NZ TRANSPORT AGENCY
WAKA KOTAHI

Heavy vehicle specialist certificate

Must be presented to a CoF (heavy) inspecting organisation if not entered into LANDATA

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

ID: JEH

Vehicle registration *(optional)*:

VIN/chassis number: 7A9E20017K1023864

Make: DOMETT

Component being certified:
- [ ] Chassis
- [ ] Load anchorage
- [ ] Log bolsters
- [ ] Towing connection
- [X] Brakes
- [ ] SRT
- [ ] PSV stability
- [ ] PSV rollover
- [ ] Swept path
- [ ] PBS

Model *(optional)*: E2001 PH

Certification category: HVEK

Description of work:

CERTIFY TO SCHEDULE 5 OF LTR 32015/45
NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.
5AFT CURTAINSIDE RSS ON TYRE: 265 70 R19.5

Code/standard/rule certified to: LTR 32015/45

Component load rating(s):
33 Tonnes GVM
35 Tonnes (Group ratings)

General drawing number(s): N/A

Supporting documents:
BRAKE RULE CERTIFICATE JH190713
BRAKE CALCULATION # TP51615

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)*:

Inspector's signature:

Inspector's name *(PRINT IN CAPS)*: JOHN HIRST

ID number: JEH

Date: 19-Jul-19

Number: 704321

CoF vehicle inspector ID *(if applicable)*:

CoF vehicle inspector signature *(if applicable)*:

Date:

All fields are mandatory unless otherwise stated.

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

distribution: DOMETT TRAILERS
7A9E20017K1023864
SODC: JH190713
LT400: 704321

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 (V6.14.04.20).
-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 03.11.2017

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 : HENDRICKSON, SBW 1937, AT0185,

		unladen	laden
total mass	P in kg	7100	35200
axle 1	P1 in kg	1600	8000
axle 2	P2 in kg	1600	8000
axle 3	P3 in kg	1300	6400
axle 4	P4 in kg	1300	6400
axle 5	P5 in kg	1300	6400
wheel base	E in mm	7800 - 8200	
centre of gravity height	h in mm	650	2098

		axle 1	axle 2	axle 3	axle 4	axle 5
		manually	manually	manually	manually	manually
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	lBh in mm	69	69	69	69	69
brake factor	[-]	23.49	23.49	23.49	23.49	23.49
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	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	bar	5.7	5.7	4.8	4.8	4.8
piston force ThA at pm6,5bar	N	6578	6578	4586	4586	4586
brake force(rdyn min)T lad. at pm6,5bar	N	50826	50826	35307	35307	35307
brake force(rdyn max)T lad. at pm6,5bar	N	50826	50826	35307	35307	35307
brake force within 1 % rolling friction proportion	%	22.3	22.3	18.5	18.5	18.5

braking rate z laden
z = sum (TR)/PRmax

0.601 for rdyn min
0.601 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

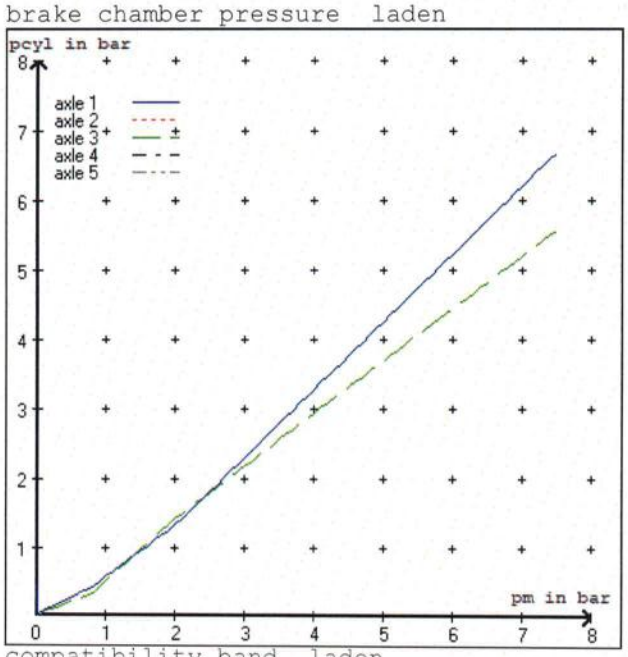
axle 5:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

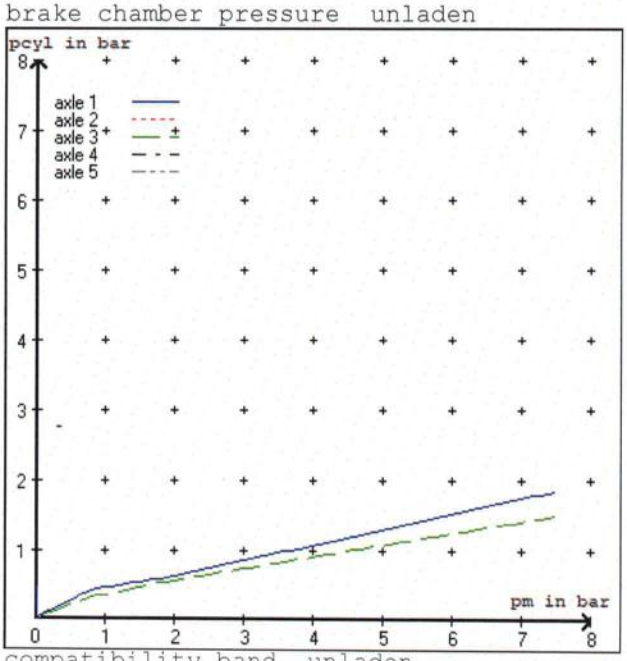
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.6 bar =>	pcha in bar :	2.9	2.9	2.6	2.6	2.6	
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	

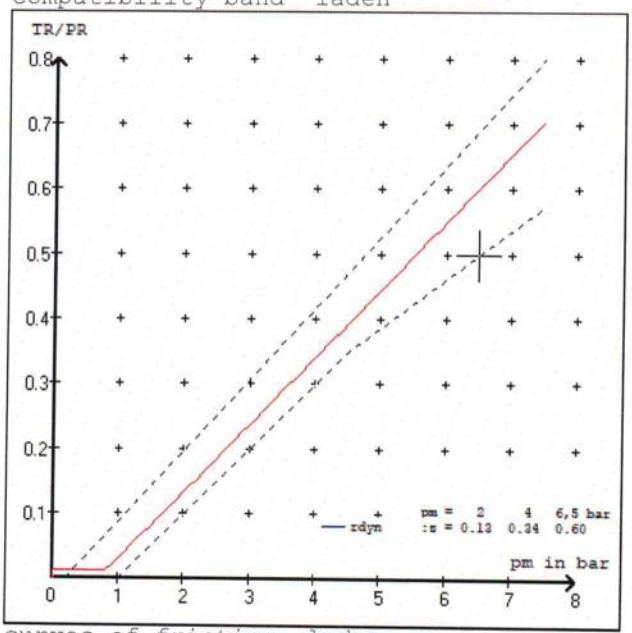
brake chamber pressure laden



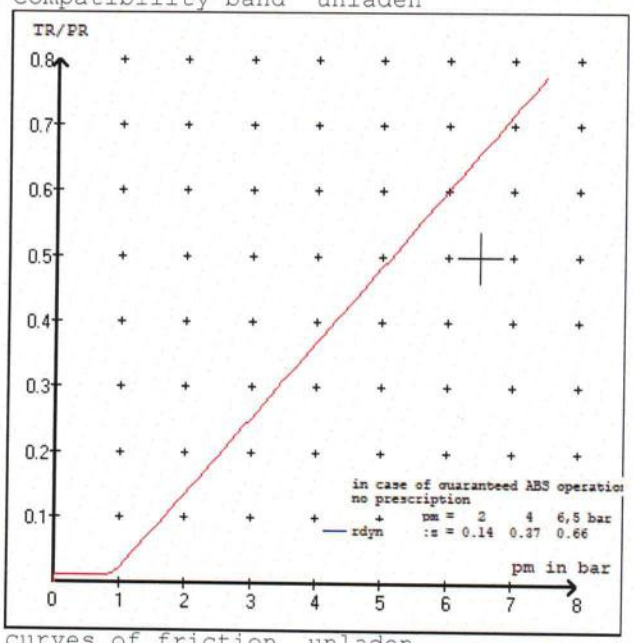
brake chamber pressure unladen



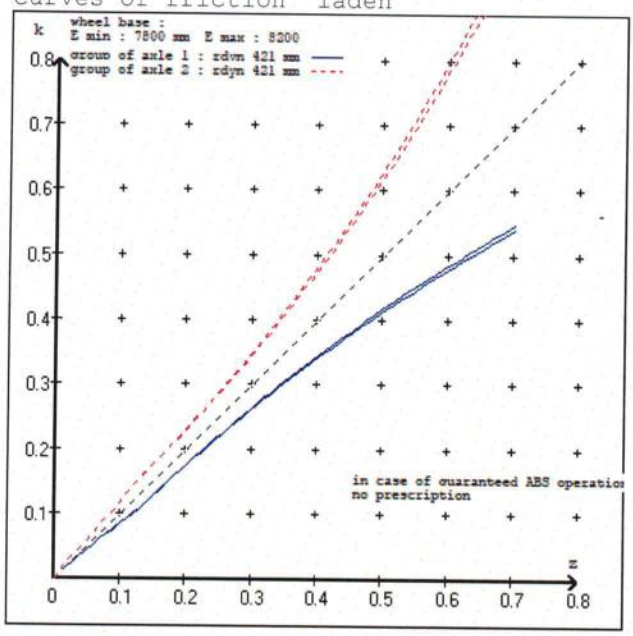
compatibility band laden



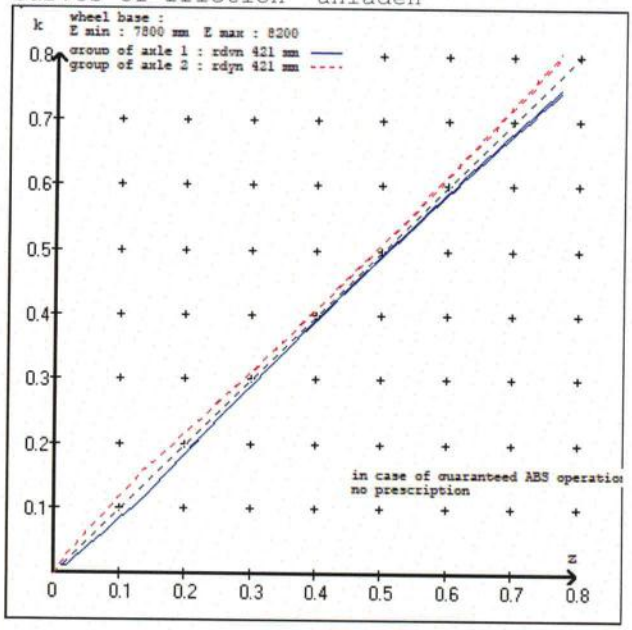
compatibility band unladen



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 51615A

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	1600	to be entered by the vehicle manufact.	1.6	8000	to be entered by the vehicle manufact.	0.4	1.3	5.7
2	1600		1.6	8000		0.4	1.3	5.7
3	1300		1.3	6400		0.3	1.4	4.8
4	1300		1.3	6400		0.3	1.4	4.8
5	1300		1.3	6400		0.3	1.4	4.8

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
1600	1.6	1600	1.6	1300	1.3	1300	1.3	1300	1.3
2100	1.9	2100	1.9	1800	1.6	1800	1.6	1800	1.6
2600	2.2	2600	2.2	2300	2.0	2300	2.0	2300	2.0
3100	2.6	3100	2.6	2800	2.3	2800	2.3	2800	2.3
3600	2.9	3600	2.9	3300	2.7	3300	2.7	3300	2.7
4100	3.2	4100	3.2	3800	3.0	3800	3.0	3800	3.0
4600	3.5	4600	3.5	4300	3.4	4300	3.4	4300	3.4
5100	3.8	5100	3.8	4800	3.7	4800	3.7	4800	3.7
8000	5.7	8000	5.7	6400	4.8	6400	4.8	6400	4.8

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

axle 1 :	reference axle: HENDRICKSONSBW 1937	brake lining:	WABCO 230
	test report : AT0185	date :	02.03.2017
axle 2 :	reference axle: HENDRICKSONSBW 1937	brake lining:	WABCO 230
	test report : AT0185	date :	02.03.2017
axle 3 :	reference axle: HENDRICKSONSBW 1937	brake lining:	WABCO 230
	test report : AT0185	date :	02.03.2017
axle 4 :	reference axle: HENDRICKSONSBW 1937	brake lining:	WABCO 230
	test report : AT0185	date :	02.03.2017
axle 5 :	reference axle: HENDRICKSONSBW 1937	brake lining:	WABCO 230
	test report : AT0185	date :	02.03.2017

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 = 24.0 % Fe
axle 2	(rdyn 421 mm)	T = 24.0 % Fe
axle 3	(rdyn 421 mm)	T = 18.5 % Fe
axle 4	(rdyn 421 mm)	T = 18.5 % Fe
axle 5	(rdyn 421 mm)	T = 18.5 % Fe

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

axle 1	(sp = 58 mm)	s = 48 mm
axle 2	(sp = 58 mm)	s = 48 mm
axle 3	(sp = 56 mm)	s = 48 mm
axle 4	(sp = 56 mm)	s = 48 mm
axle 5	(sp = 56 mm)	s = 48 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 = 4586 N
axle4	ThA = 4586 N
axle5	ThA = 4586 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 = 40650 N
axle 2	(rdyn 421 mm)	T = 40650 N
axle 3	(rdyn 421 mm)	T = 28257 N
axle 4	(rdyn 421 mm)	T = 28257 N
axle 5	(rdyn 421 mm)	T = 28257 N

	basic test of subject trailer (E)	type III (calculated) residual (hot) braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.48
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 = 40650 N
axle 2	(rdyn 421 mm)	T = 40650 N
axle 3	(rdyn 421 mm)	T = 28257 N
axle 4	(rdyn 421 mm)	T = 28257 N
axle 5	(rdyn 421 mm)	T = 28257 N

	basic test of subject trailer (E)	type III (calculated) residual (hot) braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.48
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	6160	6160
sp.brake chamber no Meritor.....		4	4
release pressure	pLs in bar	4.5	4.5

calculation:

ratio until road		4.0466	4.0466
iFb = lBh*Eta*C*rBt/(rBn*rstat)			
	for rstat in mm	401	401
brake force of spring br. Tf	in N	49151	49151
Tf = (TFZ*KDZ-2*Co/lBh)*iFb			

braking rate zf laden 0.295
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 = 5922 mm for E = 7800 mm
==========
min Ef = 6196 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	=	2098 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)

			axle 1 + 2 + 3 + 4 + 5
axle manufacturer			HENDRICKSON
type of brake			SBW 1937
type of axle			SBW 1937
			AT0185
test report of characteristic value			
adm. stat. axle load	Pstat	in kg	9000
tested axle load	Pe	in kg	10200
max. adm. tyre radius	Rezul	in mm	999
adm. cam. torque (6,5 bar)	Czul	in Nm	640
lining area per brake	AB	in cm²	292
no. of brake cylinder		-	2
brakefactor (SB) Bf		-	23.49
brakefactor (PB) Bf		-	23.49
threshold torque (Co,dec)	Mo	in Nm	6
date			02.03.2017
brake lining			WABCO 230
cam torque	Ce	in Nm	638
brake force	TeIII	in daN	4649
stroke	seIII	in mm	48
tested tyre radius	Re	in mm	520
tested lever length	le	in mm	69
threshold torque (Co,e)		in Nm	5

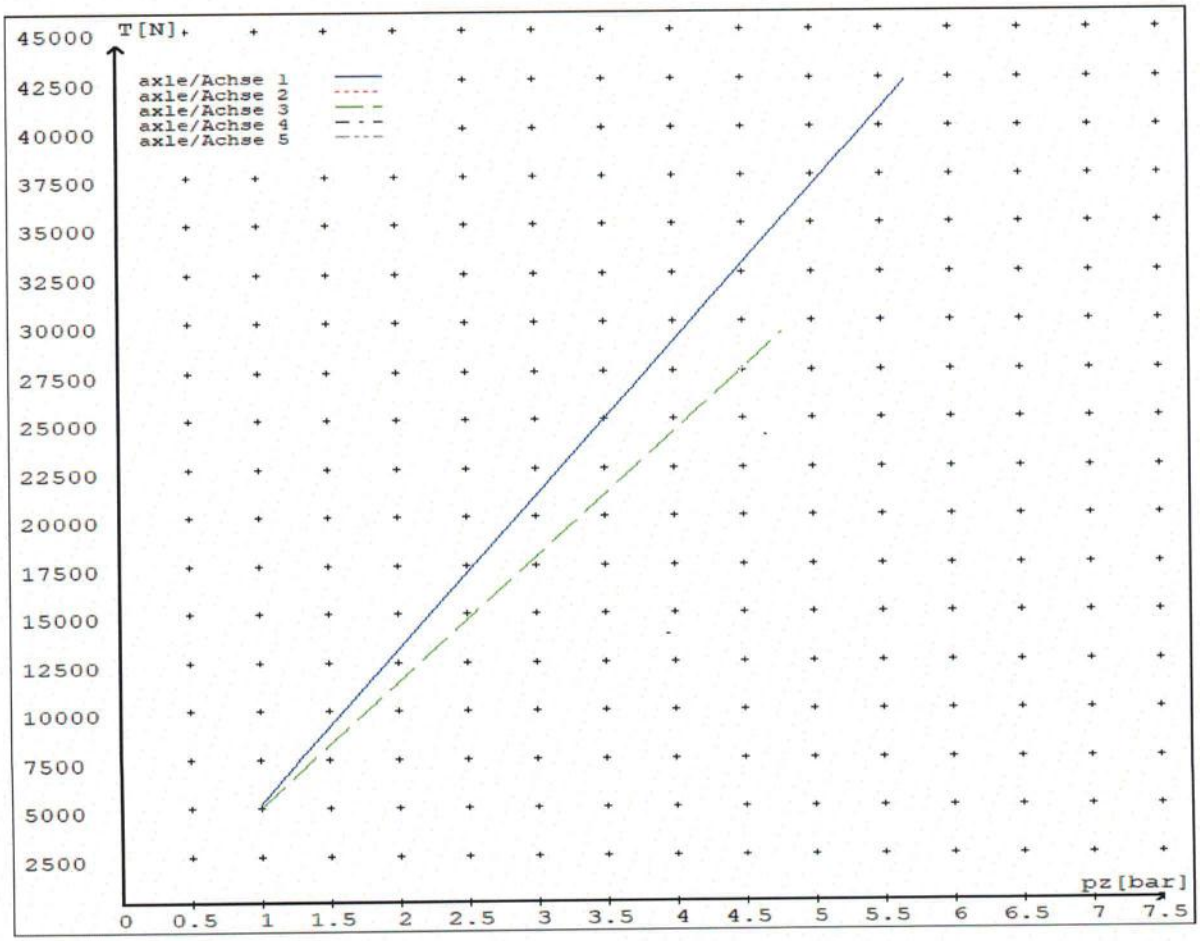
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0 5.7	5150 42285	
axle 2	1.0 5.7	5150 42285	
axle 3	1.0 4.8		4955 29374
axle 4	1.0 4.8		4955 29374
axle 5	1.0 4.8		4955 29374

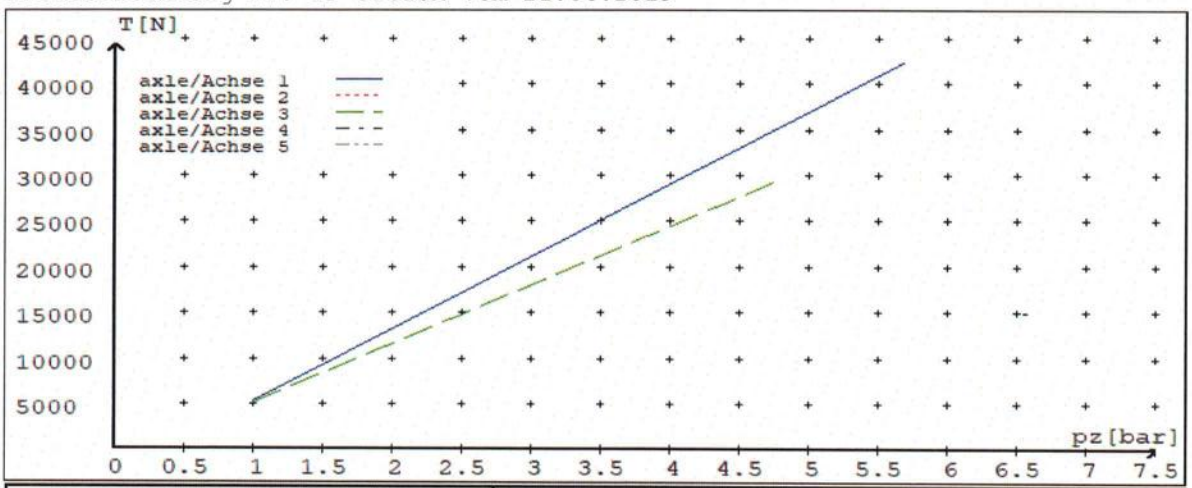
VIN - no.:

	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

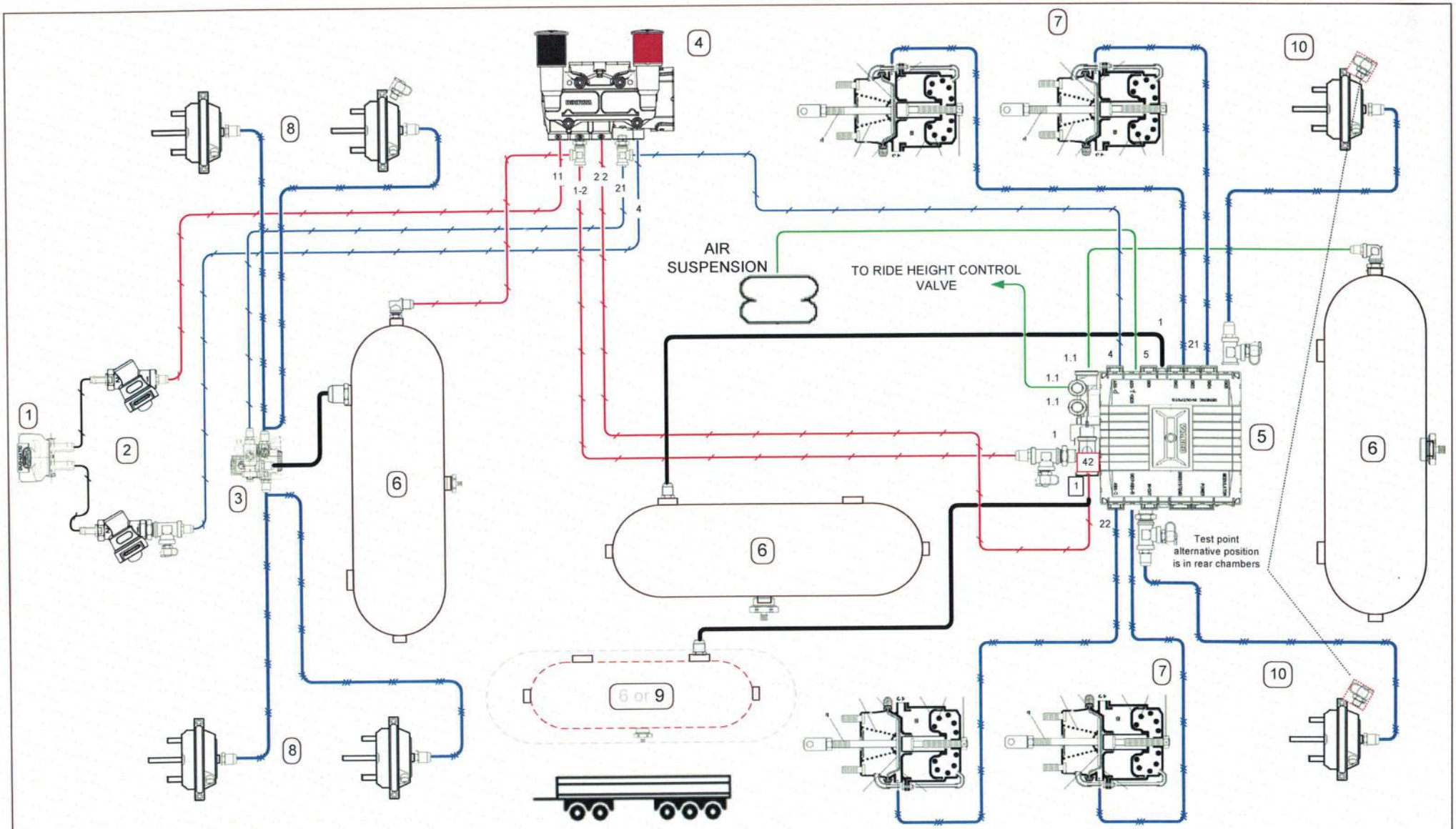


Print on WABCO no. 899 200 922 4 (only possible with laser printers!)

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 51615A date 21.06.2019
Bremsberechnung Nr: TP 51615A vom 21.06.2019



	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



GOUGH Transpecs

DOMETT TRAILERS

5 AXLE FULL TRAILER

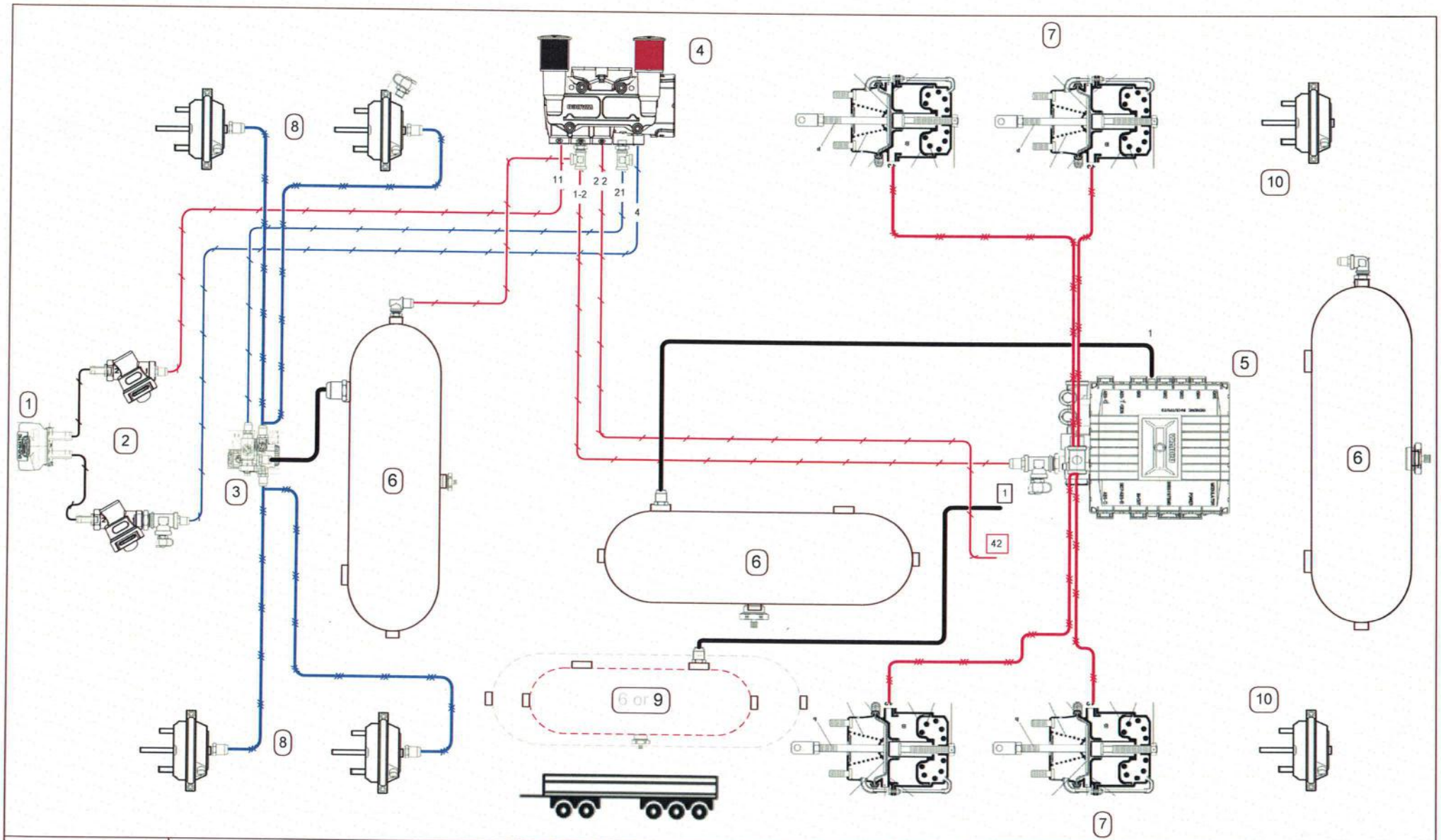
WABCO

SIZE	SPEC REFERANCE	MODEL NUMBER	REV
A4	1864	DOM5AXFULL/D/EBS	1
SCALE		SERVICE LINES	

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	452 804 001 0	Wabco Duo-Matic coupling
2	2	432 500 020 0	Wabco control line filter
3	1	480 207 202 0	Wabco EBS 3rd modulator
4	1	971 002 900 0	Wabco PREV
5	1	480 102 080 0	Wabco TEBS – E (premium)
6	3		46 Ltr Air tank
7	4	1416HTLD64	TSE Spring brake chamber
8	4	20HSCLD65	TSE Service brake chamber

ITEM	QTY.	PART NO.	DESCRIPTION
9	1		24.5 Ltr Air Tank
10	2	14HSCLD64	TSE Service brake chamber
11			
12			

PIPING LEGEND:	
	3/8" Rubber
	3/8" Rubber
	1/2" Rubber
	15mm Nylon
	12mm Nylon
	8mm Nylon
	8mm Nylon
	8mm Nylon



GOUGH Transpecs

WABCO

DOMETT TRAILERS

5 AXLE FULL TRAILER

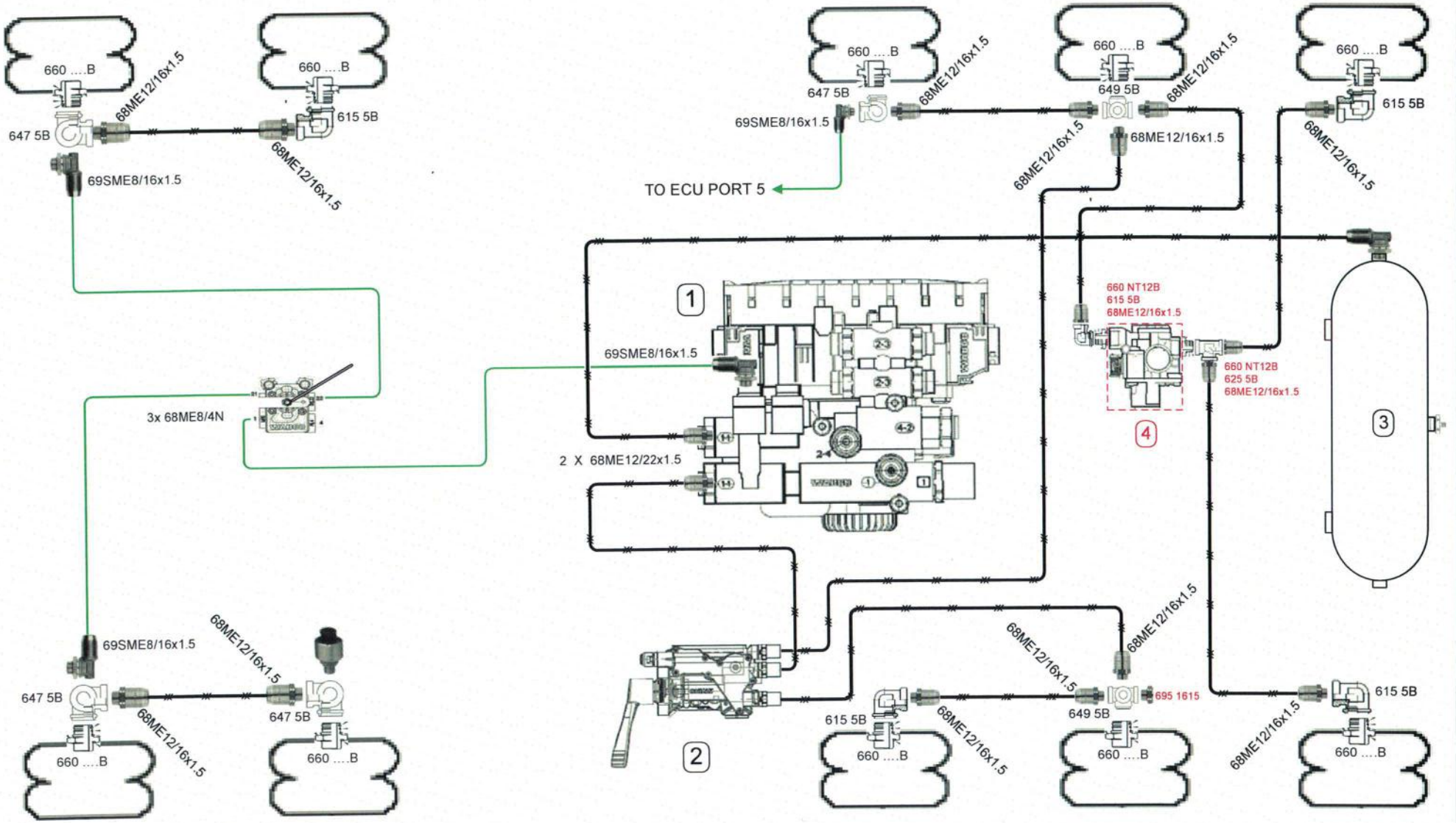
SIZE	SPEC REFERANCE	MODEL NUMBER	REV
A4	1864	DOM5AXFULL/D/EBS	1

SCALE | PARK LINES

ITEM	QTY.	PART NO.	DESCRIPTION	ITEM	QTY.	PART NO.	DESCRIPTION
1	1	452 804 001 0	Wabco Duo-Matic coupling	9	1		24.5 Ltr Air Tank
2	2	432 500 020 0	Wabco control line filter	10	2	14HSCLD64	TSE Service brake chamber
3	1	480 207 202 0	Wabco EBS 3rd 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	4	1416HTLD64	TSE Spring brake chamber				
8	4	20HSCLD65	TSE Service brake chamber				

PIPING LEGEND:

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



ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480 102 080 0	WABCO TEBS E (IN BRAKE KIT)
2	1	463 090 500 0	e-TASC VALVE
3	1		AIR TANK
4	1	472 195 052 0	TAG AXLE VALVE

ITEM	QTY.	PART NO.	DESCRIPTION

PIPING LEGEND:	
	3/8" Rubber
	3/8" Rubber
	12mm Nylon
	15mm Nylon
	12mm Nylon
	8mm Nylon
	8mm Nylon
	8mm Nylon

GOUGH Transpecs

eTASC 1 Point control with Manoeuvre Assist 'Add-on' kit

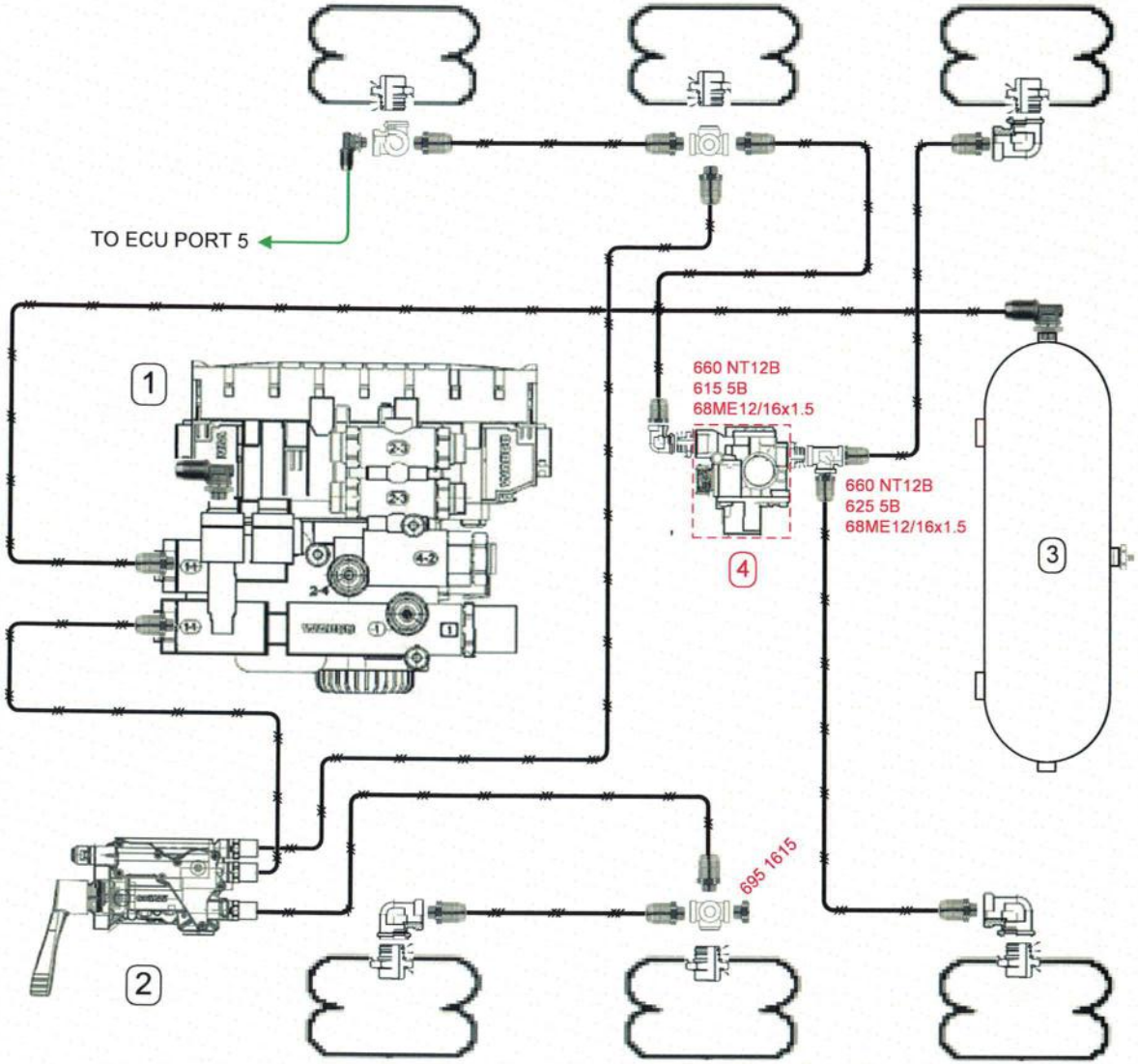
WABCO

ITEM	SYSTEM	ASSY/KIT NUMBER	DATE
		ECAS/MAAOK	12.05.17

PAGE NO: 1/3 | J HIRST | E & OE

ECAS/MAAOK

1x 472 192 052 0
1x 449 445 030 0
2x 660 NT12B
1x 615 5B
1x 625 5B
2x 68ME12/16x1.5
1x 695 1615



GOUGH Transpecs

WABCO

eTASC 1 Point control with Manoeuvre Assist 'Add-on' kit

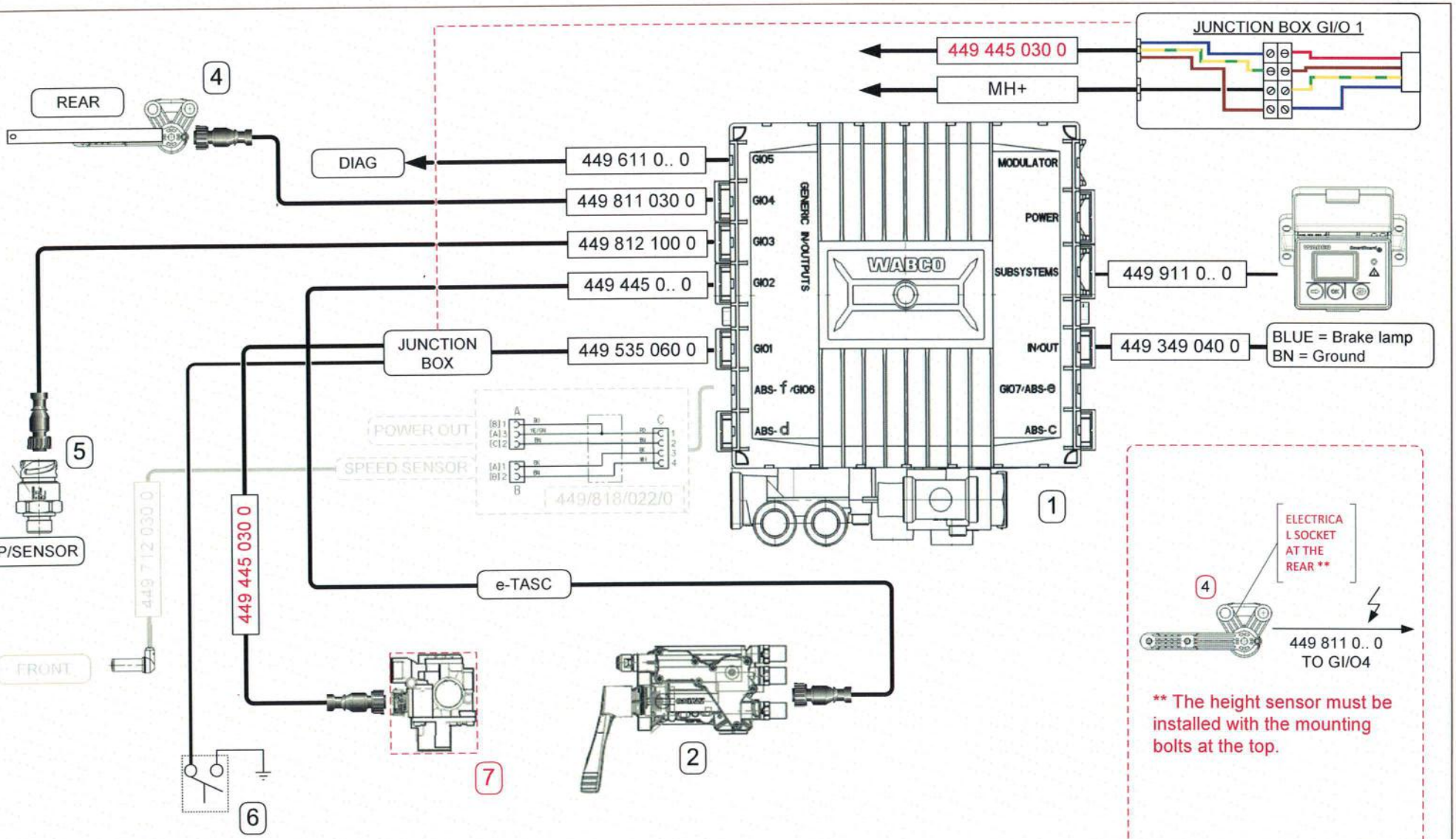
ITEM	SYSTEM	ASSY/KIT NUMBER	DATE
		ECAS/MAAOK	12.05.17

PAGE NO: 2/3 | J HIRST | E & OE

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480 102 080 0	WABCO TEBS E (IN BRAKE KIT)
2	1	463 090 500 0	e-TASC VALVE
3	1		AIR TANK
4	1	472 195 052 0	TAG AXLE VALVE

ITEM	QTY.	PART NO.	DESCRIPTION

PIPING LEGEND:	
	3/8" Rubber
	3/8" Rubber
	12mm Nylon
	15mm Nylon
	12mm Nylon
	8mm Nylon
	8mm Nylon
	8mm Nylon



ITEM	QTY.	PART NO.	DESCRIPTION
1	1	480 102 080 0	WABCO TEBS E (PREMIUM)
2	1	463 090 500 0	eTASC
4	1	463 050 100 0	ECAS HEIGHT SENSOR
5	1	441 044 101 0	AIR BAG PRESSURE SENSOR
6	1		MOMENTARY SWITCH
7	1	472 195 052 0	TAG AXLE VALVE

GOUGH Transpecs

WABCO

eTASC 1 Point control with
Manoeuvre Assist 'Add-on' kit

ITEM	DRAWING NUMBER	ASSY/KIT NUMBER	DATE
		ECAS/MAAOK	12.05.17

PAGE NO: 3/3 | J HIRST | E & OE

THE INSTALLATION POSITION OF THE FITTINGS IN THE AIR BAG IS FOR DEMONSTRATION PURPOSES ONLY.
THE TRAILER MANUFACTURER CAN ALTER THE POSITION TO SUIT TRAILER / SUSPENSION DESIGN.

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

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3173
FLEET:	BOOTHS TRANSPORT

VEHICLE DETAILS

VEHICLE TYPE:	5AFT CURTAINSIDE	**CERT #:**	JH190713
YEAR:	2019	**CALCULATION #:**	TP51615
MAKE:	DOMETT	**REGO:**	N/A
MODEL:	E2001 PH	**LT400 #:**	704321
CHASSIS #:	1864	**ORDER NUMBER:**	6562
VIN #:	7A9E20017K1023864		
GVM: *TONNES*	33	**PRIME MOVER:**	EBS / EUROPEAN
LOAD CONFIGURATION:	MIXED FREIGHT		

	FRONT	REAR	
GROUP RATINGS: *TONNES*	16	19	
WHEEL BASE: *METRES*	8.15		
	UNLADEN COG	**MAX HEIGHT**	**HEIGHT DECK**
	0.675	4.3	1.09
COG: *METRES*	2.008		
	FRONT	**REAR**	**TOTAL**
TARE: *TONNES*	3.2	3.9	7.1
	FRONT	**REAR**	
TYRE SIZE:	265 70 R19.5	265 70 R19.5	
ROLLING CIRCUMFERENCE: *MM*	2645	2645	
AXLE SPACING: *METRES*	1.31	2.51	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	HENDRICKSON	HND-PAN 19 DISC	ATRP0185
POLE WHEEL FRONT:	100	**POLE WHEEL REAR:**	100
LINING MATERIAL:	WABCO 230	**BRAKE FACTOR:**	23.49
SENSED AXLES:	2 + 4		

SERIAL NUMBERS:

1	N/A
2	N/A
3	N/A
4	N/A
5	N/A

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	TSE_CHAMBERS
SIZE:	20HSCLD	1416HTLD	14HSCLD
STROKE: *MILLIMETRES*	65	64	64
TEST REPORT #:	BC 0041.0 Jul '07	BC0143.0	BZ 122.1 Sep '00
SPRINGBRAKE FORCE: *kN*	N/A	6.16	N/A
HOLDOFF PRESSURE: *kPa*	N/A	4.5	N/A
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	WABCO PAN19
LEVER LENGTH: *MILLIMETRES*	69	69	69

BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. *kPa*
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	80 kPa
ANTI-COMPOUNDING:	YES	**ELEX:**	N/A
SPRING BRAKE RELAY:	WABCO_PREV	971 002 900 0	
YARD RELEASE VALVE:	WABCO-PREV	971 002 900 0	
INLINE RELAY FITTED:	N/A	N/A	

ECU DIRECTION: ☑ FRONT ☐ REAR **FRONT FRICTION: μ** 0.48

SMARTBOARD/OPTILINK: ☐ SMARTBOARD ☐ OPTI-LINK

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	ELECTRONIC
MAKE:	HENDRICKSON_AIR	HENDRICKSON_AIR
MODEL:	HENDRICKSON_INTRAX	HENDRICKSON_INTRAX
BELLOW SIZE:	HND SHOCKLESS	HND SHOCKLESS
HEIGHT CONTROL VALVE:	464 008 011 0	441 050 100 0
OTHER VALVES:	N/A	463 090 500 0 (eTASC)
RIDE HEIGHT *MM*:	255	255
HANGER HEIGHT *MM*:	N/A	N/A
PEDESTAL HEIGHT *MM*:	N/A	N/A
LIFTAXLE:		YES 5TH AXLE
TIPPING DUMP SWITCH:		N/A
LIFTAXLE VALVE:		472 195 052 0

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2

	FRONT	REAR
BRAKE TANK SIZE: *L*	46	71
AUXILLARY TANK SIZE: *L*	N/A	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

AIR LINES

TEST POINTS:

CONTROL LINE:	X 1	TANK:	X 1
REAR CHAMBER:	X 2	FRONT CHAMBER:	X 1
DUOMATIC COLOUR CODED:	YES		

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS [F/R]	MILLIMETRE [F / R]
UPPER LEVEL:		
NORMAL LEVEL:		255
LOWER LEVEL:		

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

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 VECHLE BRAKE RULE 32015/5, SCHEDULE 5.

DATE: 19/07/2019

SIGNED:

CERTIFIER NAME & ID: JOHN HIRST JEH

SODC ENDORSED BY: N/A N/A

PHONE (BUS): 09-980-7300

FAX:

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

GOUGH Transpecs

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)

GOUGH Transpecs

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an **E**lectronic **B**rake **S**ystem.

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)