

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
7 A 9 E 2 5 0 1 0 G 1 0 2 3 5 1 6

Make **Domett** Component being certified:

Model (optional) Chassis Load anchorage

Certification category **HVEK** Log bolsters Towing connection Brakes

SRT PSV stability PSV rollover

Swept path 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) **RSS Switched on Dual Tyres**

N/A

Supporting documents

BRAKE CODE CERTIFICATE JH160816

BRAKE CALCULATION # TP51441

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 **[Signature]**

Inspector's name (PRINT IN CAPS) ID number
RONALD STUART PRATT **TAS P**

Date Number
17-Aug-16 **556549**

CoF vehicle inspector ID CoF vehicle inspector signature Date

All fields are mandatory unless otherwise stated.

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

CERTIFICATE NO.

JH160816

CUSTOMER NAME

DOMETT TRAILERS

CUSTOMER ORDER NO.

4617

DATE RECEIVED

17-Aug-16

VEHICLE TYPE

LIVESTOCK

VIN/ CHASSIS NO.

7A9E25010G1023516

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

BRAKE VALVES

MAKE

TYPE

PRIMARY RELAY

WABCO

480 102 080 0

SECONDARY RELAY

WABCO

480 207 202 0

YARD RELEASE VALVE

SEALCO

17600B

PARK BRAKE VALVE

SEALCO

110701

LOCKED RATIO:

FRONT

REAR

MAKE

N/A

N/A

SETTING

N/A

N/A

OTHER VALVES:

MAKE: WABCO

TYPE: 434 014 000 0

SETTING: CHECK VALVE

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

OR

BRAKE CALIPER:

WABCO PAN-19

WABCO PAN-19

WABCO PAN-19

FRICTION MATERIAL:

OEM

AFTERMARKET

LINING BRAND

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 #:

TP51441

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 #

556548

SALES ORDER #:

SO483021

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:

REFER TO PAGE 7 OF BRAKE CALCULATION TP51441

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: 17-Aug-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:

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.

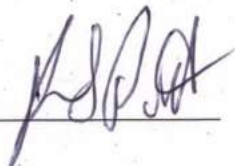
The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

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

START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2015-11-26	Serial number	437002057500F
Serial number (modulator)	000000052405		
Fingerprint Customer EOL / Customer Development / Flash Program	W033869 / 2016-08-22 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

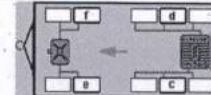
WABCO

TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00
TDB0749

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		
TYP TYPE TYPE	5AFT STOCK		
FAHRZEUG IDENT.NR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9E25010G1023516		
BREMSENRECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51441A		
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 vibrant	4S/3M
	Zwillingsbereifung Twin Tire Monte jumelle	Kippröhliches 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)			pm (bar)			0.8	2.0	---	6.5	TYP TYPE	(mm)	(mm)	(bar)	
	1.1	2.3	6.5	1.1	2.3	6.5	pz	1.0	Pz						
	H (kg)			H (kg)											TR (daN)
1	2450	1.1	2.3	8000	5.0	0.4	1.4	---	6.1	-	20	65	69	508	4479
2	2450	1.1	2.3	8000	5.0	0.4	1.4	---	6.1	-	20	65	69	508	4479
3	1850	0.7	1.7	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	489	2768
4	1850	0.7	1.7	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	489	2768
5	1850	0.7	1.7	6400	3.9	0.3	1.4	---	4.6	-	14	64	69	489	2768

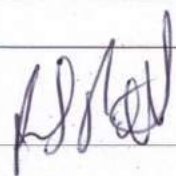
TEBS-E

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 height sensor calibration	Not tested
ABS sensor assignment	OK	Height sensor axle load	Not tested
RTR check	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

Electronic Extension Module

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

Manufacturer	DOMETT TRAILERS	Vehicle ident. no	7A9E25010G1023516
Vehicle type	5AFT STOCK	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km

Tester	Ron pratt	Signature 
Date	2016-08-22 11:14:18 a.m.	

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



CLIENT

BUILDER:	DOMETT TRAILERS
ADDRESS:	70 WHAKAKAKE STREET, TAURANGA
END USER:	GVT LIVESTOCK

VEHICLE DETAILS

VEHICLE TYPE:	LIVESTOCK	CERT #	JH160816
YEAR:	2016	MODEL:	E2501 H
MAKE:	DOMETT	CHASSIS #:	1502
VIN #:	7A9E25010G1023516		
GVM (t):	32	REGO:	N/A
BODY TYPE	5		
GROUP RATINGS (t)	FRONT	REAR	
	16	19	
WHEEL BASE (M):	6.795		
	DECK HEIGHT (M)	MAX HEIGHT (M)	
	1	4.25	
COG (M):	2.204		
TARE (t):	FRONT	REAR	TOTAL
	4.9	5.55	10.45
TYRE SIZE:	FRONT	REAR	
	265 70 R 19.5	265 70 R 19.5	
AXLE SPACING (M):	FRONT	REAR	
	1.31	2.51	
AXLE:	MAKE	MODEL	TEST REPORT
	SAF	INTRADISC	TDB0749

AXLE DATA

AXLE SERIAL NUMBERS

AXLE 1:	CUSTOMER USE
AXLE 2:	CUSTOMER USE
AXLE 3:	CUSTOMER USE
AXLE 4:	CUSTOMER USE
AXLE 5:	CUSTOMER USE

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	6.2	N/A
HOLDOFF PRESSURE (Bar):	N/A	4.5	N/A
SLACK LENGTH (mm):	69	69	69
BRAKE CALIPER:	WABCO PAN-19	WABCO PAN-19	WABCO PAN-19
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:	SEALCO	17600B	N/A
PARK BRAKE	SEALCO	110701	ANTI-COMPOUND YES

HEIGHT CONTROL:

Electronic Pneumatic

SMART BOARD:

N/A

LIFT AXLE:

N/A

ETASC:

N/A

SUSPENSION TYPE:

Reactive Non-Reactive

MAKE:

SAF SAF

MODEL:

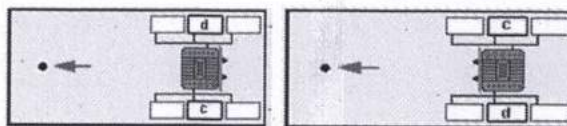
NG-IU28-ZI9-19W-68A NG-IU28-ZI9-19W-68A

BELLOW SIZE (mm):

300 300

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:

WABCO [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)	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: 17-Aug-16

SIGNED: _____ **NAME & ID:** J HIRST (JEH)

SODC SIGNED: _____ **NAME & ID:** 22-8-2016

PHONE (BUS): (09) 980 7300

FAX: (09) 980 7306

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

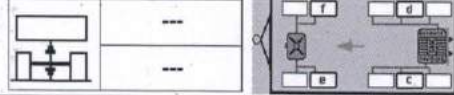
WABCO

TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.0X
TDB0749

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		
TYP TYPE TYPE	5AFT STOCK		
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9E25010G1023516		
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51441A		
POLRADZÄHNEZAHN, 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 4S/3M
RSS RSS RSS	Einzelbereifung Single Tire Monte simple	Lenkachsen Steering axle Essieu vireur	
	Zwillingsbereifung Twin Tire Monte jumelé	X	Kipptisches 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)		0.8		2.0		---		6.5		TYP TYPE	(mm)	(mm)	(bar)	
	↓ (kg)	⊗	⊗	⊗	↓ (kg)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	1.0				Pz	
1	2450	1.1	2.3	⊗	8000	5.0	0.4	1.4	---	6.1	-	20	65	69	508	4479			
2	2450	1.1	2.3	⊗	8000	5.0	0.4	1.4	---	6.1	-	20	65	69	508	4479			
3	1850	0.7	1.7	⊗	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	489	2768			
4	1850	0.7	1.7	⊗	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	489	2768			
5	1850	0.7	1.7	⊗	6400	3.9	0.3	1.4	---	4.6	-	14	64	69	489	2768			



P.O.Box 98-971

South Auckland Mail Centre

John Hirst (JEH)

DATE: 17-Aug-16 BRAKE SYSTEM: WABCO T-EBS E
 CERT. NO: JH160816 BRAKE CALCULATION #: TP51441
 VIN / CHASSIS: 7A9E25010G1023516

	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

Statement of Design Compliance**S.O.D.C. number: JH160816**For Heavy vehicle brake specification
(Schedule 5) of HV Brake Rule 32015/3**Vehicle details:**

Make: DOMETT TRAILERS
Model: E2501
VIN#: 7A9E25010G1023516
Chassis#: 1516
GCM (kgs): N/A
GVM (kgs): 32,000
Wheelbase (mm): 6795
Axle test report #: TDB 0749 (SAF 2619 Air bag)
Type: 5AFT DISC BRAKE

Component Details:

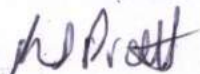
	Front	Rear
Lever length (mm):	69	69
Brake chamber size:	TSE:20HSCLD65	TSE:1416HTLD64 (14HSCLD64)
Tyre size:	265 70 R 19.5	265 70 R 19.5
Drawing number: (for component reference)	1516	
Brake calculation#:	TP 51441	
Brake system:	WABCO TEBS-E (Multi-volt) ECU FACING FORWARD	

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:

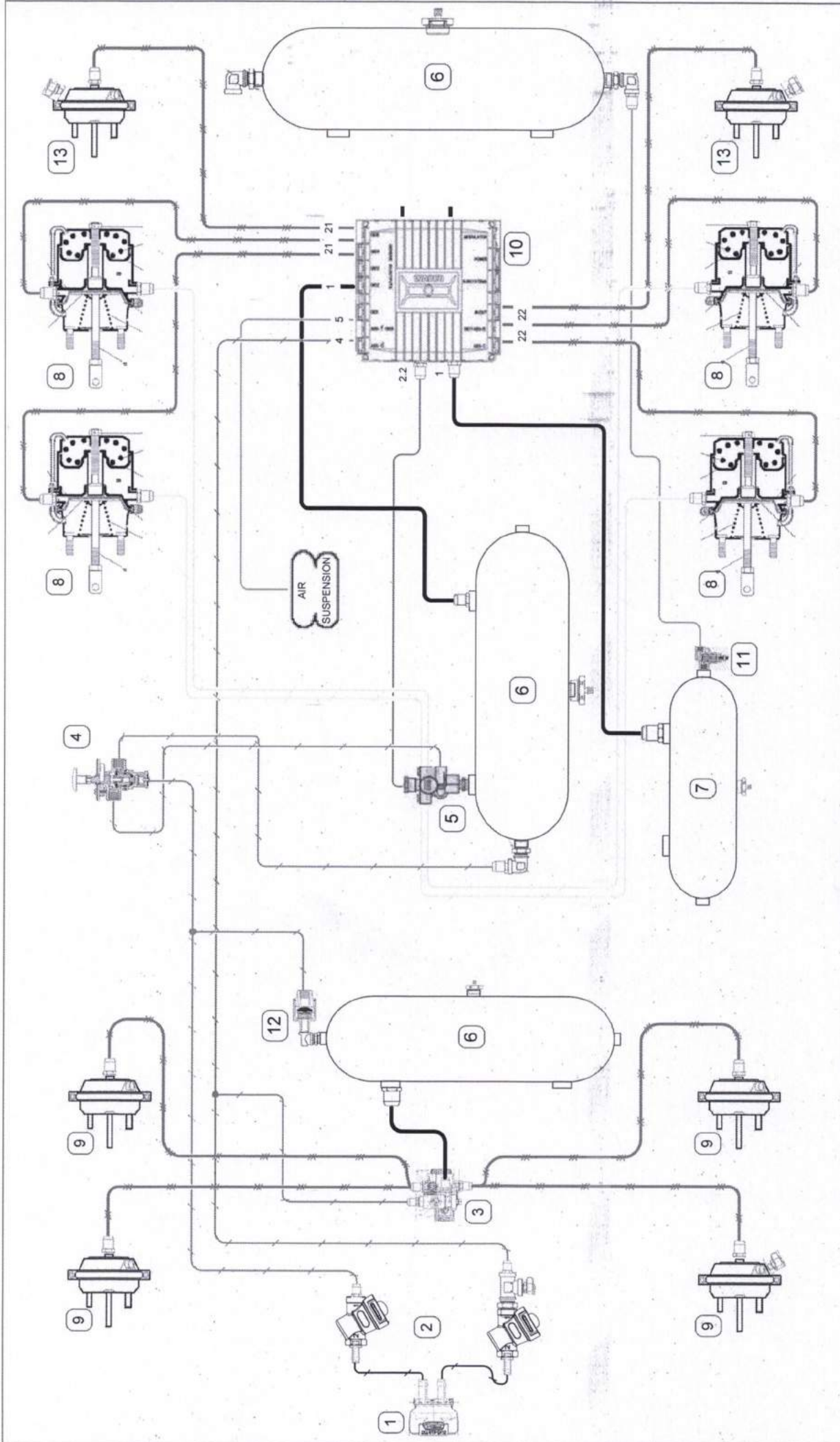
***Vehicle Standards Compliance 2002;** my Deed of Appointment and applicable requirements. To the best of my knowledge the information contained in this certificate is true and correct.*

Date: 17 Aug 2016**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.LT400=556548

Signed: R S Pratt**Dated:** 22/08/2016

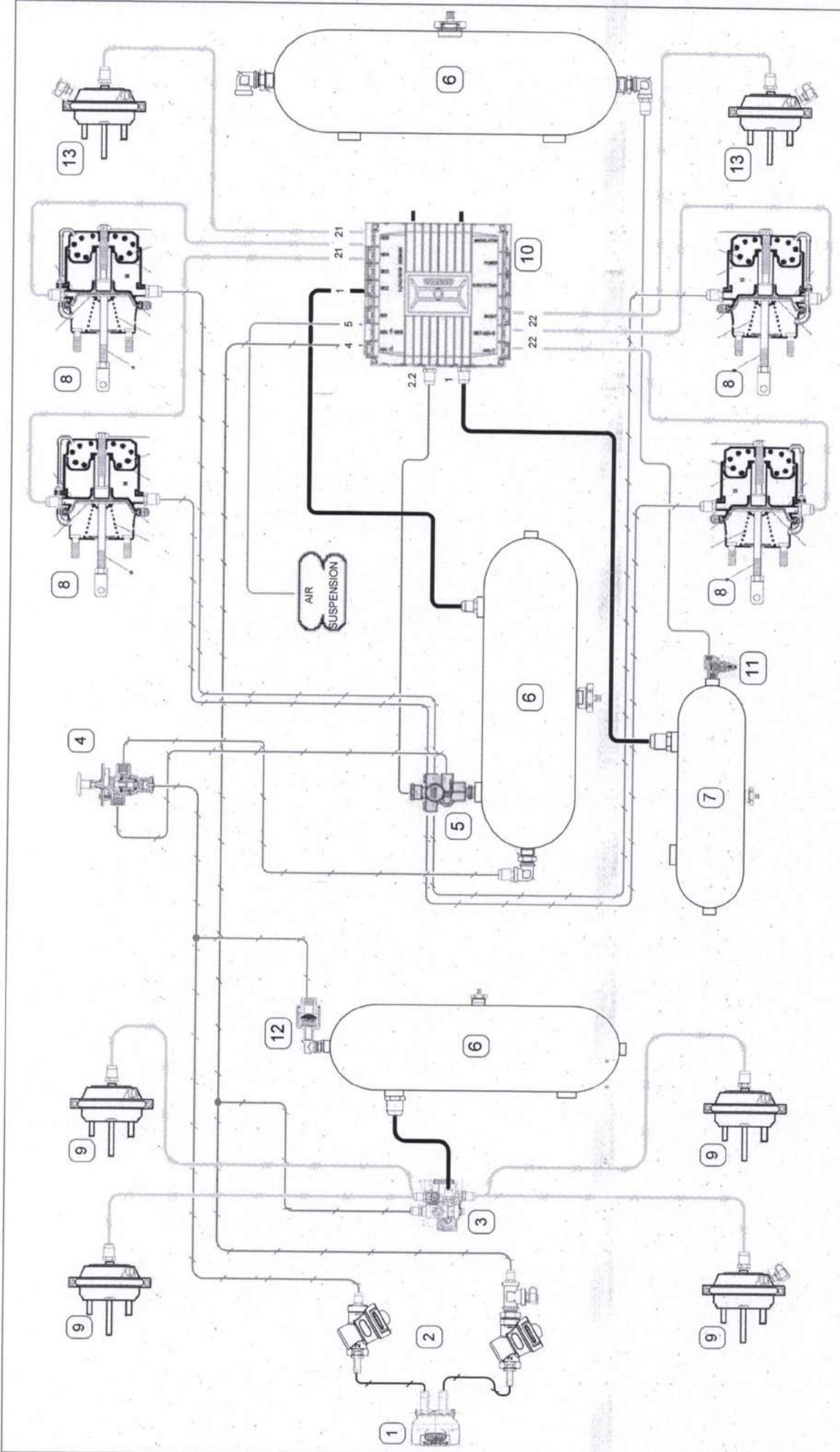
*) Programmed according to WABCO's End of Line protocol requirements where applicable and that the air suspension parameter pressures suit the suspension design & air bellow size.



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	PIPING LEGEND
1	1	452 804 001 0	WABCO DUOMATIC	9	4	20HSCLD65	TSE BRAKE CHAMBERS	3/8" Rubber
2	2	432 500 020 0	WABCO LINE FILTER	10	1	480 102 ... 0	WABCO EBS ECU	3/8" Rubber
3	1	480 207 202 0	WABCO EBS 3 RD MODULATOR	11	1	1300	SEALCO PPV	1/2" Rubber
4	1	17600B	SEALCO YARD RELEASE	12	1	434 014 000 0	WABCO CHECK VALVE	15mm Nylon
5	1	110701	SEALCO S.B.C.V.	13	1	14HSCLD64	TSE BRAKE CHAMBER	12mm Nylon
6	3	97A3104600	48 LTR AIR TANK					8mm Nylon
7	1	97A2462502	25 LTR AIR TANK					8mm Nylon
8	4	1416HTLD64	TSE BRAKE CHAMBERS					8mm Nylon

DOMETT TRAILERS
5AFT STOCK
7A9E25010G1023516

SIZE A4
 SPEC REFERENCE 1516
 SCALE
 REV 1
 SERVICE BRAKE LINES



ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	PIPING LEGEND:
1	1	452 804 001 0	WABCO DUOMATIC	9	4	20HSCLD65	TSE BRAKE CHAMBERS	3/8" Rubber
2	2	432 500 020 0	WABCO LINE FILTER	10	1	480 102 ... 0	WABCO EBS ECU	3/8" Rubber
3	1	480 207 202 0	WABCO EBS 3 rd MODULATOR	11	1	1300	SEALCO PPV	1/2" Rubber
4	1	17600B	SEALCO YARD RELEASE	12	1	434 014 000 0	WABCO CHECK VALVE	15mm Nylon
5	1	110701	SEALCO S.B.C.V.	13	1	14HSCLD64	TSE BRAKE CHAMBER	12mm Nylon
6	3	9TA3104600	46 LTR AIR TANK					8mm Nylon
7	1	9TA2462502	25 LTR AIR TANK					8mm Nylon
8	4	1416HTLD64	TSE BRAKE CHAMBERS					8mm Nylon

DOMETT TRAILERS
5AFT STOCK
7A9E25010G1023516

SIZE A4
 SCALE 1516
 SPEC REFERENCE 1
 PARK BRAKE LINES
 REV 1
WABCO
 Copyright Transpecs 2010
 All rights reserved



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

distribution: DOMETT TRAILERS
 7A9E25010G1023516
 SODC: JH160816
 LT400: TRSP
 556548

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!
 WABCO Brake V6.14.04.20 db 20.04.2016

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT STOCK
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS E
 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,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	10450	35200
axle 1	P1 in kg	2450	8000
axle 2	P2 in kg	2450	8000
axle 3	P3 in kg	1850	6400
axle 4	P4 in kg	1850	6400
axle 5	P5 in kg	1850	6400
wheel base	E in mm	6795 - 6795	
centre of gravity height	h in mm	1000	2200

	<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>	<u>axle 5</u>
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	BZ 122.1	BZ 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor	Meritor
chamber size	20.	20.	T.14/24	T.14/24	14.
lever length	1Bh 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	2.3	2.3	2.0	2.0	2.0
chamber pressure (rdyn max) pH at z=22,5%bar	2.3	2.3	2.0	2.0	2.0
chamber press. (servo) pcha at pm6,5bar bar	6.1	6.1	4.6	4.6	4.6
piston force ThA at pm6,5bar N	7071	7071	4385	4385	4385
brake force (rdyn min) T lad. at pm6,5bar N	53571	53571	33114	33114	33114
brake force (rdyn max) T lad. at pm6,5bar N	53571	53571	33114	33114	33114
brake force within 1 % rolling friction proportion %	22.3	22.3	18.5	18.5	18.5

braking rate z laden 0.598 for rdyn min
 z = sum (TR)/PRmax 0.598 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:

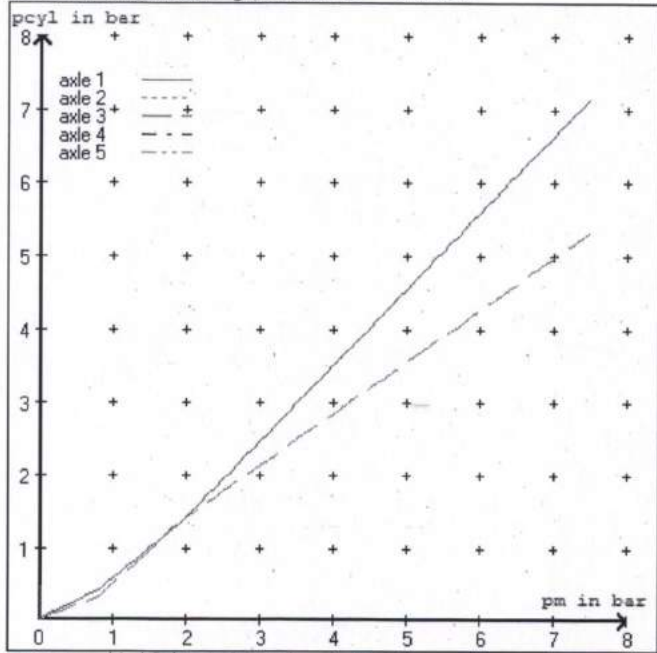
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

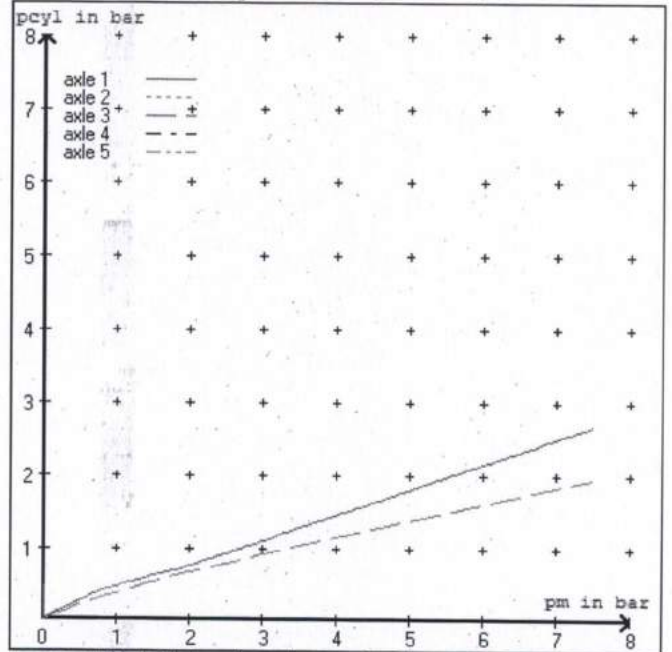
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.6 bar =>	pcha in bar :	3.1	3.1	2.5	2.5	2.5	2.5
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.3 bar =>	pcha in bar :	0.8	0.8	0.8	0.8	0.8	0.8

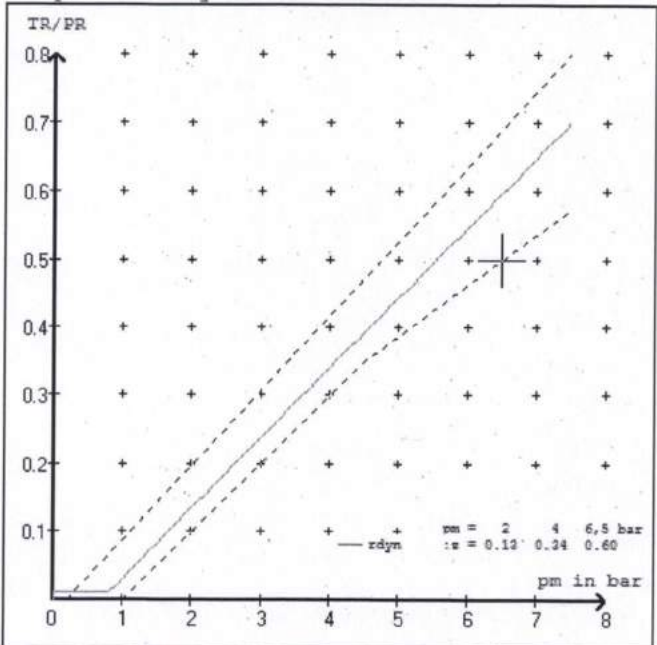
brake chamber pressure laden



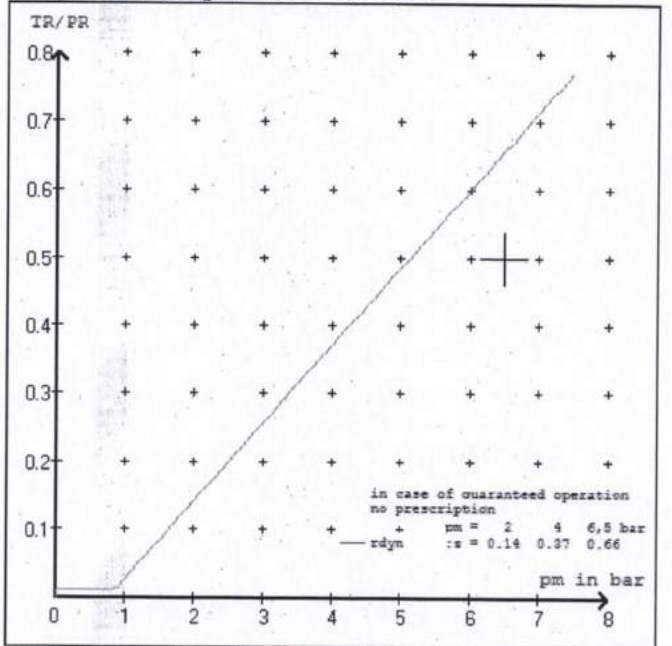
brake chamber pressure unladen



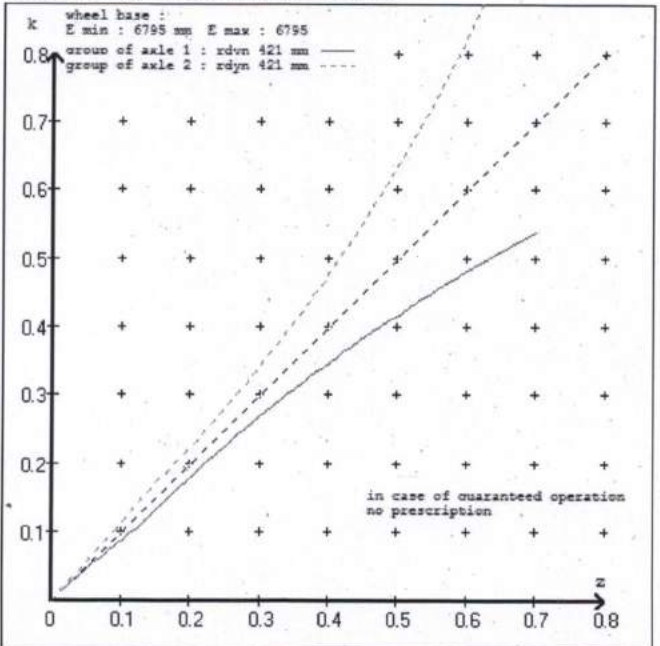
compatibility band laden



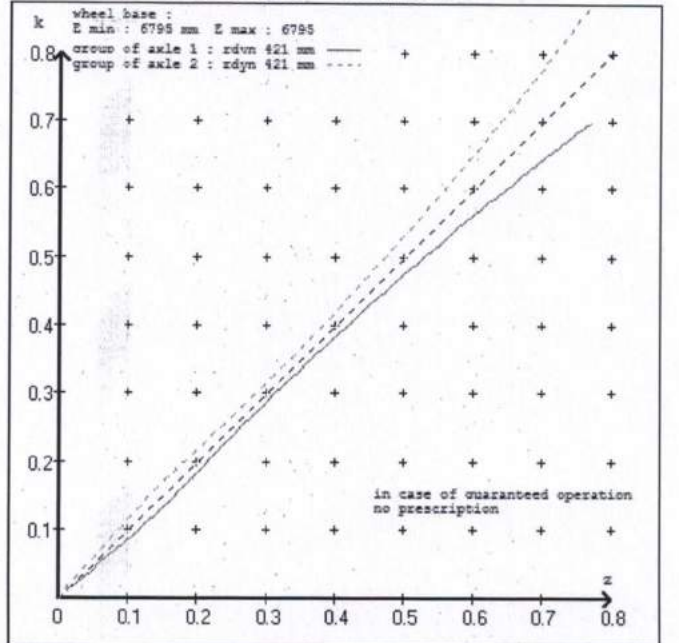
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT STOCK
 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 STOCK
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 51441A

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 = 0.010
 (laden condition) 2.0 bar z = 0.134
 6.5 bar z = 0.600

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	2450	to be	2.3	8000	to be	0.4	1.4	6.1
2	2450	entered by the vehicle manufact.	2.3	8000	entered by the vehicle manufact.	0.4	1.4	6.1
3	1850		1.7	6400		0.3	1.4	4.6
4	1850		1.7	6400		0.3	1.4	4.6
5	1850		1.7	6400		0.3	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	axle load	axle load	axle load	axle load
pcyl	pcyl	pcyl	pcyl	pcyl
2450 2.3	2450 2.3	1850 1.7	1850 1.7	1850 1.7
2950 2.6	2950 2.6	2350 2.0	2350 2.0	2350 2.0
3450 3.0	3450 3.0	2850 2.3	2850 2.3	2850 2.3
3950 3.3	3950 3.3	3350 2.7	3350 2.7	3350 2.7
4450 3.7	4450 3.7	3850 3.0	3850 3.0	3850 3.0
4950 4.0	4950 4.0	4350 3.3	4350 3.3	4350 3.3
5450 4.4	5450 4.4	4850 3.6	4850 3.6	4850 3.6
5950 4.7	5950 4.7	5350 3.9	5350 3.9	5350 3.9
8000 6.1	8000 6.1	6400 4.6	6400 4.6	6400 4.6

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

axle 1 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 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. verif. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 25.5 % Fe
axle 2	(rdyn 421 mm)	T = 25.5 % Fe
axle 3	(rdyn 421 mm)	T = 17.5 % Fe
axle 4	(rdyn 421 mm)	T = 17.5 % Fe
axle 5	(rdyn 421 mm)	T = 17.5 % 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 = 7071 N
axle2	ThA = 7071 N
axle3	ThA = 4385 N
axle4	ThA = 4385 N
axle5	ThA = 4385 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 = 41837 N
axle 2	(rdyn 421 mm)	T = 41837 N
axle 3	(rdyn 421 mm)	T = 25928 N
axle 4	(rdyn 421 mm)	T = 25928 N
axle 5	(rdyn 421 mm)	T = 25928 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	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)	T = 41837 N
axle 2	(rdyn 421 mm)	T = 41837 N
axle 3	(rdyn 421 mm)	T = 25928 N
axle 4	(rdyn 421 mm)	T = 25928 N
axle 5	(rdyn 421 mm)	T = 25928 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	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

	<u>axle 3</u>	<u>axle 4</u>
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	T.14/24	T.14/24
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	7605	7605
sp.brake chamber no Meritor.....	4	4
release pressure pLs in bar	4.8	4.8

calculation:

ratio until road	3.9674	3.9674
$iF_b = lBh \cdot \eta \cdot C \cdot r_{Bt} / (r_{Bn} \cdot r_{stat})$ for rstat in mm	401	401
brake force of spring br. Tf in N	59654	59654
$T_f = (TFZ \cdot KDZ - 2 \cdot C_o / lBh) \cdot iF_b$		
braking rate zf laden	0.356	
$z_f = \sum (T_f) / P + 0,01$		

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width min Ef necessary
to fulfil the regulations

$$\min E_f = E \cdot (1 - PR/P + z_{ferf} \cdot h/E) / (1 - z_{ferf} / (f_{zul} \cdot n_f/n_g))$$

$$\min E_f = 5260 \text{ mm} \quad \text{for } E = 6795 \text{ mm}$$

$$\min E_f = 5260 \text{ mm} \quad \text{for } E = 6795 \text{ mm}$$

min Ef = minimum distance between front axle(s) (trailer) or support (semitraile:
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 = 2200 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	5087	
	6.1	44792	
axle 2	1.0	5087	
	6.1	44792	
axle 3	1.0		4892
	4.6		27687
axle 4	1.0		4892
	4.6		27687
axle 5	1.0		4892
	4.6		27687

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

