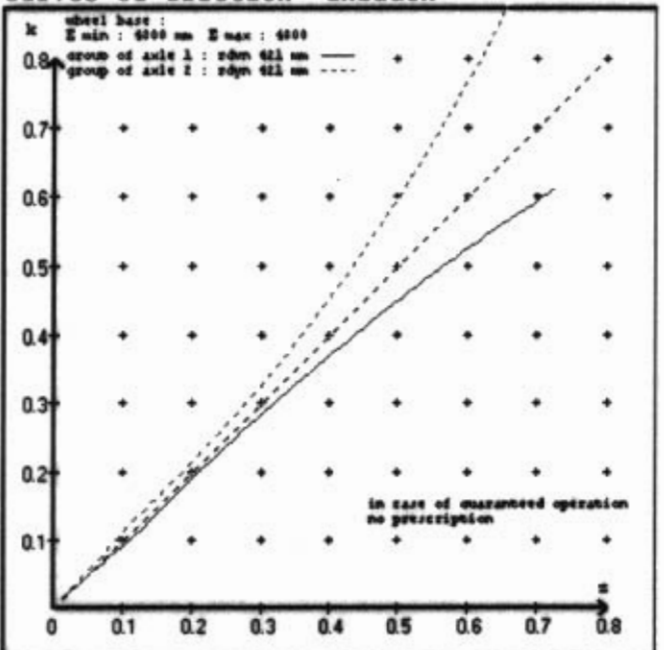
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT
 trailer model : 4AX TANKER
 trailer type : 4-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 14. (Meritor) lever length 69 mm
 axle 2 : 2 x type/diameter 14. (Meritor) lever length 69 mm
 axle 3 : 2 x type/diameter T.14/16 (Meritor) lever length 69 mm
 axle 4 : 2 x type/diameter T.14/16 (Meritor) lever length 69 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
 trailer model : 4AX TANKER
 trailer type : 4-axle-full-trailer
 brake calculation no. : TP 50420A

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

assignment pm / deceleration z: pm 0.8 bar z = 0.000
 (laden condition) 2.0 bar z = 0.116
 6.5 bar z = 0.550

control pressure pm		6,5		control pressure pm		0.8	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden		
1	1360	to be	1.5	7000	to be	0.4	1.2	5.8
2	1360	entered by the vehicle manufact.	1.5	7000	entered by the vehicle manufact.	0.4	1.2	5.8
3	1160		1.2	7000		0.4	1.3	4.6
4	1160		1.2	7000		0.4	1.3	4.6
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	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1360	1.5	1360	1.5	1160	1.1	1160	1.1
1860	1.9	1860	1.9	1660	1.4	1660	1.4
2360	2.3	2360	2.3	2160	1.7	2160	1.7
2860	2.6	2860	2.6	2660	2.0	2660	2.0
3360	3.0	3360	3.0	3160	2.3	3160	2.3
3860	3.4	3860	3.4	3660	2.6	3660	2.6
4360	3.8	4360	3.8	4160	2.9	4160	2.9
4860	4.2	4860	4.2	4660	3.2	4660	3.2
7000	5.8	7000	5.8	7000	4.6	7000	4.6

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: SAF	SBW 1937-...	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 13.10.2008
axle 2 : reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 13.10.2008
axle 3 : reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 13.10.2008
axle 4 : reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 13.10.2008

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

axle 1	(rdyn 421 mm)	T = 22.3 % Pe
axle 2	(rdyn 421 mm)	T = 22.3 % Pe
axle 3	(rdyn 421 mm)	T = 18.9 % Pe
axle 4	(rdyn 421 mm)	T = 18.9 % Pe

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

axle 1	(sp = 57 mm)	s = 39 mm
axle 2	(sp = 57 mm)	s = 39 mm
axle 3	(sp = 56 mm)	s = 39 mm
axle 4	(sp = 56 mm)	s = 39 mm

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

axle1	ThA = 5588 N
axle2	ThA = 5588 N
axle3	ThA = 4385 N
axle4	ThA = 4385 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 = 33284 N
axle 2	(rdyn 421 mm)	T = 33284 N
axle 3	(rdyn 421 mm)	T = 26161 N
axle 4	(rdyn 421 mm)	T = 26161 N

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

braking rate of the vehicle (item 4.3.2 to appendix I to annex VII)	0.55	0.43
--	------	------

required braking rate (items 1.3.3 and 1.6.2 to annex II)	>= 0,4 and >= 0,6*z (0.33)
--	-------------------------------

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

axle 1	(rdyn 421 mm)	T = 33284 N
axle 2	(rdyn 421 mm)	T = 33284 N
axle 3	(rdyn 421 mm)	T = 26161 N
axle 4	(rdyn 421 mm)	T = 26161 N

basic test of subject trailer (z)	type III (calculated) residual (hot)braking
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braking rate of the vehicle (item 4.3.2 to appendix I to annex VII)	0.55	0.43
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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.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	4.8	4.8

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	0.361	
$zf = \text{sum}(Tf) / P + 0,01$			

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 = 3504 mm for E = 4800 mm

min Ef = 3504 mm for E = 4800 mm

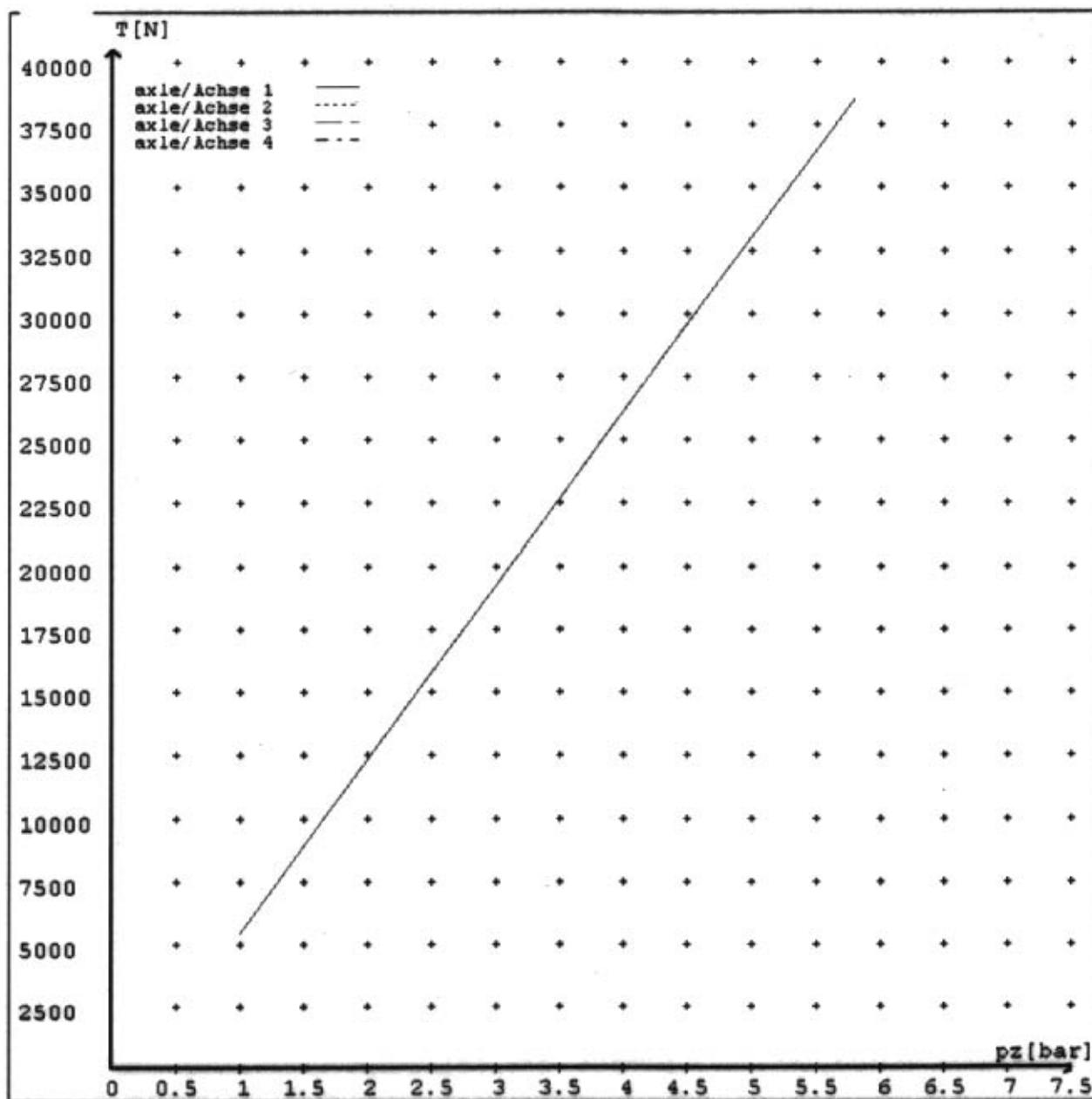
- min Ef = minimum distance between front axle(s) (trailer) or support (semitrailers) and the rear axle(s) (resultant of the bogie)
- E = wheel base
- fzul = 0.80 maximum permissible frictional connection required
- zferf = 0.18 maximum required braking ratio of the parking brake
- h = 1755 mm height of center of gravity - laden
- PR = 14000 kg maximum bogie mass - laden
- P = 28000 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%

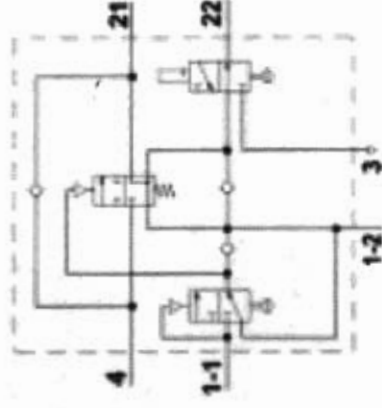
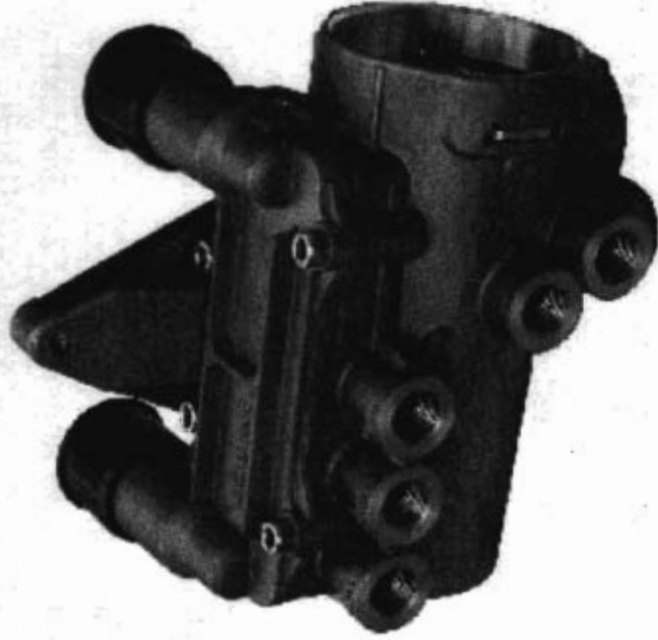
	pz [bar]	T [N]	T [N]
axle 1	1.0	5383	
	5.8	38488	
axle 2	1.0	5383	
	5.8	38488	
axle 3	1.0		5383
	4.6		30212
axle 4	1.0		5383
	4.6		30212

VIN - no.:



Fleet operators
Market information

Park-release emergency valve (PREV) | 971 002 900 0



Market information

Technical information release: Wabco PREV ID # 971 002 900 0

Trailers in the fleet may be equipped with Wabco's Park Release Emergency Valve (PREV) - subject to an approved exemption notice attached to the trailer (similar to the brake compliance plate).

The PREV replaces the standard Spring Brake Control & Yard Release valves to significantly enhance vehicle control & stability. The valve may be fitted as O.E. or as a retrofit package.

The valve will be located mid way down the side of the chassis rail & can be identified by the prominent Red & Black control knobs spaced 120mm apart, housed in one assembly.

The trailer equipped with a PREV & used in conjunction with EBS brake control systems will have proportional & modulated (ABS) braking through actuation of the service brakes, rather than the spring brakes, when the Emergency brake is operated.

If any of the following events occur;

- Emergency brake application (via cab control)
- Drop in supply line pressure (< 310 kPa)
- Supply line rupture ...

...the improved operational characteristic of the emergency brake function prevents wheel lock & the prevalent tyre damage associated with it. More importantly though a Service brake application provides optimum stability by ensuring full directional control of the vehicle is maintained.

Application of the park brake via the cab control will apply all Service Brakes on the trailer. Should the system pressure drop the trailer Spring Brakes will automatically apply.

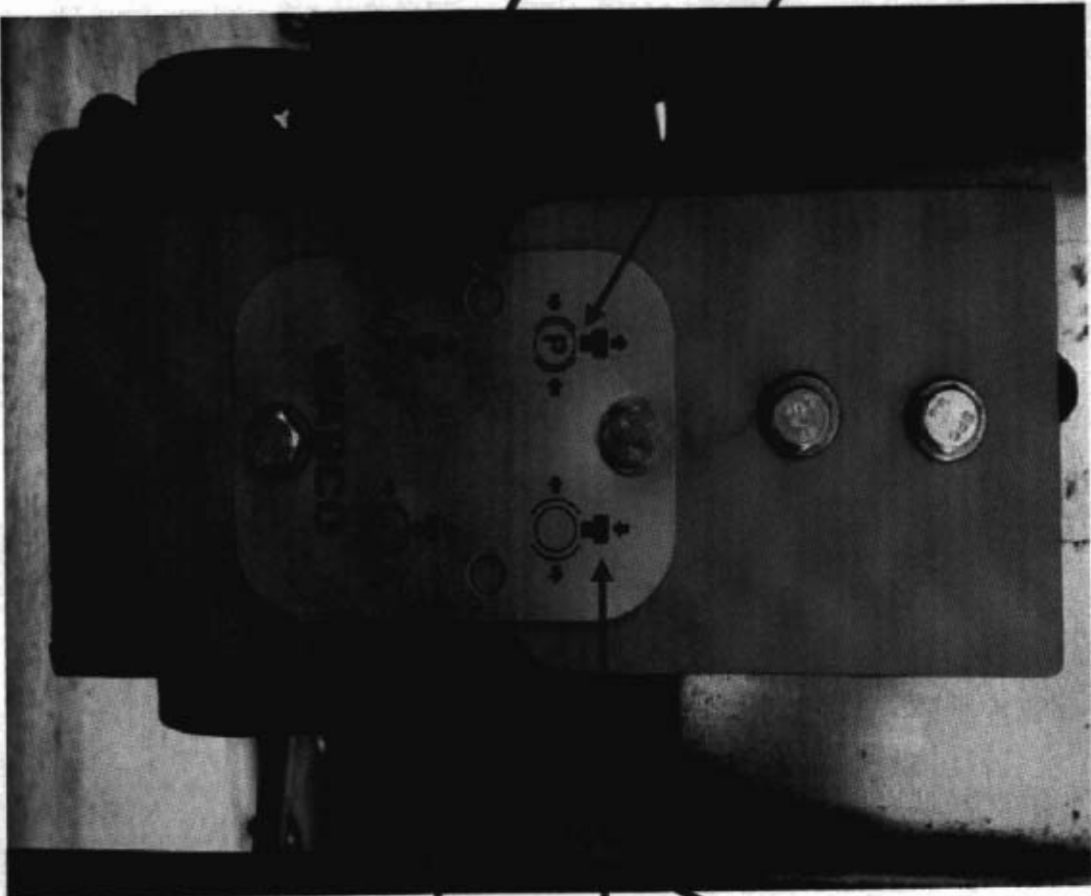
When the trailer is presented for COF the park brake system performance is checked by pulling the Red control knob on the PREV assembly. The park brake control in the cab does not have to be applied during the park brake test at COF.

Market information

The trailer Park brake is applied by pulling the Red control knob.

The Parking Brake performance of the trailer is therefore checked on the Brake Roller Machine by pulling the Red park brake control knob.

If the trailer is detached from the prime mover, please apply the Park brake.



When the park brake is applied in the towing vehicle, the Service brakes are applied on the trailer.

The Black control knob is used to manoeuvre the trailer when not connected to a prime mover.

Push the control knob in to release the Service brakes

– pull the control knob out to reapply the Service brakes.

If the control knob is left pushed in it will automatically 'pop-out' when the prime mover is re-coupled, the supply lines reconnected & the Park brake control in the cab is released.

Market information

An Emergency Brake application will apply the Service brakes. The vehicle operator should notice the event & will be able to safely manoeuvre the combination to a controlled stop.

However, if the operator is initially unaware of a problem the illuminated EBS/ABS warning lamp will indicate that a problem exists.

TEBS is a self-monitoring system & may generate a fault code similar to the example illustrated below. The importance of monitoring & reporting the ABS/EBS warning lamp events cannot be stressed enough & must be reported immediately. It is recommended Service providers check the TEBS diagnostic memory at each service interval. This operation takes approx 5 minutes.

Pneumatic Control line/ Residual pressure

Pneumatic Control line/ Residual pressure

Residual pressure has been detected in the pneumatic control line (yellow coupling head).

The fault is detected when the desired-pressure sensor measures a pressure > 0.3 bar and the vehicle speed increases by 30 km/h.

(Plausibility: The vehicle cannot accelerate and brake at the same time.)

Are pipes kinked or blocked?

Is the trailer control valve in the towing vehicle OK?