

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS) **JOHN HIRST** ID **JEH**

Vehicle registration (optional) _____ VIN/chassis number **7A9D10017L1023945**

Make **DOMETT** Component being certified: Chassis Load anchorage

Model (optional) **D1001** Log bolsters Towing connection Brakes

Certification category **HVEK** SRT PSV stability PSV rollover

Swept path PBS

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/5

NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.

4A TANKER

Code/standard/rule certified to **LTR 32015/5** Component load rating(s) **26 Tonnes GVM**

General drawing number(s) **N/A** **30 Tonnes (Group ratings)**

RSS TWIN TYRES

Supporting documents

BRAKE RULE CERTIFICATE LC200405

BRAKE CALCULATION # 822LPC

Special conditions (optional)


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

Certification expiry date (if applicable) **N/A [UNLESS MODIFIED]** or Hubodometer reading (whichever comes first)

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) **LPC**

Inspector's signature 

Inspector's name (PRINT IN CAPS) **JOHN HIRST** ID number **JEH**

Date **17-Apr-20** Number **739069**

CoF vehicle inspector ID (if applicable) _____ CoF vehicle inspector signature (if applicable) _____ Date _____

All fields are mandatory unless otherwise stated.

**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-5
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE**

CLIENT

MANUFACTURER:	DOMETT TRUCK & TRAILERS
ADDRESS:	Taurikura Drive, Tauranga 3110
FLEET:	FONTERRA

VEHICLE DETAILS

VEHICLE TYPE:	4A TANKER	CERT #:	LC200405
YEAR:	2020	CALCULATION #:	822LPC
MAKE:	DOMETT	REGO:	N/A
MODEL:	D1001	LT400 #:	739069
CHASSIS #:	1945	ORDER NUMBER:	7143
VIN #:	7A9D10017L1023945		
GVM: TONNES	26	PRIME MOVER:	EBS / EUROPEAN
LOAD CONFIGURATION:	UNIFORM DENSITY		
GROUP RATINGS: TONNES	FRONT	REAR	
	15	15	
WHEEL BASE: METRES	5.07		
	UNLADEN COG	MAX HEIGHT	HEIGHT DECK
	0.7	2.485	1
COG: METRES	1.534		
	FRONT	REAR	TOTAL
TARE: TONNES	2.8	2.4	5.2
	FRONT	REAR	
TYRE SIZE:	265 70 R19.5	265 70 R19.5	
ROLLING CIRCUMFERENCE: MM	2645	2645	
AXLE SPACING: METRES	1.3	1.3	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9S	TDB0870
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	SAF 607	BRAKE FACTOR:	22.37
SENSED AXLES:	2 + 4	NOTES:	
SERIAL NUMBERS:	1		IU
	2		IU
	3		IU
	4		IU

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	
BRAND:	TSE_CHAMBERS	WABCO_CHAMBERS	
SIZE:	20HSCLD	1616 (925/464/461/0)	
STROKE: <i>MILLIMETRES</i>	65	63	
TEST REPORT #:	BC 0041.0 Jul '07	BC 0006.0	
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.28	
HOLDOFF PRESSURE: <i>kPa</i>	N/A	5	
FOUNDATION BRAKE:	SAF SBS1918	SAF SBS1918	
LEVER LENGTH: <i>MILLIMETRES</i>	76	76	
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 064 0 (24V)	80 kPa
3RD MODULATOR #:	WABCO	480 207 001 0 (24V)	80 kPa
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	SEALCO_SBR	110701	
YARD RELEASE VALVE:	SEALCO_YR	17600B	
INLINE RELAY FITTED:	N/A	N/A	
ECU DIRECTION:	<input checked="" type="checkbox"/> FRONT <input type="checkbox"/> REAR	FRONT FRICTION: μ	0.51
SMARTBOARD/OPTILINK:	<input type="checkbox"/> SMARTBOARD <input type="checkbox"/> OPTI-LINK		
ELEX:	<input type="checkbox"/> ELEX 446 122 070 0 <input type="checkbox"/> TAILGUARD		

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_INTRA	SAF_INTRA
BELLOW SIZE:	2619, 300mm	2619, 300mm
HEIGHT CONTROL VALVE:	464 008 011 0	464 008 011 0
OTHER VALVES:	N/A	N/A
RIDE HEIGHT <i>MM</i> :	250	250
HANGER HEIGHT <i>MM</i> :	200	200
PEDESTAL HEIGHT <i>MM</i> :	NIL	NIL
LIFTAXLE:		N/A
DUMP SWITCH:		PNEUMATIC
LIFTAXLE VALVE:		N/A
PRESSURE LIMITING:		N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: <i>L</i>	12113P, 46L	12113P, 46L
AUXILLARY TANK SIZE: <i>L</i>	N/A	12113P, 46L
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

AIR LINES

TEST POINTS:			
CONTROL LINE:	FILTER X 1	TANK:	ECU X 1
REAR CHAMBER:	ECU X 2	FRONT CHAMBER:	LEFT 1st X 1
TRIOMATIC COLOUR CODED:	YES		

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

CHECKS AT COMMISSION OF VEHICLE

CHAMBER BUNGS REMOVED: VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME: MODULATOR 2.1 MODULATOR 2.2 RELAY VALVE
 ms:

NOTES AND SPECIAL CONDITIONS

SUSPENSION DUMP VALVE 3042402 3/2 way manual valve

REASON FOR CERTIFICATION: NEW TRAILER

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 32015/5, SCHEDULE 5.

DATE: 17/04/2020

SIGNED: 

CERTIFIER NAME & ID: JOHN HIRST JEH

SODC BY: LANCE CAWTE LPC

PHONE (BUS): 09-980-7300

FAX:

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 32015/5.

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 32015/5. 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 32015/5, 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)



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

distribution: DOMETT
 2020 SAF 4A WPC [TP822LPC]
 7A9D10017L1023945
 SODC: LC200405
 LT400: JEH 739069

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 (V6.18.07.12).
 -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 V6.18.07.12 db 31.08.2018

vehicle manufacturer: DOMETT
 trailer model : 4A TANKER, D1001
 trailer type : 4-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 3+4: 16/16
 265/70 R 19,5

axle 1 + 2 + 3 + 4 : SAF, SBS 1918, TDB 0870 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	5200	30000
axle 1	P1 in kg	1400	7500
axle 2	P2 in kg	1400	7500
axle 3	P3 in kg	1200	7500
axle 4	P4 in kg	1200	7500
wheel base	E in mm	5070 - 5070	
centre of gravity height	h in mm	700	1534

	<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>
no. of combined axles	1	1	1	1
no. of brake chambers per axle line KDZ	2	2	2	2
The power output corresponds to	BZ 122.1	BZ 122.1BC	0006.0BC	0006.0
brake chamber manufacturer	Meritor	Meritor	WABCO	WABCO
chamber size	20.	20.	16/16	16/16
lever length 1Bh in mm	76	76	76	76
brake factor [-]	22.37	22.37	22.37	22.37
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	2.1	2.1	2.1	2.1
chamber pressure (rdyn max) pH at z=22,5%bar	2.1	2.1	2.1	2.1
chamber press. (servo) pcha at pm6,5bar bar	5.5	5.5	4.6	4.6
piston force ThA at pm6,5bar N	6332	6332	4648	4648
brake force (rdyn min) T lad. at pm6,5bar N	51239	51239	37636	37636
brake force (rdyn max) T lad. at pm6,5bar N	51239	51239	37636	37636
Brake force incl. 1 % rolling resistance proportion %	26.5	26.5	23.5	23.5

braking rate z laden 0.604 for rdyn min
 z = sum (TR)/PRmax 0.604 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: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 20HSCLD65

axle 2:

valve 1: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 20HSCLD65

axle 3:

valve 1: 480 102 ... 0 WABCO
EBS trailer modulator

brake cylinder: WABCO 925 464 4.. 0 / 925 484 96. 0

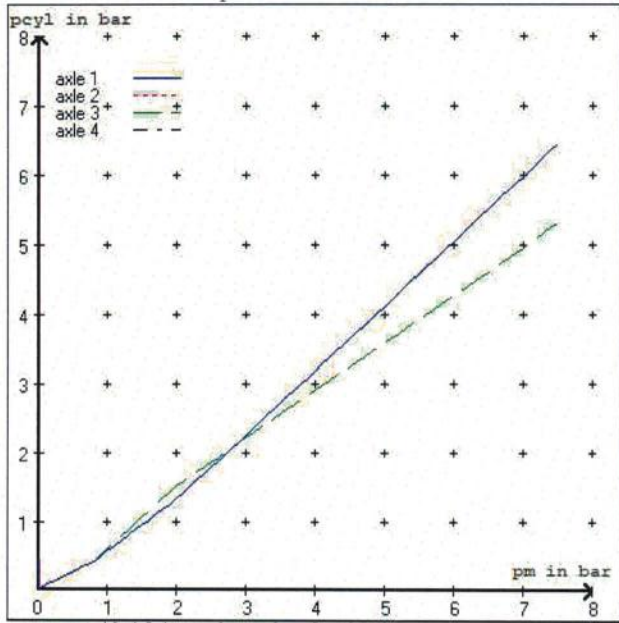
axle 4:

valve 1: 480 102 ... 0 WABCO
EBS trailer modulator

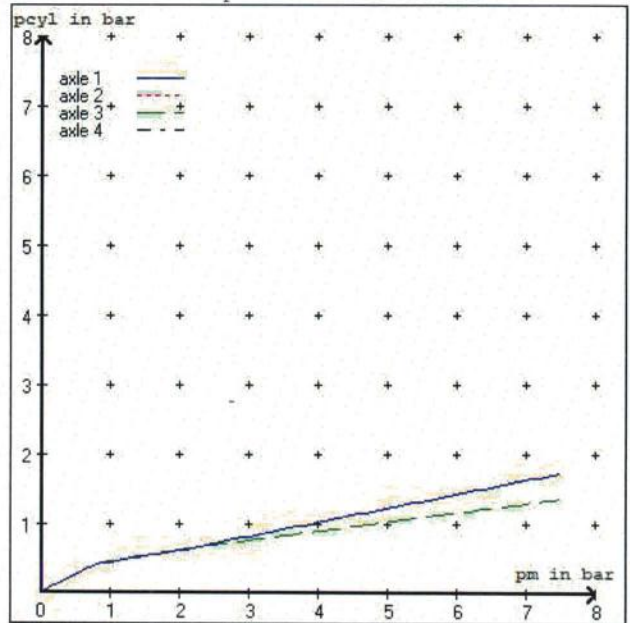
brake cylinder: WABCO 925 464 4.. 0 / 925 484 96. 0

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 3.6 bar =>	pcha in bar :	2.8	2.8	2.6	2.6
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4
at pm 1.3 bar =>	pcha in bar :	0.8	0.8	0.9	0.9

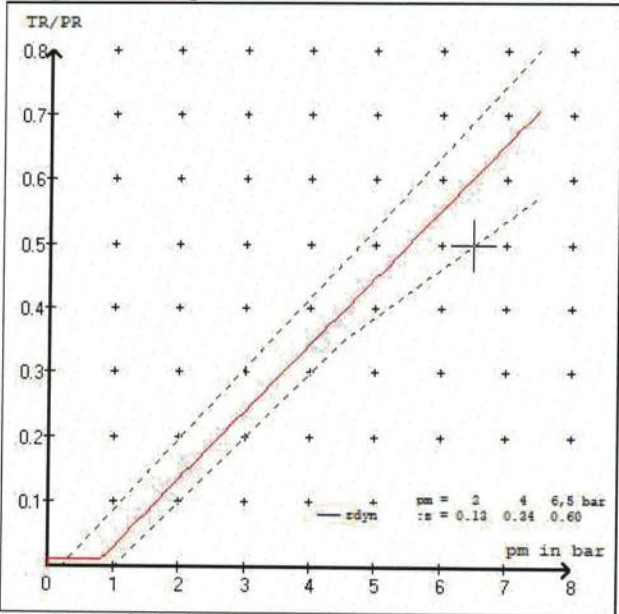
brake chamber pressure laden



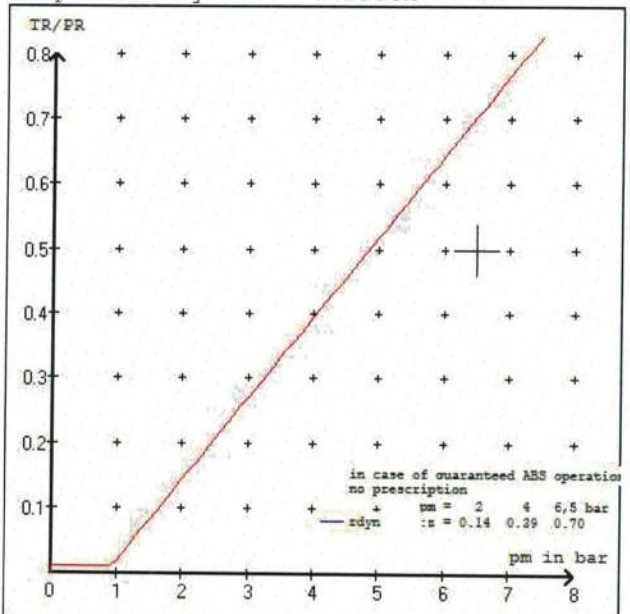
brake chamber pressure unladen



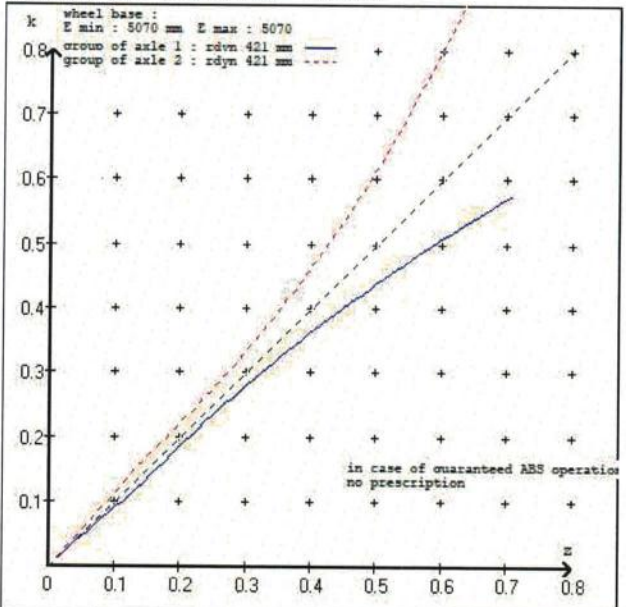
compatibility band laden



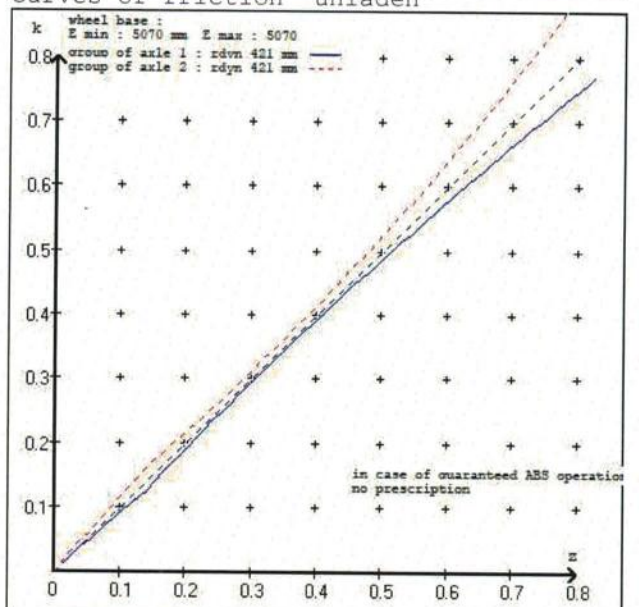
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT
 trailer model : 4A TANKER, D1001
 trailer type : 4-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 76 mm
 axle 2 : 2 x type/diameter 20. (Meritor) lever length 76 mm
 axle 3 : 2 x type/diameter 16/16 (WABCO) lever length 76 mm
 axle 4 : 2 x type/diameter 16/16 (WABCO) lever length 76 mm

brake diagram :

valve :
 480 207 0.. 0 WABCO EBS relay valve or 480 207 2.. 0
 480 102 ... 0 WABCO EBS trailer modulator

EBS input data

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vehicle manufacturer: DOMETT
 trailer model : 4A TANKER, D1001
 trailer type : 4-axle-full-trailer
 brake calculation no. : TP 2020A

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	1400	to be	1.5	7500	to be	0.4	1.3	5.5	
2	1400	entered by the vehicle manufact.	1.5	7500	entered by the vehicle manufact.	0.4	1.3	5.5	
3	1200		1.2	7500		0.4	1.5	4.6	
4	1200		1.2	7500		0.4	1.5	4.6	
5	0		0,0	0		0,0	0,0	0,0	

The unladen values indicated in the above table are values for the basic parameter set. Higher unladen axle loads and liftaxles are automatically recognized and do not require separate adjustment. The above unladen axle loads must not be fallen below.

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axle 1	axle 2	axle 3	axle 4
axle load pcyl	axle load pcyl	axle load pcyl	axle load pcyl
1400	1.5	1200	1.2
1900	1.8	1700	1.5
2400	2.2	2200	1.7
2900	2.5	2700	2.0
3400	2.8	3200	2.3
3900	3.1	3700	2.5
4400	3.5	4200	2.8
4900	3.8	4700	3.1
7500	5.5	7500	4.6

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

axle 1 : reference axle: SAF	SBS 1937	brake lining: SAF 437
test report :	TDB 0870 ECE	date : 20131111
axle 2 : reference axle: SAF	SBS 1937	brake lining: SAF 437
test report :	TDB 0870 ECE	date : 20131111
axle 3 : reference axle: SAF	SBS 1937	brake lining: SAF 437
test report :	TDB 0870 ECE	date : 20131111
axle 4 : reference axle: SAF	SBS 1937	brake lining: SAF 437
test report :	TDB 0870 ECE	date : 20131111

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 = 24.1 % Fe
axle 2	(rdyn 421 mm)	T = 24.1 % Fe
axle 3	(rdyn 421 mm)	T = 20.0 % Fe
axle 4	(rdyn 421 mm)	T = 20.0 % Fe

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

axle 1	(sp = 58 mm)	s = 47 mm
axle 2	(sp = 58 mm)	s = 47 mm
axle 3	(sp = 50 mm)	s = 47 mm
axle 4	(sp = 50 mm)	s = 47 mm

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

axle1	ThA = 6332 N
axle2	ThA = 6332 N
axle3	ThA = 4648 N
axle4	ThA = 4648 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 = 38993 N
axle 2	(rdyn 421 mm)	T = 38993 N
axle 3	(rdyn 421 mm)	T = 28649 N
axle 4	(rdyn 421 mm)	T = 28649 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
	0.46

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

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 = 38993 N
axle 2	(rdyn 421 mm)	T = 38993 N
axle 3	(rdyn 421 mm)	T = 28649 N
axle 4	(rdyn 421 mm)	T = 28649 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
	0.46

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

required braking rate
(items 1.5.3 and 1.7.2 to annex 11)

>= 0,4 and
>= 0,6*E (0.36)

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

axle 1	: reference axle: SAF	SBS 1937	brake lining: SAF 607
	test report :	TDB 0870 ECE	date : 2014520
axle 2	: reference axle: SAF	SBS 1937	brake lining: SAF 607
	test report :	TDB 0870 ECE	date : 2014520
axle 3	: reference axle: SAF	SBS 1937	brake lining: SAF 607
	test report :	TDB 0870 ECE	date : 2014520
axle 4	: reference axle: SAF	SBS 1937	brake lining: SAF 607
	test report :	TDB 0870 ECE	date : 2014520

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 = 24.1 % Fe
axle 2	(rdyn 421 mm)	T = 24.1 % Fe
axle 3	(rdyn 421 mm)	T = 20.0 % Fe
axle 4	(rdyn 421 mm)	T = 20.0 % Fe

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

axle 1	(sp = 58 mm)	s = 46 mm
axle 2	(sp = 58 mm)	s = 46 mm
axle 3	(sp = 50 mm)	s = 46 mm
axle 4	(sp = 50 mm)	s = 46 mm

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

axle1	ThA = 6332 N
axle2	ThA = 6332 N
axle3	ThA = 4648 N
axle4	ThA = 4648 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 = 40838 N
axle 2	(rdyn 421 mm)	T = 40838 N
axle 3	(rdyn 421 mm)	T = 29995 N
axle 4	(rdyn 421 mm)	T = 29995 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.48

required braking rate $\geq 0,4$ and $\geq 0,6 * E (0.36)$
(items 1.5.3 and 1.7.2 to annex 11)

axle 1	(rdyn 421 mm)	T = 40838 N
axle 2	(rdyn 421 mm)	T = 40838 N
axle 3	(rdyn 421 mm)	T = 29995 N
axle 4	(rdyn 421 mm)	T = 29995 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.48

required braking rate $\geq 0,4$ and $\geq 0,6 * E (0.36)$
(items 1.5.3 and 1.7.2 to annex 11)

spring parking brake

	axle 3	axle 4
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	16/16	16/16
lever length lBh in mm	76	76
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	6282	6282
sp.brake chamber no 925	464 4.. 0464	4.. 0
sp.brake chamber no 925	484 96. 0484	96. 0
release pressure pLs in bar	5.0	5.0

calculation:

ratio until road	4.2397	4.2397
$iFb = lBh * \eta * C * rBt / (rBn * rstat)$ for rstat in mm	401	401
brake force of spring br. Tf in N	52598	52598
$Tf = (TFZ * KDZ - 2 * Co / lBh) * iFb$		
braking rate zf laden	0.367	
$zf = \sum (Tf) / P + 0,01$		

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 = 3627 mm for E = 5070 mm

min Ef = 3627 mm for E = 5070 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 = 1534 mm height of center of gravity - laden
- PR = 15000 kg maximum bogie mass - laden
- P = 30000 kg maximum total mass - laden
- nf = 2 no. of axle(s) with TRISTOP spring brake actuators
- ng = 2 no. of bogie axle(s)

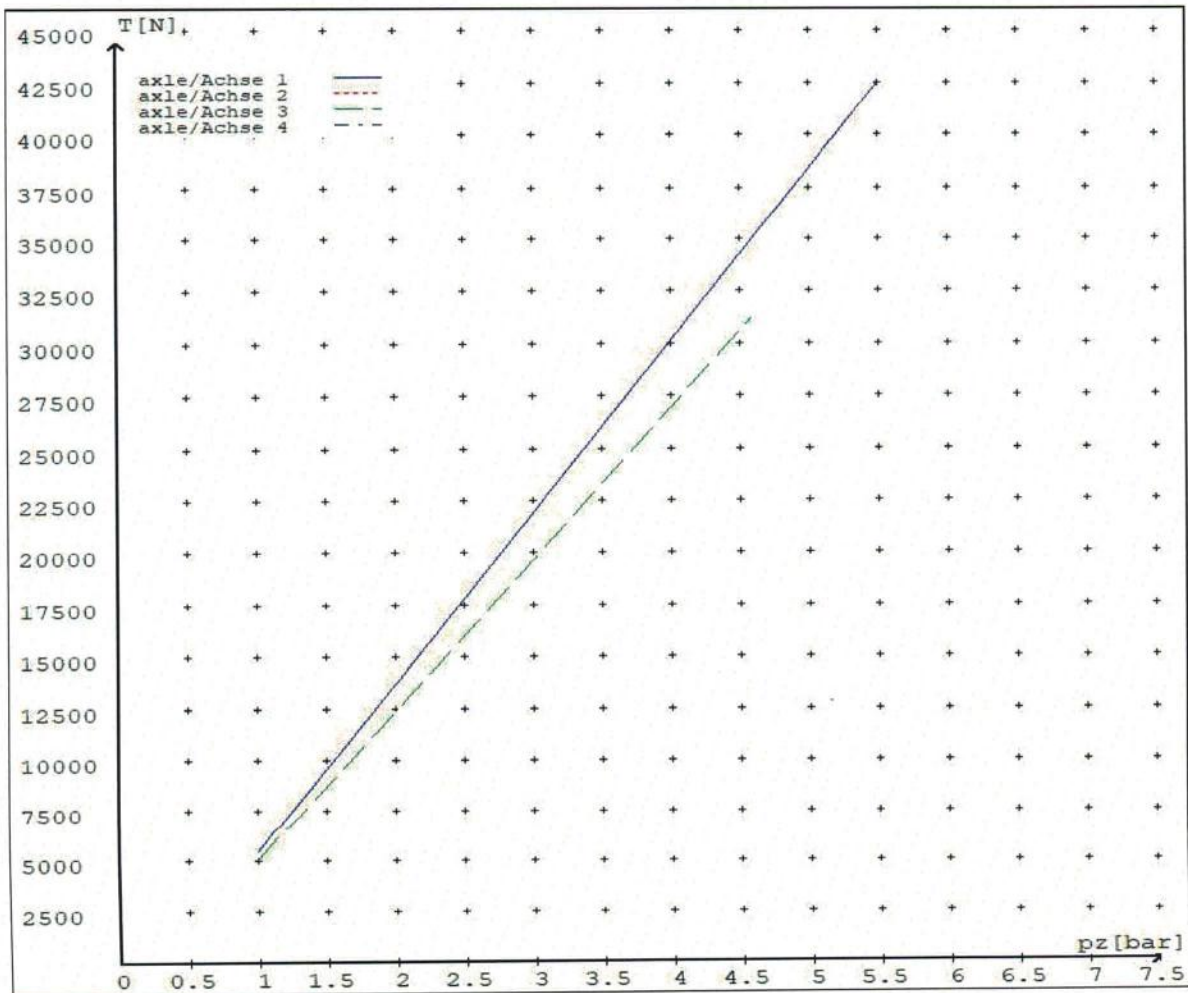
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5350	
	5.5	42416	
axle 2	1.0	5350	
	5.5	42416	
axle 3	1.0		4969
	4.6		31156
axle 4	1.0		4969
	4.6		31156

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	16/16	16/16	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	65	65	63	63	
Lever length = ...mm Hebellänge =mm	76	76	76	76	



reference values for $z = 0.5$

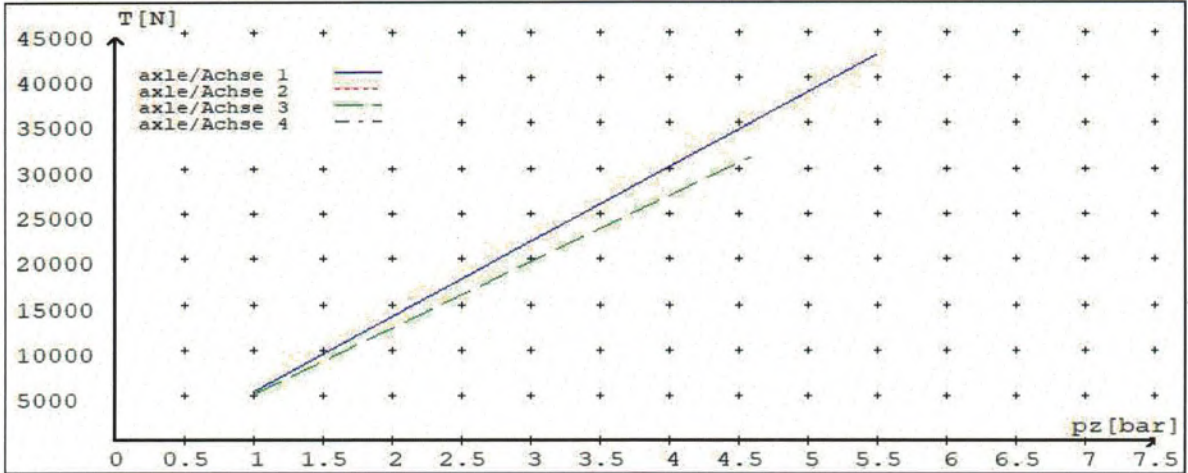
for max rdyn: 421 mm

Angabe der Referenzwerte für $z = 0.5$

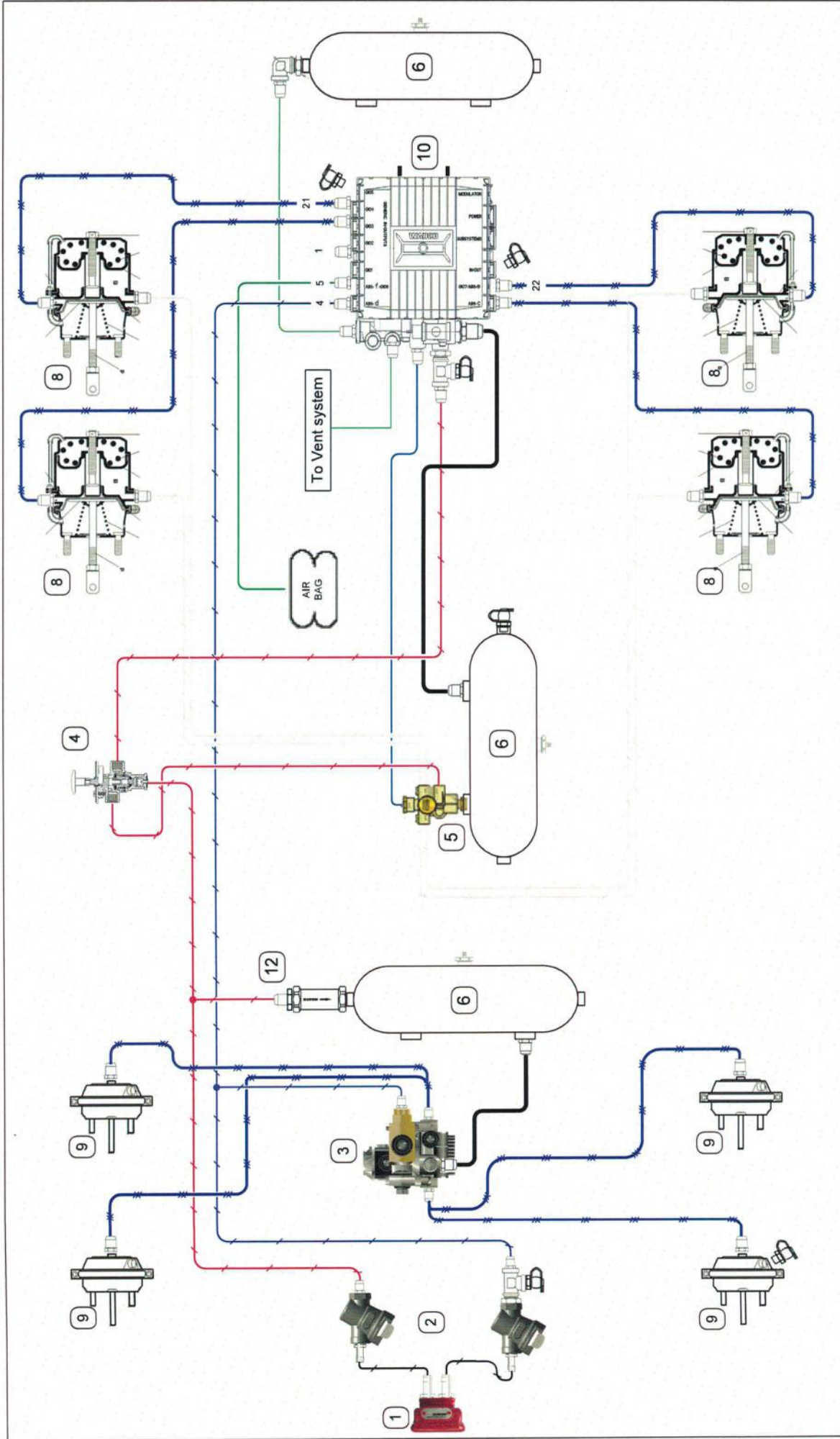
für max rdyn: 421 mm

brake calculation no: TP 2020A date 16.04.2020

Bremsberechnung Nr: TP 2020A vom 16.04.2020



	Axle (s) / Achse (n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	16/16	16/16	/
Maximum stroke $s_{max} = \dots$ mm maximaler Hub $s_{max} = \dots$ mm	65	65	63	63	
Lever length = \dots mm Hebellänge = \dots mm	76	76	76	76	



ITEM		QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	PIPING LEGEND:
1	1	452 808 002 0	WABCO TRIMATIC	9	4	20HSLD65	TSE BRAKE CHAMBERS	3/8" Rubber	
2	2	432 500 020 0	WABCO LINE FILTER	10	1	480 102 064 0	WABCO EBS ECU	3/8" Rubber	
3	1	480 207 001 0	WABCO EBS 3 RD MODULATOR	11	1	1330	SEALCO DRV	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.					12mm Nylon	
6	3	12113P	46 LTR AIR TANK					8mm Nylon	
8	4	925 464 461 0	WABCO BRAKE CHAMBERS					8mm Nylon	

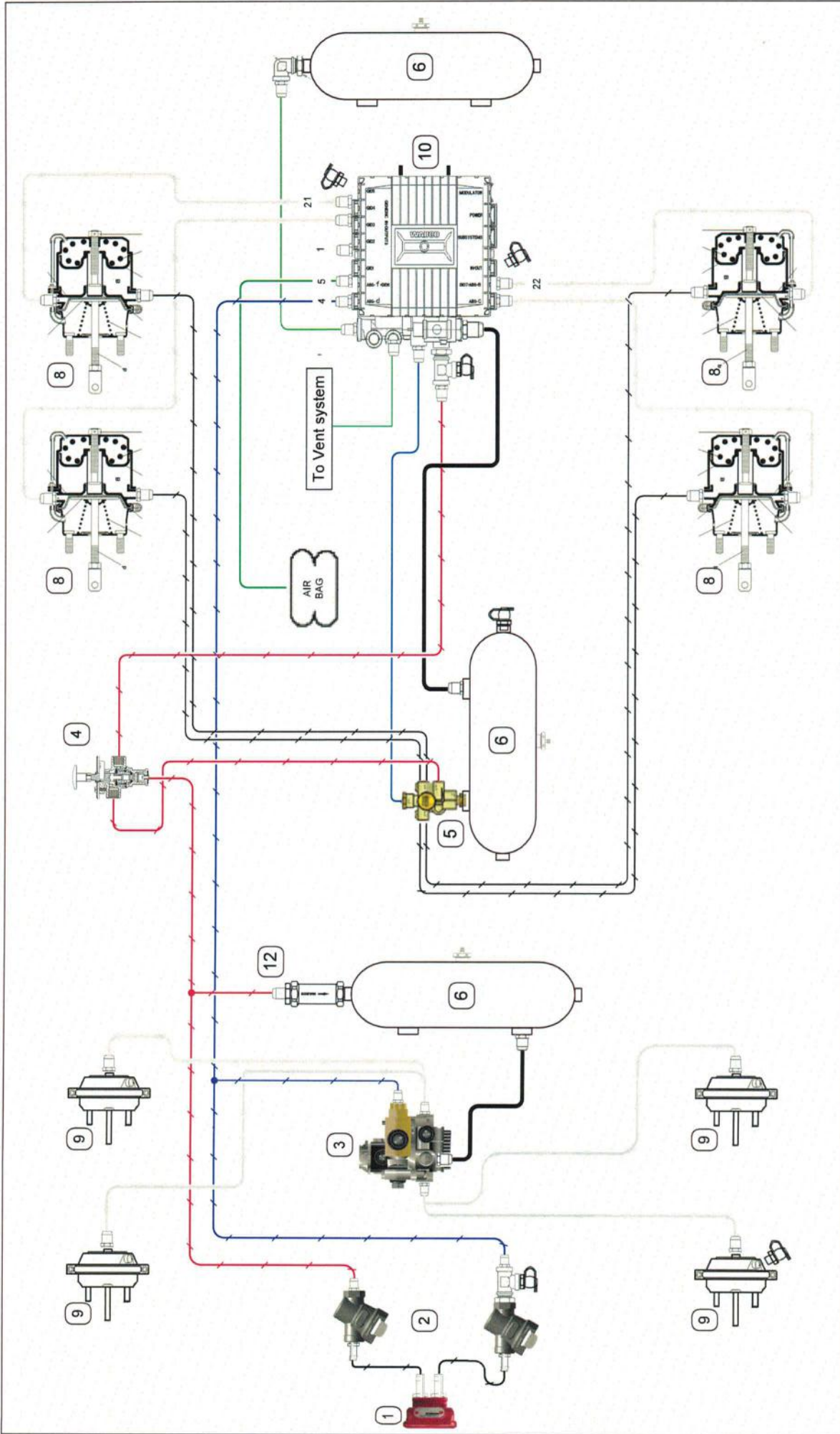
DOMETT TRAILERS

DOM/BRAKE/FONTT/2010

SIZE	A4	SCALE	SERVICE LINES
SPEC REFERENCE	1945	MODEL	D1001
REV	1		



WABCO
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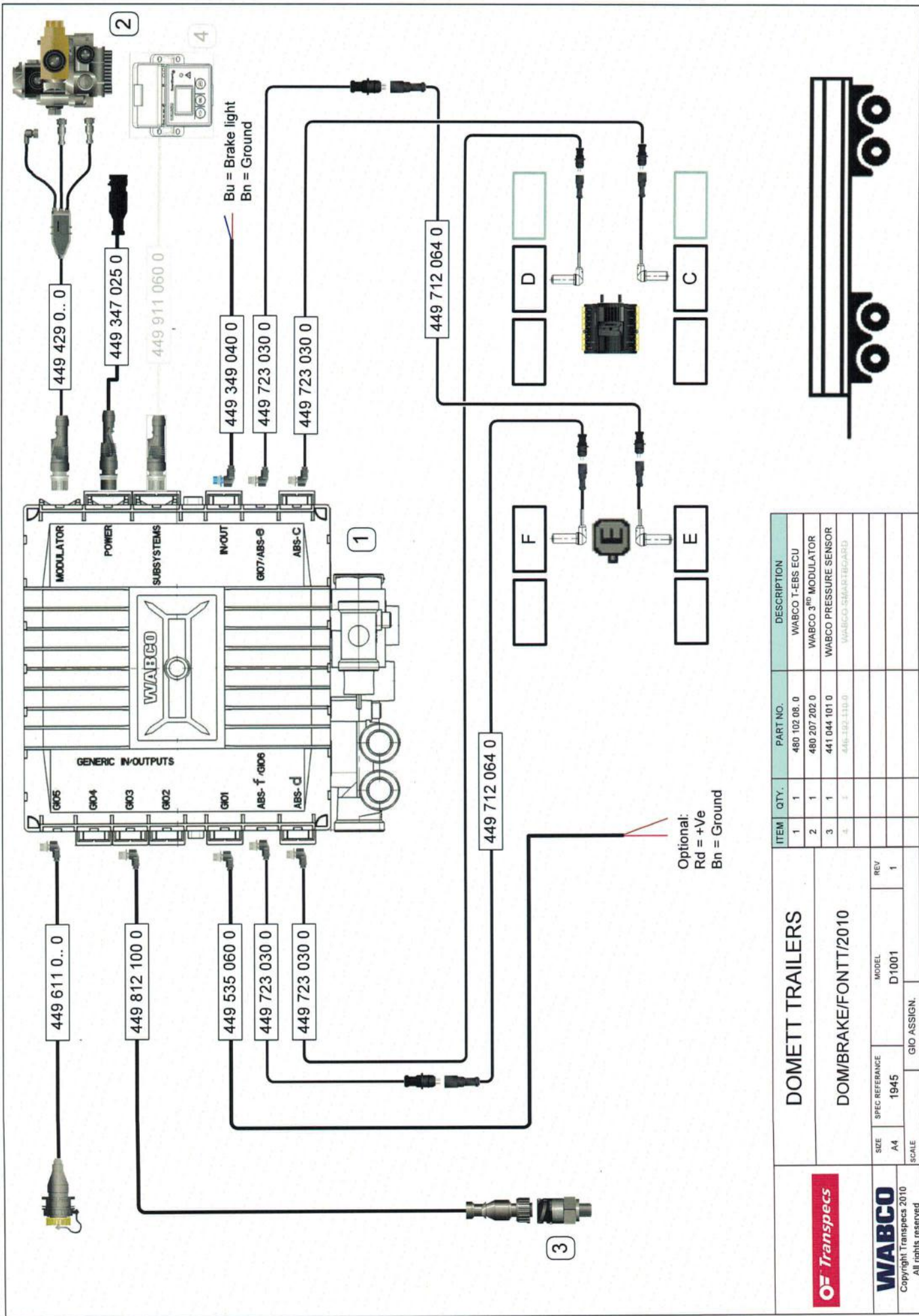


ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION	PIPING LEGEND:
1	1	452 808 002 0	WABCO TRIOMATIC	9	4	20HSLD65	TSE BRAKE CHAMBERS	3/8" Rubber
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4	1	17600B	SEALCO YARD RELEASE	12	1	434 014 000 0	WABCO CHECK VALVE	15mm Nylon
5	1	110701	SEALCO S.B.C.V.					12mm Nylon
6	3	12113P	46 LTR AIR TANK					8mm Nylon
8	4	925 464 461 0	WABCO BRAKE CHAMBERS					8mm Nylon

DOMETT TRAILERS

DOM/BRAKE/FONTT/2010

SCALE	A4	SPEC REFERENCE	1945	MODEL	D1001	REV	1
PARK LINES							



ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480 102 08 0	WABCO T-EBS ECU
2	1	480 207 202 0	WABCO 3 RD MODULATOR
3	1	441 044 101 0	WABCO PRESSURE SENSOR
4	1	446 392 110 0	WABCO 24AIR BOARD

DOMETT TRAILERS

DOM/BRAKE/FONTT/2010

SIZE	SPEC REFERENCE	MODEL	REV
A4	1945	D1001	1
SCALE	GIO ASSIGN.		



