



Heavy Vehicle Specialist Certificate

Heavy Vehicle Specialist Inspector and Inspecting Organisation

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

ID

CHRIS CLARKE

CJC

Vehicle Registration*

VIN / Chassis Number

7A9E20012C1023112

Component being certified:

Chassis Modification

Load Anchorage

Log Bolsters

Certification Category

Towing Connection

✓ Brakes

SRT

HUEK

Description of Work

CARRY OUT SET UP OF TRAILER EBS SYSTEM.

Roll stability function (RSS) ACTIVATED + TESTED AS PER START UP PROTOCOL.

Code/Standard Certified to

Component Load Rating(s)

HUBNZ 32015/2 SCHED 5.

~~4~~ 32500KG.

General Drawing Number(s)

N/A.

Supporting Documents

BRACE DESIGN CERTIFICATE - JH130101
PRE-EXEMPTION REF - HUB12/405.

*Special Conditions

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

Certification Expiry Date (if applicable)

or Hubodometer Reading (whichever comes first)

N/A

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

Number

16.01.2013

424280

COF Vehicle Inspector ID:

COF Vehicle Inspector Signature:

Date

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

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) NZTA Helpdesk 0800 699 000*


C J Clarke (CJC HVEK)

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.

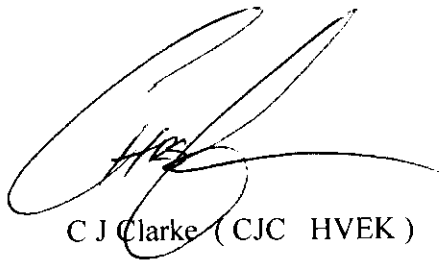
The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

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.



C J Clarke (CJC HVEK)

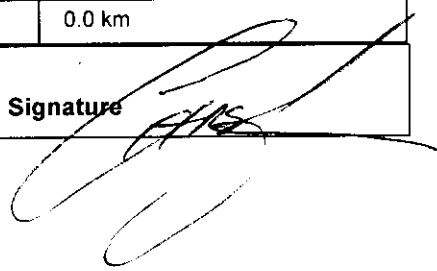
WABCO START-UP PROTOCOL

| | | | |
|---|--|-------------------|---------------|
| System | Trailer EBS-E | WABCO part number | 480 102 080 0 |
| Production date | 2012-06-06 | Serial number | 897000447700L |
| Serial number (modulator) | 000000016011 | | |
| Fingerprint Customer EOL / Customer Development / Flash Program | W503643 / 2013-01-16 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00 | | |

| WABCO | | TRAILER EBS-E | | GGVSI/ADR TUEH TB 2007 - 019.00 | | | | | | | | | | | | |
|---|---|---------------|--|--|------|------|------|-----|-----|-----|---|---------|----|-----|-----|------|
| HERSTELLER MANUFACTURER CONSTRUCTEUR | DOMETT | | | GIO | Pin1 | Pin3 | Pin4 | | | | | | | | | |
| TYP TYPE TYPE | 5AX F/T | | | 1 | --- | --- | --- | | | | | | | | | |
| FAHRZEUGIDENTIFIK. CHASSIS NUMBER NUMERO DE CHASSIS | 7A9E20012C1023112 | | | 2 | --- | --- | --- | | | | | | | | | |
| BREMSENRECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO. | TP50758 | | | 3 | ALS2 | ALS2 | --- | | | | | | | | | |
| POLRADZAHNZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTEE c-d e-f | 80 | 80 | ABS-System ABS-System Systeme ABS | 4 | --- | --- | --- | | | | | | | | | |
| | | | 4S/3M | 5 | DIAG | DIAG | DIAG | | | | | | | | | |
| RSS RSS RSS | Einfachbereifung Single Tyre Monte simple | | Lenkachsen Steering axle Essieu Viseur | 6 | --- | --- | --- | | | | | | | | | |
| | Zwillingbereifung Twin Tyre Monte jumelle | X | Kipprahmiges Fahrzeug Critical Trailer Vehicule critique | 7 | --- | --- | --- | | | | | | | | | |
| Subsystems | --- | I/O | |  | | | | | | | | | | | | |
| | pm (bar) | 6.5 | pm (bar) | 0.7 | 2.0 | --- | 6.5 | | | | | | | | | |
| ACHSE AXLE ESSIEU | | | | | | | pz | | | | | | | | | |
| | 1 | 1900 | 0.8 | 2.3 | 7250 | 4.7 | 0.4 | 1.4 | --- | 5.8 | - | 24 | 75 | 152 | 487 | 3598 |
| | 2 | 1900 | 0.8 | 2.3 | 7250 | 4.7 | 0.4 | 1.4 | --- | 5.8 | - | 24 | 75 | 152 | 487 | 3598 |
| | 3 | 1200 | 0.4 | 1.6 | 6000 | 3.8 | 0.4 | 1.4 | --- | 4.6 | - | 24 / 30 | 64 | 127 | 512 | 2914 |
| | 4 | 1200 | 0.4 | 1.6 | 6000 | 3.8 | 0.4 | 1.4 | --- | 4.6 | - | 24 / 30 | 64 | 127 | 512 | 2914 |
| | 5 | 1200 | 0.4 | 1.6 | 6000 | 3.8 | 0.4 | 1.4 | --- | 4.6 | - | 24 / 30 | 64 | 127 | 512 | 2914 |

| | | | |
|-----------------------|-------------|----------------------------------|------------|
| Diagnostic memory | OK | Warning lamp control | OK |
| Parameter setting | carried out | Stop light power supply | Not tested |
| EBS pressure test | Not tested | 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 |
| Signal inputs | Not tested | | |

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

| | | | |
|--------------|--------------------------|---|-------------------|
| Manufacturer | DOMETT | Vehicle ident. no | 7A9E20012C1023112 |
| Vehicle type | 5AX F/T | Odometer reading | 0.0 km |
| next Service | 0 km | Trip reading | 0.0 km |
| Tested by | Chris Clarke | Signature  | |
| Date | 2013-01-16 10:32:02 a.m. | | |



NZ TRANSPORT AGENCY
WAKA KOTAHI

NATIONAL OFFICE

50 Victoria Street
Private Bag 6995
Wellington 6141
New Zealand
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www.nzta.govt.nz

Exemption: HVB12/405

**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 T & T,**
VIN/CHASSIS: **7A9E20012C1023112**

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 Gough Transpecs or an NZ^o Transport Agency appointed HVEK certifier acting on behalf of, and under instruction from, Gough Transpecs; Gough 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) Gough 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 Gough Transpecs.
- 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 9) 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 18th day of December 2012.

Jackie Hartley
Administrator (Assessments)

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

distribution: DOMETT
7A9E20012C1023112
SODC: JH130101

please note!

This brake calculation is made under consideration of
-the legal precriptions mentioned above in the version valid at the time of making the program (V6.12.08.27).
-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 V6.12.08.27 db 30.08.2012

vehicle manufacturer: DOMETT
trailer model : 5AX F/T
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 3+4+5: 24/30
265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : Assali Stefen, B (350x200), TDB 0855 ECE,

| | | unladen | laden |
|--------------------------|----------|-------------|-------|
| total mass | P in kg | 7400 | 32500 |
| axle 1 | P1 in kg | 1900 | 7250 |
| axle 2 | P2 in kg | 1900 | 7250 |
| axle 3 | P3 in kg | 1200 | 6000 |
| axle 4 | P4 in kg | 1200 | 6000 |
| axle 5 | P5 in kg | 1200 | 6000 |
| wheel base | E in mm | 7400 - 7400 | |
| centre of gravity height | h in mm | 1090 | 2054 |

| | axle 1 | axle 2 | axle 3 | axle 4 | axle 5 |
|---|--------|----------|----------|----------|--------|
| no. of combined axles | 1 | 1 | 1 | 1 | 1 |
| no. of brake chambers per axle line KDZ | 2 | 2 | 2 | 2 | 2 |
| The power output corresponds to | FE 747 | FE 747BC | 0051.0BC | 0051.0BC | 0051.0 |
| brake chamber manufacturer | WABCO | WABCO | WABCO | WABCO | WABCO |
| chamber size | 24 | 24 | 24/30 | 24/30 | 24/30 |
| lever length lBh in mm | 127 | 127 | 127 | 127 | 127 |
| brake factor [-] | 9.10 | 9.10 | 9.10 | 9.10 | 9.10 |
| dyn. rolling radius rdyn min in mm | 421 | 421 | 421 | 421 | 421 |
| dyn. rolling radius rdyn max in mm | 421 | 421 | 421 | 421 | 421 |
| threshold torque Co Nm | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |

| calculation: | axle 1 | axle 2 | axle 3 | axle 4 | axle 5 |
|--|--------|--------|--------|--------|--------|
| chamber pressure (rdyn min) p _H at z=22,5%bar | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 |
| chamber pressure (rdyn max) p _H at z=22,5%bar | 2.2 | 2.2 | 2.0 | 2.0 | 2.0 |
| chamber press. (servo) p _{cha} at p _m 6,5bar bar | 5.8 | 5.8 | 4.6 | 4.6 | 4.6 |
| piston force ThA at p _m 6,5bar N | 7986 | 7986 | 6502 | 6502 | 6502 |
| brake force (rdyn min) T' lad. at p _m 6,5bar N | 43475 | 43475 | 35204 | 35204 | 35204 |
| brake force (rdyn max) T lad. at p _m 6,5bar N | 43475 | 43475 | 35204 | 35204 | 35204 |
| brake force within 1 % rolling friction proportion % | 19.6 | 19.6 | 20.3 | 20.3 | 20.3 |

braking rate z laden 0.604 for r_{dyn} min
z = sum (TR)/PRmax 0.604 for r_{dyn} 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 or 480 207 2.. 0
 EBS relay valve

brake cylinder: WABCO 423 106 9.. 0

axle 2:

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: WABCO 423 106 9.. 0

axle 3:

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

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

brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

axle 4:

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

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

brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

axle 5:

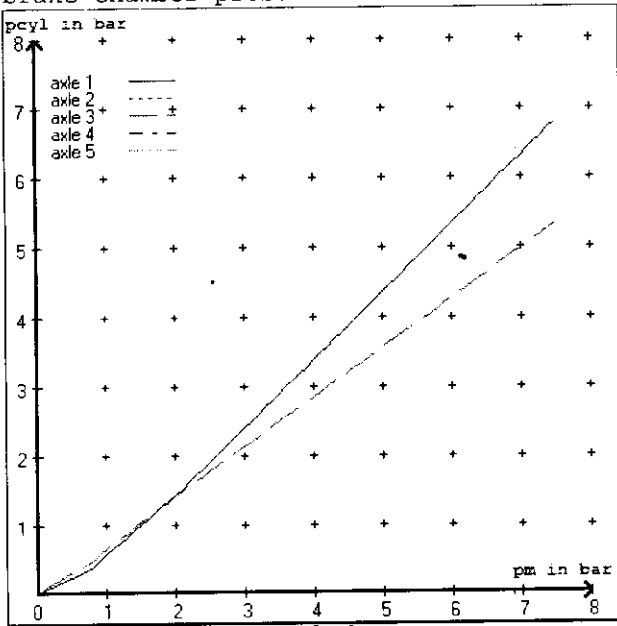
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

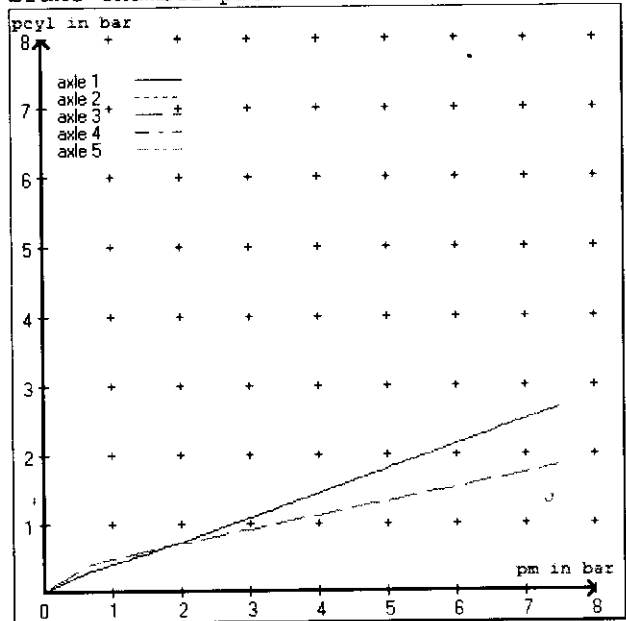
brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

| | | | | | | | |
|-----------------------------|----------------|-------|-------|-------|-------|-------|-----|
| test type III (zIII = 0.30) | for rdyn min : | axle1 | axle2 | axle3 | axle4 | axle5 | |
| at pm 3.5 bar => | pcha in bar : | 2.9 | 2.9 | 2.5 | 2.5 | 2.5 | 2.5 |
| test type III (zIII = 0.06) | for rdyn min : | axle1 | axle2 | axle3 | axle4 | axle5 | |
| at pm 1.2 bar => | pcha in bar : | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 |

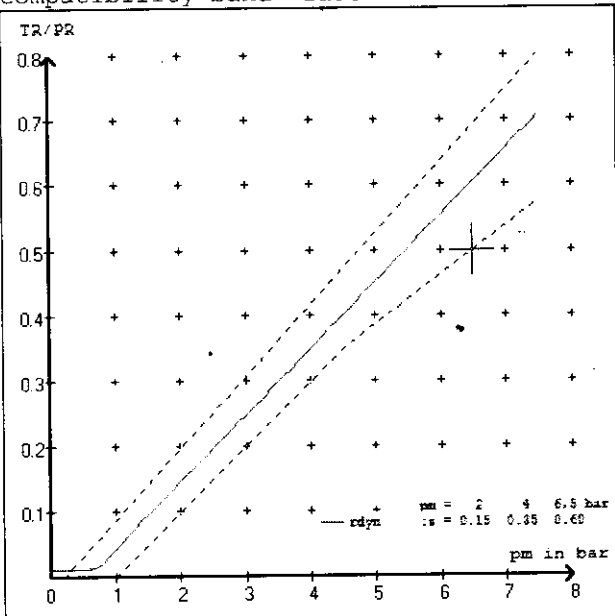
brake chamber pressure laden



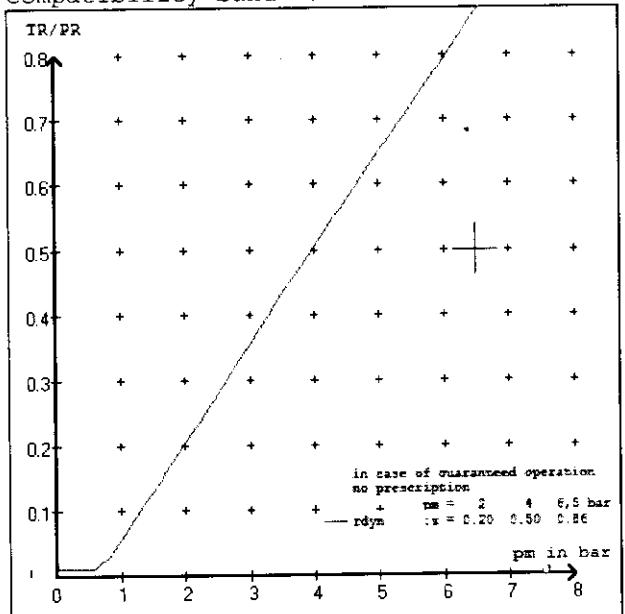
brake chamber pressure unladen



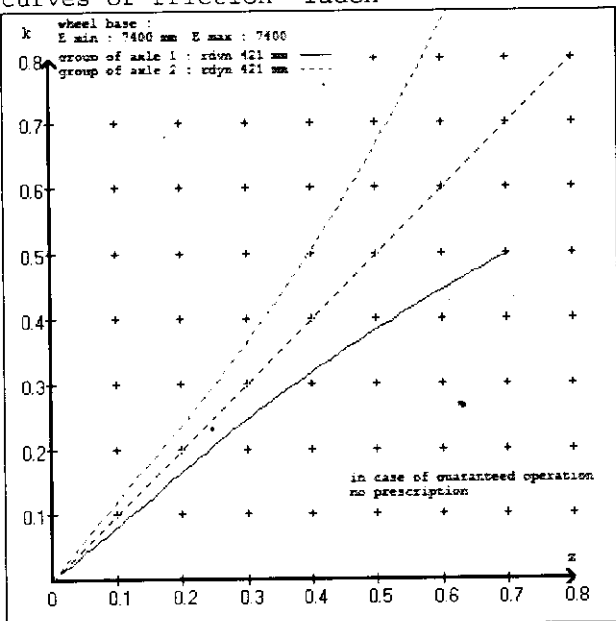
compatibility band laden



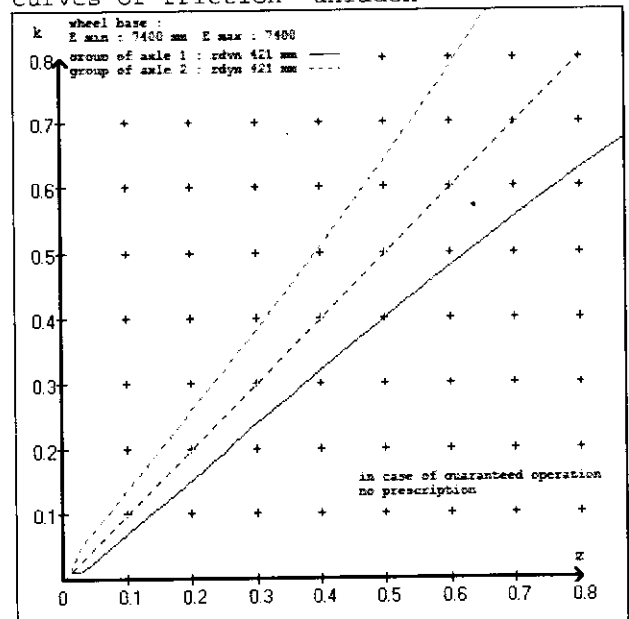
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT
 trailer model : 5AX F/T
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 24 (WABCO) lever length 127 mm
 axle 2 : 2 x type/diameter 24 (WABCO) lever length 127 mm
 axle 3 : 2 x type/diameter 24/30 (WABCO) lever length 127 mm
 axle 4 : 2 x type/diameter 24/30 (WABCO) lever length 127 mm
 axle 5 : 2 x type/diameter 24/30 (WABCO) lever length 127 mm

brake diagram :

valve :

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

EBS input data

=====

vehicle manufacturer: DOMETT
 trailer model : 5AX F/T
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 50758A

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 | 1900 | to be | 2.3 | 7250 | to be | 0.4 | 1.4 | 5.8 | |
| 2 | 1900 | entered by | 2.3 | 7250 | entered by | 0.4 | 1.4 | 5.8 | |
| 3 | 1200 | the vehicle manufact. | 1.6 | 6000 | the vehicle manufact. | 0.4 | 1.4 | 4.6 | |
| 4 | 1200 | | 1.6 | 6000 | | 0.4 | 1.4 | 4.6 | |
| 5 | 1200 | | 1.6 | 6000 | | 0.4 | 1.4 | 4.6 | |

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 5 | |
|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| axle load | pcyl | axle load | pcyl | axle load | pcyl | axle load | pcyl | axle load | pcyl |
| 1900 | 2.3 | 1900 | 2.3 | 1200 | 1.6 | 1200 | 1.6 | 1200 | 1.6 |
| 2400 | 2.6 | 2400 | 2.6 | 1700 | 1.9 | 1700 | 1.9 | 1700 | 1.9 |
| 2900 | 3.0 | 2900 | 3.0 | 2200 | 2.2 | 2200 | 2.2 | 2200 | 2.2 |
| 3400 | 3.3 | 3400 | 3.3 | 2700 | 2.5 | 2700 | 2.5 | 2700 | 2.5 |
| 3900 | 3.6 | 3900 | 3.6 | 3200 | 2.9 | 3200 | 2.9 | 3200 | 2.9 |
| 4400 | 3.9 | 4400 | 3.9 | 3700 | 3.2 | 3700 | 3.2 | 3700 | 3.2 |
| 4900 | 4.3 | 4900 | 4.3 | 4200 | 3.5 | 4200 | 3.5 | 4200 | 3.5 |
| 5400 | 4.6 | 5400 | 4.6 | 4700 | 3.8 | 4700 | 3.8 | 4700 | 3.8 |
| 7250 | 5.8 | 7250 | 5.8 | 6000 | 4.6 | 6000 | 4.6 | 6000 | 4.6 |

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

| | |
|--------|---|
| axle 1 | : reference axle: Assali SteftM / LM / LCe brake lining: ROR 685 AF |
| | test report : TDB 0855 ECE date : 20110721 |
| axle 2 | : reference axle: Assali SteftM / LM / LCe brake lining: ROR 685 AF |
| | test report : TDB 0855 ECE date : 20110721 |
| axle 3 | : reference axle: Assali SteftM / LM / LCe brake lining: ROR 685 AF |
| | test report : TDB 0855 ECE date : 20110721 |
| axle 4 | : reference axle: Assali SteftM / LM / LCe brake lining: ROR 685 AF |
| | test report : TDB 0855 ECE date : 20110721 |
| axle 5 | : reference axle: Assali SteftM / LM / LCe brake lining: ROR 685 AF |
| | test report : TDB 0855 ECE date : 20110721 |

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 = 20.0 % Fe |
| axle 2 | (rdyn 421 mm) | T = 20.0 % Fe |
| axle 3 | (rdyn 421 mm) | T = 17.6 % Fe |
| axle 4 | (rdyn 421 mm) | T = 17.6 % Fe |
| axle 5 | (rdyn 421 mm) | T = 17.6 % Fe |

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

| | | |
|--------|--------------|-----------|
| axle 1 | (sp = 73 mm) | s = 54 mm |
| axle 2 | (sp = 73 mm) | s = 54 mm |
| axle 3 | (sp = 63 mm) | s = 54 mm |
| axle 4 | (sp = 63 mm) | s = 54 mm |
| axle 5 | (sp = 63 mm) | s = 54 mm |

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

| | |
|-------|--------------|
| axle1 | ThA = 7986 N |
| axle2 | ThA = 7986 N |
| axle3 | ThA = 6502 N |
| axle4 | ThA = 6502 N |
| axle5 | ThA = 6502 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 = 35989 N |
| axle 2 | (rdyn 421 mm) | T = 35989 N |
| axle 3 | (rdyn 421 mm) | T = 29145 N |
| axle 4 | (rdyn 421 mm) | T = 29145 N |
| axle 5 | (rdyn 421 mm) | T = 29145 N |

| | |
|-------------|--------------|
| basic test | type III |
| of subject | (calculated) |
| trailer (E) | residual |

| | | |
|---|------|----------------------|
| braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11) | 0.60 | (hot)braking 0.50 |
|---|------|----------------------|

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

| | | |
|--------|---------------|-------------|
| axle 1 | (rdyn 421 mm) | T = 35989 N |
| axle 2 | (rdyn 421 mm) | T = 35989 N |
| axle 3 | (rdyn 421 mm) | T = 29145 N |
| axle 4 | (rdyn 421 mm) | T = 29145 N |
| axle 5 | (rdyn 421 mm) | T = 29145 N |

| | |
|-------------|--------------|
| basic test | type III |
| of subject | (calculated) |
| trailer (E) | residual |

| | | |
|---|------|----------------------|
| braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11) | 0.60 | (hot)braking 0.50 |
|---|------|----------------------|

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

spring parking brake

| | axle 3 | axle 4 | axle 5 |
|--|-----------------------------|--------|--------|
| no of TRISTOP-actuators per axle line KDZ | 2 | 2 | 2 |
| TRISTOP-actuator type | 24/30 | 24/30 | 24/30 |
| lever length lBh in mm | 127 | 127 | 127 |
| stat. tyre radius rstat max in mm | 401 | 401 | 401 |
| at a stroke of s in mm | 30 | 30 | 30 |
| min. force of spring brake TFZ in N | 6360 | 6360 | 6360 |
| sp.brake chamber no 925 | 376 005 0376 005 0376 005 0 | | |
| sp.brake chamber no 925 | 376 2.. 0376 2.. 0376 2.. 0 | | |
| release pressure pLs in bar | 4.9 | 4.9 | 4.9 |

calculation:

| | | | |
|--|--------|--------|--------|
| ratio until road | 2.8820 | 2.8820 | 2.8820 |
| $iFb = lBh * \eta * C * rBt / (2 * rBn * rstat)$ for rstat in mm | 401 | 401 | 401 |
| brake force of spring br. Tf in N | 35525 | 35525 | 35525 |
| $Tf = (TFZ * KDZ - 2 * Co / lBh) * iFb$ | | | |
| braking rate zf laden | 0.344 | | |
| $zf = \text{sum}(Tf) / P + 0,01$ | | | |

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width mir, Ef necessary
to fulfil the regulations

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

min Ef = 4737 mm for E = 7400 mm
 =====
 min Ef = 4737 mm for E = 7400 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 = 2054 mm height of center of gravity - laden
 PR = 18000 kg maximum bogie mass - laden
 P = 32500 kg maximum total mass - laden
 nf = 3 no. of axle(s) with TRISTOP spring brake actuators
 ng = 3 no. of bogie axle(s)

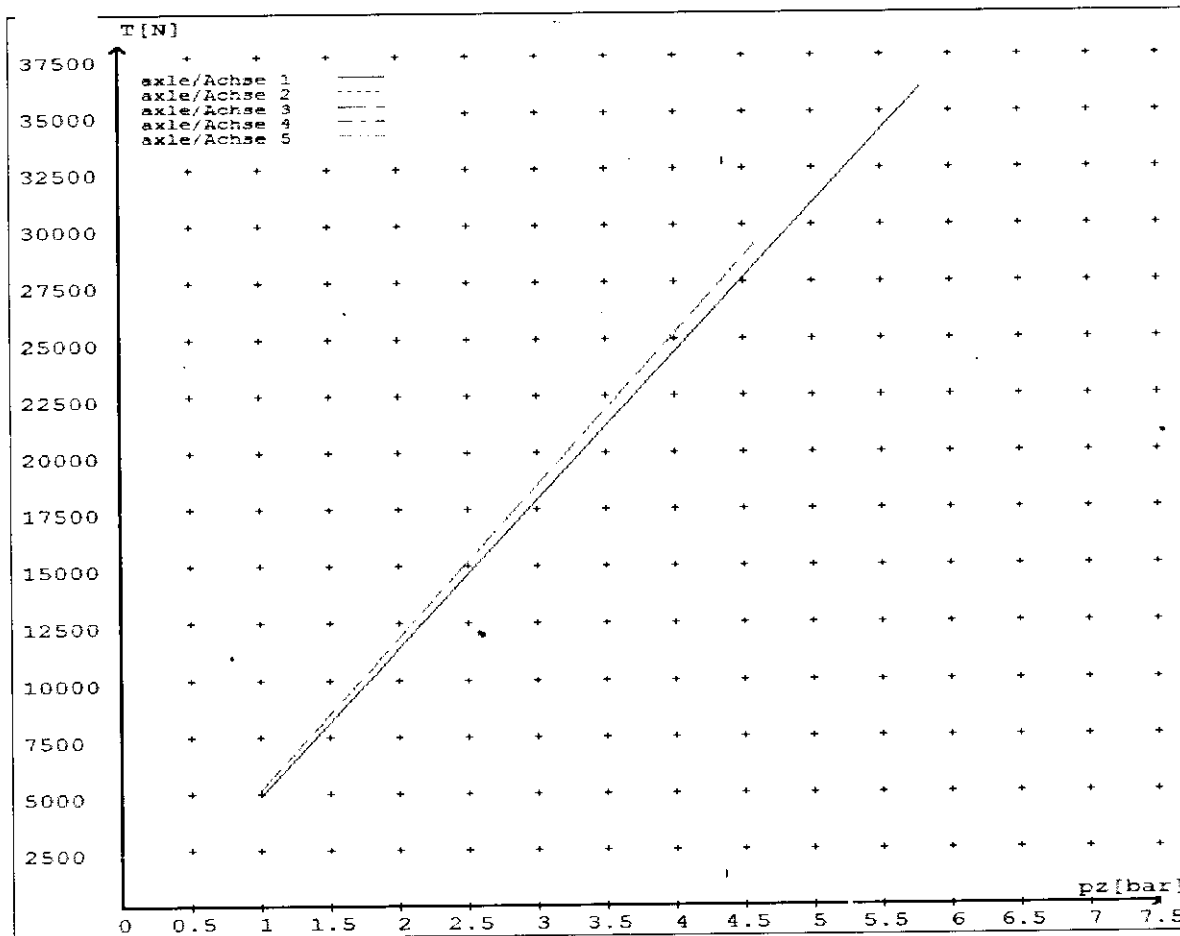
reference values

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

| | pz [bar] | T [N] | T [N] |
|--------|----------|-------|-------|
| axle 1 | 1.0 | 4880 | |
| | 5.8 | 35989 | |
| axle 2 | 1.0 | 4880 | |
| | 5.8 | 35989 | |
| axle 3 | 1.0 | | 5124 |
| | 4.6 | | 29143 |
| axle 4 | 1.0 | | 5124 |
| | 4.6 | | 29143 |
| axle 5 | 1.0 | | 5124 |
| | 4.6 | | 29143 |

VIN - no.:

| | Axle(s) / Achse(n) | | | | |
|---|--------------------|-----|-------|-------|-------|
| | 24/ | 24/ | 24/30 | 24/30 | 24/30 |
| brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest) | 24/ | 24/ | 24/30 | 24/30 | 24/30 |
| Maximum stroke smax = ...mm maximaler Hub smax =mm | 75 | 75 | 64 | 64 | 64 |
| Lever length =mm Hebellänge =mm | 127 | 127 | 127 | 127 | 127 |



| | | | | | | | | | | | | | | | | | |
|--|--|--------------------------|--|--|--|---|--|--------------------------------|--|-------------|--|-------------|--|-------------|--|-----|--|
| WABCO | | | | TRAILER EBS-E | | | | GGVS/ADR TUEH TB 2007 - 019.00 | | | | | | | | | |
| HERSTELLER MANUFACTURER CONSTRUCTEUR | | DOMETT | | | | | | GIO | | Pin1 | | Pin3 | | Pin4 | | | |
| TYP TYPE TYPE | | 5AX F/T | | | | | | 1 | | --- | | --- | | --- | | | |
| FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS | | 7A9E20012C1023112 | | | | | | 2 | | --- | | --- | | --- | | | |
| BREMSRECHNUNGS NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO. | | TP50758 | | | | | | 3 | | ALS2 | | ALS2 | | --- | | | |
| POLRADZAHNEZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTEE c-d e-f | | 80 | | 80 | | ABS-System ABS-System Système ABS | | 4S/3M | | 4 | | --- | | --- | | | |
| RSS Single Tyre Monte simple | | | | Lenkachse Steering axle Essieu vkrur | | | | | | 5 | | DIAG | | DIAG | | | |
| Zwillingenbereifung Twin Tyre Monte jumelle | | X | | Kippkritisches Fahrzeug Critical Trailer Véhicule critique | | | | | | 6 | | --- | | --- | | | |
| Subsystems | | SB | | I/O | | | | | | 7 | | --- | | --- | | | |
| | | | | | | | | | | | | | | | | | |
| ACHSE AXLE ESSIEU | | pm (bar) | | 6.5 | | pm (bar) | | 0.7 | | 2.0 | | --- | | 6.5 | | | |
| 1 | | 1900 | | 0.8 | | 2.3 | | 7250 | | 4.7 | | 0.4 | | 1.4 | | --- | |
| 2 | | 1900 | | 0.8 | | 2.3 | | 7250 | | 4.7 | | 0.4 | | 1.4 | | --- | |
| 3 | | 1200 | | 0.4 | | 1.6 | | 6000 | | 3.8 | | 0.4 | | 1.4 | | --- | |
| 4 | | 1200 | | 0.4 | | 1.6 | | 6000 | | 3.8 | | 0.4 | | 1.4 | | --- | |
| 5 | | 1200 | | 0.4 | | 1.6 | | 6000 | | 3.8 | | 0.4 | | 1.4 | | --- | |
| | | pz | | | | | | | | | | | | | | | |
| | | TYP TYPE | | (mm) | | (mm) | | (mm) | | | | | | | | | |
| | | 24 | | 75 | | 152 | | 487 | | 3598 | | | | | | | |
| | | 24 | | 75 | | 152 | | 487 | | 3598 | | | | | | | |
| | | 24 / 30 | | 64 | | 127 | | 512 | | 2914 | | | | | | | |
| | | 24 / 30 | | 64 | | 127 | | 512 | | 2914 | | | | | | | |
| | | 24 / 30 | | 64 | | 127 | | 512 | | 2914 | | | | | | | |

After the ALB sign has been attached to the vehicle, please overspray the sign with transparent varnish.



P.O.Box 98-971

South Auckland Mail Centre

J.HIRST (JEH)

DATE

15-Jan-13

BRAKE SYSTEM

WABCO EBS-E

CERT. NO.

JH130101

PREV EXEMPTION

HVB12/405

VIN / CHASSIS

7A9E20012C1023112

BRAKE CHAMBERS FRONT

24S TSE

BRAKE CHAMBERS REAR

2430GC TSE

SLACK LENGTH FRONT

152 mm

TYRE SIZE FRONT

265 70 R 19.5

SLACK LENGTH REAR

127 mm

TYRE SIZE REAR

265 70 R 19.5

THIS VEHICLE COMPLIES WITH THE NZ

LINING MATERIAL FRONT

ROR 685 AF

HVBR 32015/2 - SCHEDULE 5

LINING MATERIAL REAR

ROR 685 AF

Dopo l'applicazione della targhetta ALB all'automezzo, si raccomanda di spruzzarvi sopra dello smalto.

Après avoir apposé la plaquette ALB sur le véhicule, prière de la recouvrir de vernis clair.

Nach dem Aufbringen des ALB-Schildes am Fahrzeug, bitte Schild mit Klarlack übersprühen.



NZ TRANSPORT AGENCY
WAKA KOTAHI

NATIONAL OFFICE

50 Victoria Street
Private Bag 6995
Wellington 6141
New Zealand
T 64 4 894 5400
F 64 4 894 6100

www.nzta.govt.nz

Exemption: HVB12/405

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 T & T,
VIN/CHASSIS: 7A9E20012C1023112

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 Gough Transpecs or an NZ Transport Agency appointed HVEK certifier acting on behalf of, and under instruction from, Gough Transpecs; Gough 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) Gough 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 Gough Transpecs.
- 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 9) 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 18th day of December 2012.

Jackie Hartley
Administrator (Assessments)