

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 (PRINT IN CAPS) ID

RON PRATT **TRSP**

Vehicle registration (optional) VIN/chassis number

7A9E20011G1023527

Make **DOMETT TRAILERS**

Model (optional)

Certification category **HVEK**

Component being certified:

<input type="checkbox"/> Chassis	<input type="checkbox"/> Load anchorage
<input type="checkbox"/> Log bolsters	<input checked="" type="checkbox"/> Brakes
<input type="checkbox"/> SRT	<input type="checkbox"/> PSV stability
<input type="checkbox"/> Swept path	<input type="checkbox"/> PSV rollover
<input type="checkbox"/> Towing connection	<input type="checkbox"/> PBS

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/3

Code/standard/rule certified to	Component load rating(s)
LTR 32015/3	32 Tonnes GVM
General drawing number(s)	(35 Tonnes (Group ratings))
N/A	Rss Switched on Dual Tyres

Supporting documents

BRAKE CODE CERTIFICATE JH160913

BRAKE CALCULATION # TP51499

Special conditions (optional)

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

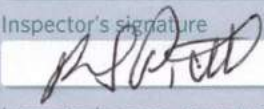
Certification expiry date (if applicable) or Hubodometer reading (whichever comes first)

N/A

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

RONALD STUART PRATT **TRSP**

Date **21-Sep-16** Number **564990**

CoF vehicle inspector ID	CoF vehicle inspector signature	Date
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All fields are mandatory unless otherwise stated.

Statement of Design Compliance**S.O.D.C. number: JH160913**For Heavy vehicle brake specification
(Schedule 5) of HV Brake Rule 32015/3**Vehicle details:**

Make: DOMETT TRAILERS
Model: E2001
VIN#: 7A9E20011G1023527
Chassis#: 1527
GCM (kgs): N/A
GVM (kgs): 32,000
Wheelbase (mm): 8200
Axle test report #: TDB 0749 (SAF 2619 Air bag)
Type: 5AFT DISC BRAKE

Component Details:

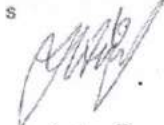
	Front	Rear
Lever length (mm):	69	69
Brake chamber size:	TSE:20HSCLD65	TSE:1416HTLD64 (14HSCLD64)
Tyre size:	265 70 R 19.5	265 70 R 19.5
Drawing number:	1527	
(for component reference)		
Brake calculation#:	TP 51499	
Brake system:	WABCO TEBS-E (Multi-volt)	

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.*

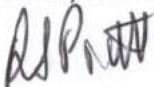
Date: 21 Sept 2016

s


Name: John Hirst (HVEK)**Certifier ID:** JEH

LT400 No=564990

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

Signed: R S PRATT

Dated: 22/09/2016

*) Programmed according to WABCO's End of Line protocol requirements where applicable and that the air suspension parameter pressures suit the suspension design & air bellow size.

**PDS INFORMATION REQUIRED FOR FULL TRAILERS
TO COMPLY WITH THE NZ HVBR 32015/3**



CLIENT

BUILDER:	DOMETT TRUCK & TRAILER
ADDRESS:	70 WHAKAKAKE STREET, TAURANGA
END USER:	SCS

VEHICLE DETAILS

VEHICLE TYPE:	CURTAINSIDE	CERT #	JH160913
YEAR:	2016	MODEL:	E2001
MAKE:	DOMETT	CHASSIS #:	1527
VIN #:	7A9E20011G1023527		
GVM (t):	32	REGO:	N/A
BODY TYPE	1		
GROUP RATINGS (t)	FRONT	REAR	
	16	19	
WHEEL BASE (M):	8.2		
	DECK HEIGHT (M)	MAX HEIGHT (M)	
	1.09	4.25	
COG (M):	2.054		
	FRONT	REAR	TOTAL
TARE (t):	3.4	4.2	7.6
	FRONT	REAR	
TYRE SIZE:	265 70 R 19.5	265 70 R 19.5	
	FRONT	REAR	
AXLE SPACING (M):	1.31	2.51	
	MAKE	MODEL	TEST REPORT
AXLE:	SAF INTRADISC	DISC	TDB0749

BRAKE DETAILS

	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
AXLE SERIAL NUMBERS:	1	PLEASE COMPLETE	
	2	PLEASE COMPLETE	
	3	PLEASE COMPLETE	
	4	PLEASE COMPLETE	
	5	PLEASE COMPLETE	

BRAKE DETAILS

CHAMBERS

	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE	TSE	TSE
SIZE/MODEL:	20HSCLD65	1416HTLD64	14HSCLD64
MAX STROKE (mm):	65	64	64
SPRINGBRAKE FORCE (Kn):	N/A	6.16	N/A
HOLD OFF PRESSURE (Bar):	N/A	4.5	N/A
SLACK LENGTH (mm):	69	69	69
BRAKE CALIPER:	SBW 1937	SBW 1937	SBW 1937
LINING MATERIAL:	JURID 539	JURID 539	JURID 539

BRAKE VALVES

	MAKE	PART#	CRACK / SETTING
SERVICE RELAY 1ST:	WABCO	480 102 080 0	N/A
SERVICE RELAY 2ND:	WABCO	480 207 202 0	N/A
RATIO VALVE:	N/A	N/A	N/A
YARD RELEASE:	WABCO	971 002 900 0	N/A
PARK BRAKE	WABCO	971 002 900 0	ANTI-COMPOUND YES

HEIGHT CONTROL:

Electronic Pneumatic

SMART BOARD:

446 192 110 0

LIFT AXLE:

N/A

ETASC:

N/A

SUSPENSION TYPE:

Reactive Non-Reactive

MAKE:

SAF SAF

MODEL:

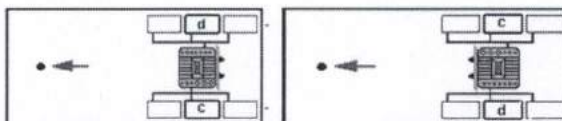
NG-IU28-ZI9-19W-68A NG-IU28-ZI9-19W-68A

BELLOW SIZE (mm):

300 (2619V) 300 (2619V)

ECU DIRECTION:

FRONT REAR



AIR TANKS

AIR TANKS STANDARD:	SAE J10 / EN 286-2	
BRAKE CAPACITY (Ltr):	46	71
SUSP. CAPACITY (Ltr):	N/A	46
AUXILLARY/ PROTECTED:	YES (VIA P.E.M. 461/513/002/0)	

AIR LINES & TEST POINTS**TEST POINTS**

FRONT CHAMBER:	YES	RATIO IN (Bar):	N/A
REAR CHAMBER:	YES (@ECU)	RATIO OUT (Bar):	N/A
TANK:	YES (@ ECU) _r	CONTROL LINE:	YES
DUOMATIC COLOUR CODED:	YES		
CLEARED ON SEMI:	N/A		
SENSORS ON AXLES:	2 + 4		

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS: F / R	MILLIMETRE: F / R	
UPPER LEVEL:	N/A	N/A	
NORMAL LEVEL:	N/A	N/A	
LOWER LEVEL:	N/A	N/A	
	MODULATOR 2.1	MODULATOR 2.2	RELAY VALVE
RESPONSE TIME (m/s):			

DECLARATION

I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN 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.

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015 /3, SCHEDULE 5.

DATE: 21-Sep-16

SIGNED: _____

NAME & ID: J HIRST (JEH)

SODC SIGNED:  _____

NAME & ID: Rowan RATTI TRSP

PHONE (BUS): (09) 980 7300

FAX: (09) 980 7306

POSTAL ADDRESS: P.O. Box 98-971, Manukau 2241
New Zealand



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 32015/3.

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 32015/3. 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

(p.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 32015/3, 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.

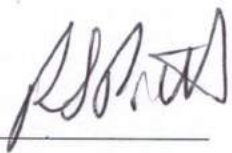
The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

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)



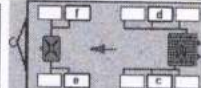
WABCO

TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.0X
TDB0749

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		
TYP TYPE TYPE	5AFT CURTAINSIDE		
FAHRZEUG IDENT.NR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9E20011G1023527		
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.	TP51499A		
POLRADZÄHNEZAHL. 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
RSS RSS RSS	Einfachbereifung Single Tire Monte simple	Lenkachse Steering axle Essieu avant	4S/3M
	Zwillingsbereifung Twin Tire Monte jumelle	X	Kipkränches Fahrzeug Critical Trailer Véhicule critique
Subsystems	SB	I/O	24N

GIO	Pin1	Pin3	Pin4
1	24V-O1	---	---
2	---	---	---
3	ALS2	ALS2	---
4	---	---	---
5	DIAG	DIAG	DIAG
6	---	---	---
7	---	---	---



ACHSE AXLE ESSIEU	pm (bar)		6.5		pm (bar)		0.6		2.0		---		6.5		TYP TYPE	(mm)	(mm)	(bar)	
	H (kg)	8	6.5	2.1	H (kg)	8	0.6	2.0	---	6.5	pz	1.0	Pz						
																		TR (daN)	
1	1700	0.6	2.1	8000	5.0	0.4	1.5	---	5.7	-	20	65	69	504	4133				
2	1700	0.6	2.1	8000	5.0	0.4	1.5	---	5.7	-	20	65	69	504	4133				
3	1400	0.4	1.9	6400	3.9	0.3	1.6	---	5.0	-	14 / 16	64	69	485	2996				
4	1400	0.4	1.9	6400	3.9	0.3	1.6	---	5.0	-	14 / 16	64	69	485	2996				
5	1400	0.4	1.9	6400	3.9	0.3	1.6	---	5.0	-	14	64	69	485	2996				

**HEAVY VEHICLE BRAKE RULE
32015/3 WORKSHEET
(PROCEDURE DOCUMENTATION SHEET-PDS)
&
CONFIRMATION OF COMPLIANCE**

CERTIFICATE NO.

JH160913

CUSTOMER NAME

DOMETT TRUCK & TRAILER

CUSTOMER ORDER NO.

4635

DATE RECEIVED

21-Sep-16

VEHICLE TYPE

CURTAINSIDE

VIN/ CHASSIS NO.

7A9E20011G1023527

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	441 044 101 0	N/A
DISTANCE SENSOR	464 008 011 0	464 008 011 0

OTHER VALVES:

MAKE: _____ WABCO _____ TYPE: _____ 461 513 002 0 _____ SETTING: _____ 5.5 Bar _____
MAKE: _____ TYPE: _____ SETTING: _____
MAKE: _____ TYPE: _____ SETTING: _____
MAKE: _____ TYPE: _____ SETTING: _____

BRAKE CHAMBERS:

	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
MAKE	TSE	TSE	TSE
SIZE	20HSCLD65	1416HTLD64	14HSCLD64
MAX STROKE (mm)	65	64	64
SLACK LENGTH (mm)	69	69	69

DRUM TYPE: N/A N/A N/A

BRAKE CALIPER: SBW 1937 SBW 1937 SBW 1937

FRICTION MATERIAL: OEM AFTERMARKET

<u>LINING BRAND</u>	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
	JURID 539	JURID 539	JURID 539

OTHERS:

TYRES: FRONT REAR
265 70 R 19.5 265 70 R 19.5

BRAKE CALCULATION #: TP51499

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 #

SALES ORDER #: SO516460 **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:

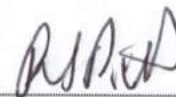
BRAKE CALCULATION TP51499 USES THE TSE1424HTLD TO DETERMINE THE SERVICE BRAKE PERFORMANCE & THE TSE1616HTLD64 TO MEASURE THE PARK BRAKE PERFORMANCE OF AXLES 3 & 4. THE ACTUAL CHAMBER USED (TSE1416HTLD64) IS NOT AVAILABLE IN THE WABCO BRAKE CALCULATOR.

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 32015/3, SCHEDULE 5.

DATE: 21-Sep-16

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 32015/3 SCHEDULE 5.

DATE:

SIGNED:

NAME:

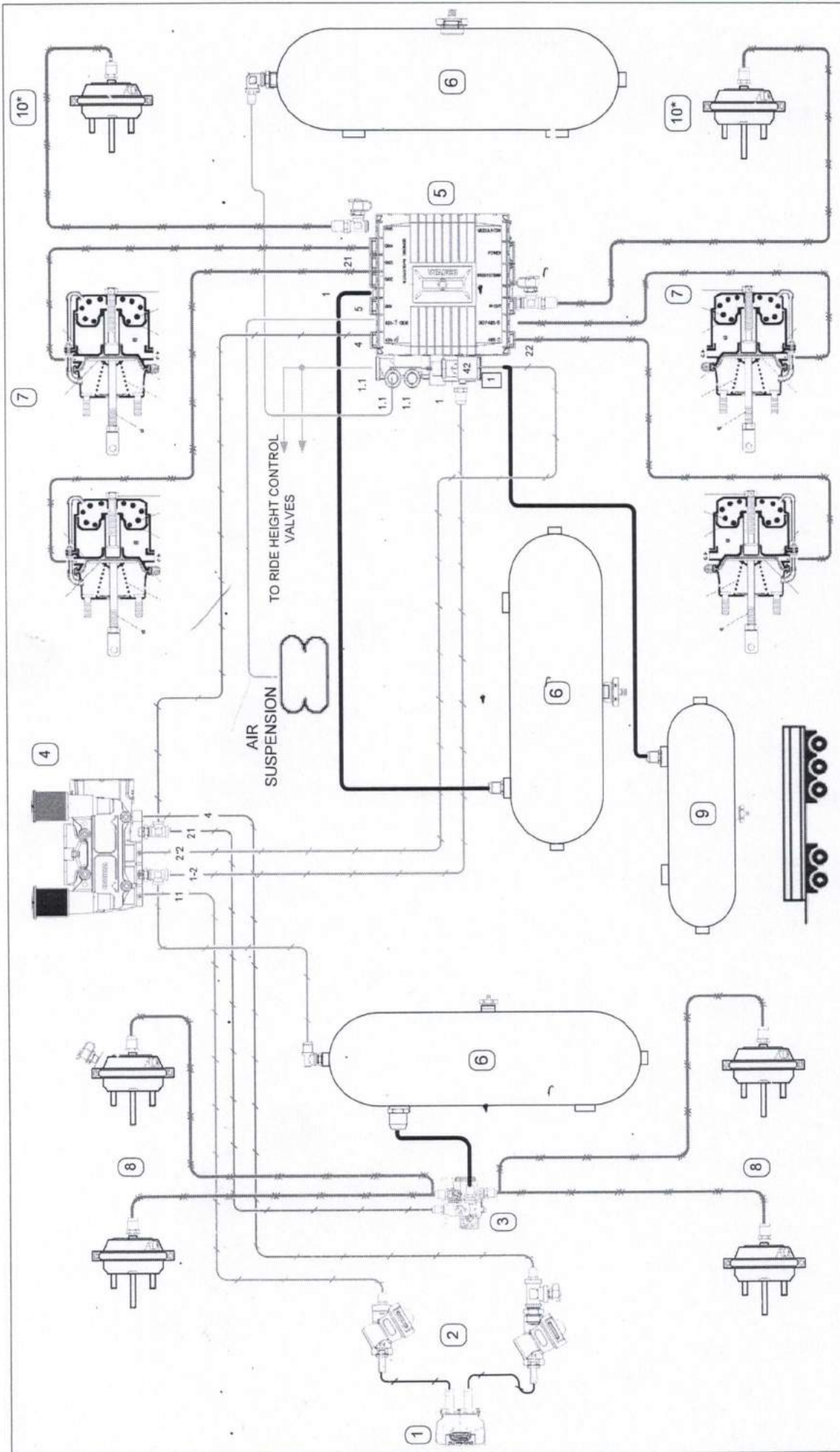
CERTIFIERS ID:

POSITION:

PHONE (BUS):

FAX (BUS):

COMMENTS:



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	PIPING LEGEND:
1	1	452 804 001 0	WABCO Dup-Matic coupling	9	1	14HSCLD64	25 Ltr Air Tank	3/8" Rubber
2	2	432 500 020 0	WABCO control line filter	10*	2		TSE SERVICE BRAKE CHAMBER	3/8" Rubber
3	1	480 207 202 0	WABCO EBS 3rd modulator	11				1/2" Rubber
4	1	971 002 800 0	WABCO PREV	12				15mm Nylon
5	1	480 102 080 0	WABCO TEBS - E (premium)					12mm Nylon
6	3		46 Ltr Air tank					8mm Nylon
7	6	1418HTLD64	TSE Spring brake chamber					8mm Nylon
8	4	20HSCLD65	TSE Service brake chamber					8mm Nylon

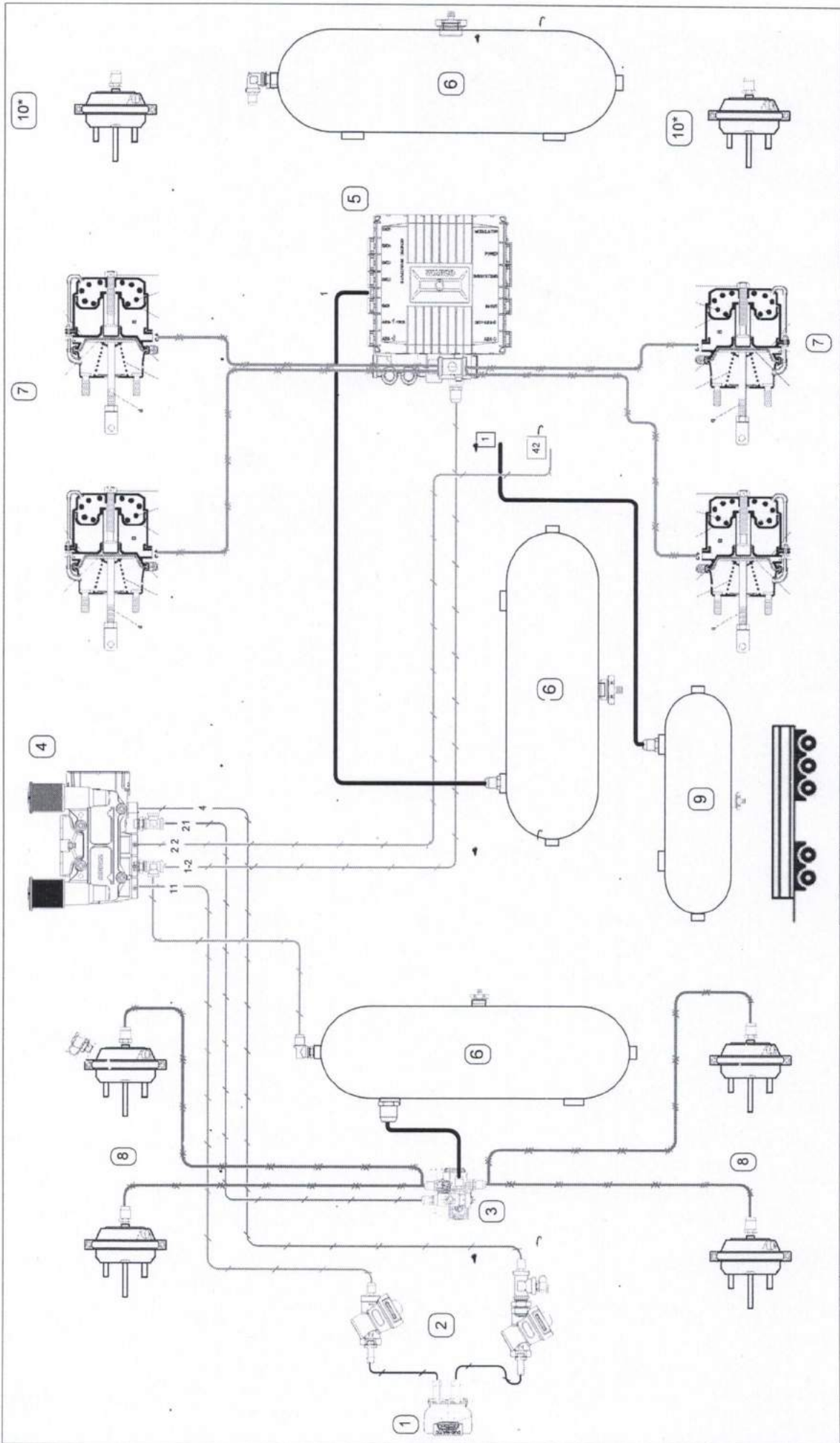
Domett T&T

DOM/5AXLE/TRAILERKIT
7A9E20011G1023527

SIZE A4
SPEC REFERENCE 1527
MODEL NUMBER E2001
REV 1
SCALE SERVICE LINES

GOUGH Transpecs

WABCO
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ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	452 804 001 0	WABCO Duo-Male coupling	9	1	14HSCLD64	25 Ltr Air Tank
2	2	432 500 020 0	WABCO control line filter	10*	2		TSE SERVICE BRAKE CHAMBER
3	1	480 207 202 0	WABCO EBS 3" modulator	11			
4	1	971 002 900 0	WABCO PREV	12			
5	1	480 102 080 0	WABCO TEBS - E (premium)				
6	3		46 Ltr Air tank				
7	6	1416HTLD64	TSE Spring brake chamber				
8	4	20HSCLD65	TSE Service brake chamber				

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WABCO
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Domett T&T

DOM/5AXLE/TRAILERKIT
 7A9E20011G:1023527

SIZE A4
 SPEC REFERENCE 1527
 MODEL NUMBER E2001
 SCALE PARK LINES

PIPING LEGEND:

	3/8" Rubber
	3/8" Rubber
	1/2" Rubber
	15mm Nylon
	12mm Nylon
	8mm Nylon
	8mm Nylon
	8mm Nylon



P.O.Box 98-971

South Auckland Mail Centre

John Hirst (JEH)

DATE: 21-Sep-16 BRAKE SYSTEM: WABCO T- EBS E
 CERT. NO: JH160913 BRAKE CALCULATION #: TP51499
 VIN / CHASSIS: 7A9E20011G1023527

	Make	Model	Max stroke (mm)
BRAKE CHAMBERS Ax 1 & 2	TSE	20HSCLD65	65
BRAKE CHAMBERS Ax 3 & 4	TSE	1416HTLD64	64
BRAKE CHAMBERS Ax 5	TSE	14HSCLD64	64
SLACK LENGTH FRONT (mm):	69	TYRE SIZE FRONT:	265 70 R 19.5
SLACK LENGTH REAR (mm):	69	TYRE SIZE REAR:	265 70 R 19.5

THIS VEHICLE COMPLIES WITH THE NZ
 HEAVY VEHICLE BRAKE RULE 32015/3, SCHEDULE 5

LINING MATERIAL FRONT: JURID 539
 LINING MATERIAL REAR: JURID 539

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

distribution: DOMETT TRAILERS
 7A9E20011G1023527
 SODC: JH160913
 LT400: TRSP:

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 : 5AFT CURTAINSIDE
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 3+4: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -
 SEE PAGE 7 FOR PERFORMANCE DATA]
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBW 1937, TDB 0749 ECE,

		unladen	laden
total mass	P in kg	7600	35200
axle 1	P1 in kg	1700	8000
axle 2	P2 in kg	1700	8000
axle 3	P3 in kg	1400	6400
axle 4	P4 in kg	1400	6400
axle 5	P5 in kg	1400	6400
wheel base	E in mm	8200 - 8200	
centre of gravity height	h in mm	1090	2050

	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	2	2	2	2	2
The power output corresponds to brake chamber manufacturer	BZ 122.1 Meritor	BZ 122.1 Meritor	BZ 119.6 Meritor	BZ 119.6 Meritor	BZ 122.1 Meritor
chamber size	20.	20.	T.14/24	T.14/24	14.
lever length	69	69	69	69	69
brake factor	23.03	23.03	23.03	23.03	23.03
dyn. rolling radius	421	421	421	421	421
dyn. rolling radius	421	421	421	421	421
threshold torque	6.0	6.0	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.2	2.2	2.1	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%bar	2.2	2.2	2.1	2.1	2.1
chamber press.(servo)pcha at pm6,5bar	5.7	5.7	5.0	5.0	5.0
piston force	6578	6578	4786	4786	4786
brake force(rdyn min)T lad. at pm6,5bar	49846	49846	36143	36143	36143
brake force(rdyn max)T lad. at pm6,5bar	49846	49846	36143	36143	36143
brake force within 1 % rolling friction proportion	22.3	22.3	18.5	18.5	18.5

braking rate z laden 0.603 for rdyn min
 z = sum (TR)/PRmax 0.603 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 or 480 207 2.. 0
 EBS relay valve

brake cylinder: Meritor 20HSCLD65

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: Meritor 20HSCLD65

axle 3:

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

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

brake cylinder: Meritor 1424HTLD64

axle 4:

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

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

brake cylinder: Meritor 1424HTLD64

axle 5:

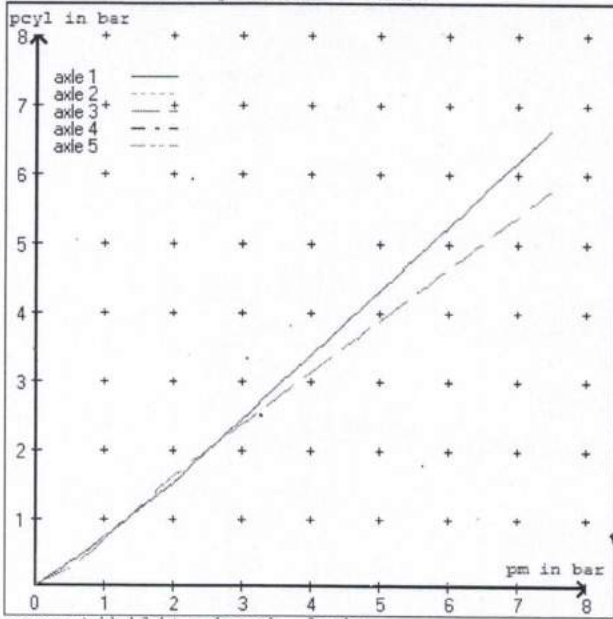
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

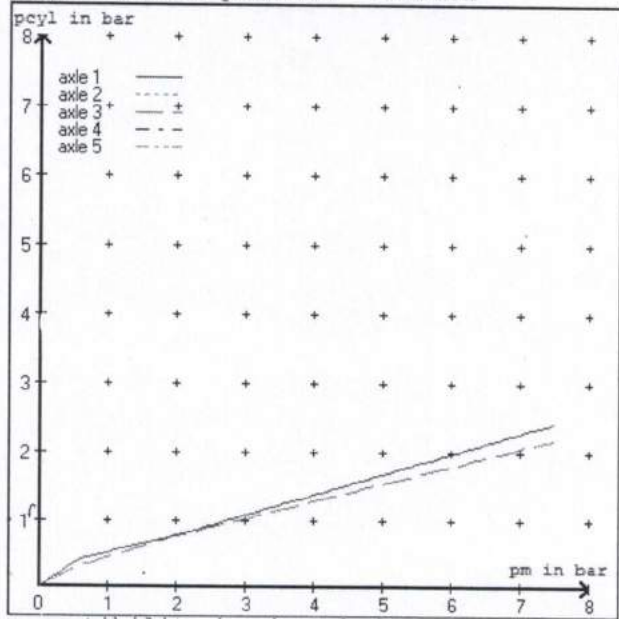
brake cylinder: Meritor 14HSCLD64

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	2.7	2.7	2.7	
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.1 bar =>	pcha in bar :	0.8	0.8	0.8	0.8	0.8	

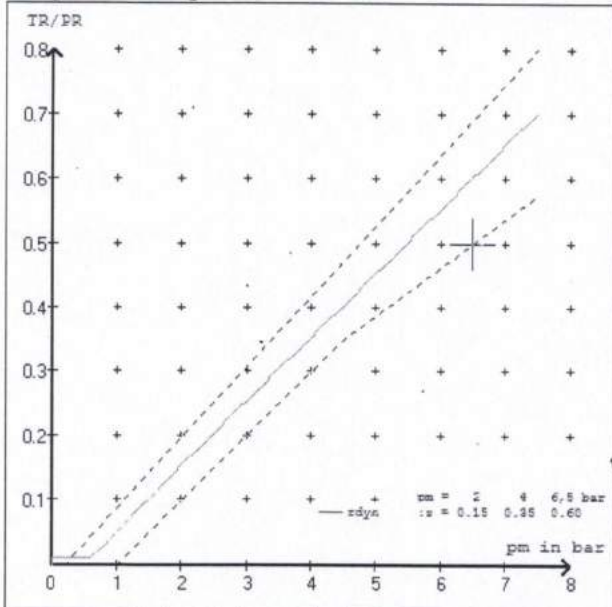
brake chamber pressure laden



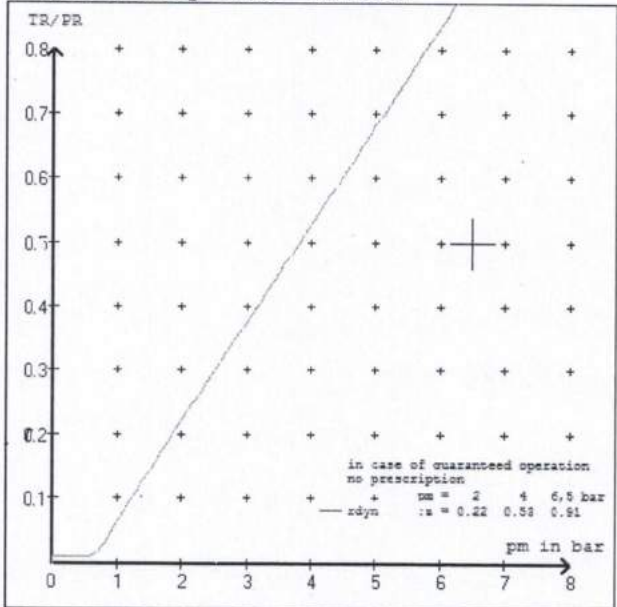
brake chamber pressure unladen



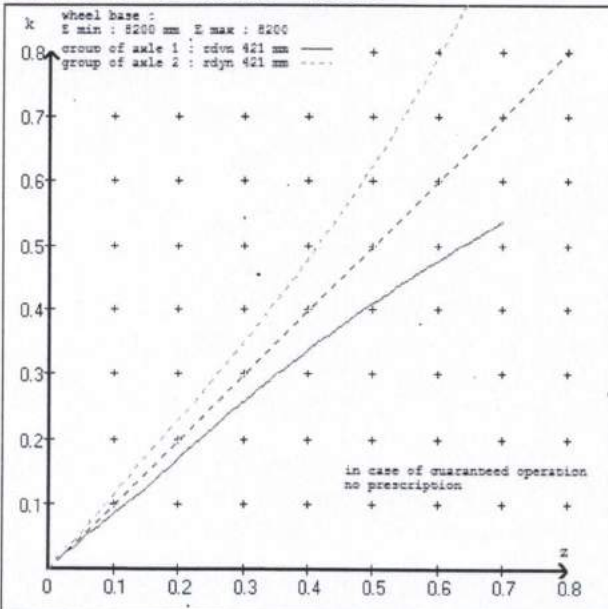
compatibility band laden



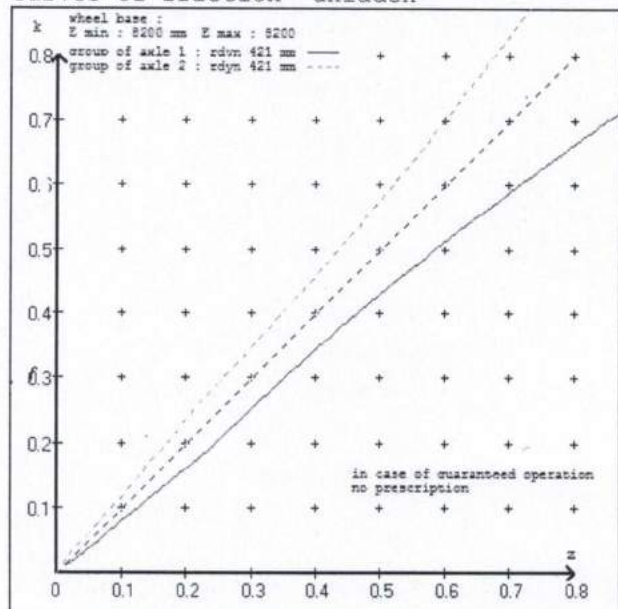
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT CURTAINSIDE
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 69 mm
 axle 2 : 2 x type/diameter 20. (Meritor) lever length 69 mm
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 4 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 5 : 2 x type/diameter 14. (Meritor) lever length 69 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 TRAILERS
 trailer model : 5AFT CURTAINSIDE
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 51499A

tire circumference main axle : 2650 for r dyn max
 tire circumference auxiliary axle : 2650 for r dyn max

assignment pm / deceleration z: pm 0.6 bar z = 0.010
 (laden condition) 2.0 bar z = 0.150
 6.5 bar z = 0.600

control pressure pm		6,5	control pressure pm		0.6	2.0	6.5	
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden		
1	1700	to be	2.1	8000	to be	0.4	1.5	5.7
2	1700	entered by the vehicle manufact.	2.1	8000	entered by the vehicle manufact.	0.4	1.5	5.7
3	1400		1.9	6400		0.3	1.6	5.0
4	1400		1.9	6400		0.3	1.6	5.0
5	1400		1.9	6400		0.3	1.6	5.0

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 5
axle load	axle load	axle load	axle load	axle load
pcyl	pcyl	pcyl	pcyl	pcyl
1700	1700	1400	1400	1400
2200	2200	1900	1900	1900
2700	2700	2400	2400	2400
3200	3200	2900	2900	2900
3700	3700	3400	3400	3400
4200	4200	3900	3900	3900
4700	4700	4400	4400	4400
5200	5200	4900	4900	4900
8000	8000	6400	6400	6400

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

axle 1 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 2 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 3 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 4 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 5 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013

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

axle 1	(rdyn 421 mm)	T = 23.5 % Fe
axle 2	(rdyn 421 mm)	T = 23.5 % Fe
axle 3	(rdyn 421 mm)	T = 18.8 % Fe
axle 4	(rdyn 421 mm)	T = 18.8 % Fe
axle 5	(rdyn 421 mm)	T = 18.8 % Fe

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

axle 1	(sp = 58 mm)	s = 39 mm
axle 2	(sp = 58 mm)	s = 39 mm
axle 3	(sp = 56 mm)	s = 39 mm
axle 4	(sp = 56 mm)	s = 39 mm
axle 5	(sp = 56 mm)	s = 39 mm

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

axle1	ThA = 6578 N
axle2	ThA = 6578 N
axle3	ThA = 4786 N
axle4	ThA = 4786 N
axle5	ThA = 4786 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 = 38948 N
axle 2	(rdyn 421 mm)	T = 38948 N
axle 3	(rdyn 421 mm)	T = 28278 N
axle 4	(rdyn 421 mm)	T = 28278 N
axle 5	(rdyn 421 mm)	T = 28278 N

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

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

0.60 0.47

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)
axle 2	(rdyn 421 mm)
axle 3	(rdyn 421 mm)
axle 4	(rdyn 421 mm)
axle 5	(rdyn 421 mm)

T = 38948 N
T = 38948 N
T = 28278 N
T = 28278 N
T = 28278 N

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

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

0.60 0.47

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
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	6200	6200
sp.brake chamber no Meritor.....		4	4
release pressure	pLs in bar	4.5	4.5

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	0.289	
$zf = \text{sum}(Tf) / P + 0,01$			

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 = 6183 mm for E = 8200 mm

min Ef = 6183 mm for E = 8200 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 = 2050 mm height of center of gravity - laden

PR = 19200 kg maximum bogie mass - laden

P = 35200 kg maximum total mass - laden

nf = 2 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	5045	
	5.7	41332	
axle 2	1.0	5045	
	5.7	41332	
axle 3	1.0		4852
	5.0		29969
axle 4	1.0		4852
	5.0		29969
axle 5	1.0		4852
	5.0		29969

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax =mm	65	65	64	64	64
Lever length =mm Hebellänge =mm	69.08	69.08	69.08	69.08	69.08

