

# Heavy vehicle specialist certificate Must be presented to a CoF (heavy) inspecting organisation if not entered into LANDATA

| Heavy vehicle specialist inspector's or man   | nufacturing inspectir  | ng organis | ation's name (                    | PRINT IN CAPS)                   | , ID            |
|---|--|------------|-----------------------------------|----------------------------------|-----------------|
|   |  | CH         | RIS CLA                           | RKE                              | CJC             |
| Plate number (optional)   | VIN/ch   | assis num  |                                   | 01292                            | 0.23398         |
| Make  | Compr  |            | ng certified:                     | Chassis                          | Load anchorage  |
| DOMETT  |  |            |                                   |                                  |                 |
| Model (optional) <b>E2001 PH-33</b>   | Lo   | g bolsters |                                   | Towing connection                | <b>X</b> Brakes |
| Certification category  | SR   | RT         |                                   | PSV stability                    | PSV rollover    |
| HVEK  | Sv   | vept path  |                                   | PBS                              |                 |
| Description of work   |  |            |                                   |                                  |                 |
| CERTIFY TO SCHEDULE 5   | OF LTR 32015   | : NZ HE    | AVY VEHI                          | CLE BRAKE SPECI                  | FICATION.       |
| CARRY OUT BRAKE CALCU   | JLATIONS, INS  | SPECTION   | ON AND E                          | CU END OF LINE P                 | ROTOCOL.        |
| 5AFT CURTAINSIDE  |  |            |                                   | TYRE: 265 70 R19.                |                 |
| FOR SYSTEM ARCHITECTU   | JRE, PLEASE I  | REFER      | TO PDS V                          | VORKSHEET & SCI                  | HEMATIC.        |
| REASON FOR CERTIFICATION  |  |            |                                   |                                  |                 |
| Code/standard/rule certified to   |  |            | Compone                           | nt load rating(s)                | *,              |
| LTR 32015   |  |            |                                   | 33 Tonnes GV                     | M               |
| General drawing number(s)   |  |            |                                   | 16 Tonne (Fror                   |                 |
| N/A   |  |            |                                   | 19 Tonne (Rea                    | r brake mass)   |
| Supporting documents BRAKE RULE CERTIFICATE   | JH2312   | 21         |                                   |                                  |                 |
| BRAKE CALCULATION #   | TP5279   | )1         |                                   |                                  |                 |
| Special conditions (optional) WARNING LAMP MUST ILLU EXTINGUISH IMMEDIATELY   |  |            |                                   |                                  | EN              |
| Certi <b>NAiqUNDESSMODIFIED]</b>  |  | or         | Hubodome                          | eter reading (whichever comes fi | rst)            |
| Declaration   |  |            | Designer's                        | JOHN: HIRST pector below         | v) JEH          |
| I the undersigned, declare that I am the heavinspector identified and I hold a current valid certify that the above mentioned vehicle commanufacture and installation, and this certifier all respects with the Land Transport Rule: Compliance 2002 and my appointment. To the knowledge the information contained in the and correct. | d appointment. I<br>mponent's design,<br>ication complies<br>Vehicle Standards<br>the best of my | C          | Inspector's Inspector's Dat 18-De | HRIS CLAGO                       |                 |
| CoF vehicle inspector ID (if applicable)  | CoF vehicle  | e inspecto | or signature (if                  | applicable) Date                 | ,               |

**Te Kāwanatanga o Aotearoa** New Zealand Government

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

7A9E20012P2023398 SoDC: JH231221 LT400: CJC A11463 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.

-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 13.10.2020

vehicle manufacturer: DOMETT TRAILERS

trailer model : 5AFT CURTAINSIDE
trailer type : 5-axle-full-trailer

remarks : air / hydraulic / VA suspension

WABCO TRAILER - EBS E

TRISTOP 3+4: T.14/24 [OUTPUT FORCE @ 30 mm = 6160 N]

please note!

265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : HENDRICKSON, SBW 1937, ATPR0185,

|                          |          | unladen     | <u>laden</u> |
|--------------------------|----------|-------------|--------------|
| total mass               | P in kg  | 6750        | 35050        |
| axle 1                   | P1 in kg | 1650        | 8000         |
| axle 2                   | P2 in kg | 1650        | 8000         |
| axle 3                   | P3 in kg | 1150        | 6350         |
| axle 4                   | P4 in kg | 1150        | 6350         |
| axle 5                   | P5 in kg | 1150        | 6350         |
| wheel base               | E in mm  | 7890 - 7990 |              |
| centre of gravity height | h in mm  | 1030        | 2100         |

|                              |                    | axle 1   | axle 2   | axle 3   | axle 4   | axle 5        |
|------------------------------|--------------------|----------|----------|----------|----------|---------------|
|                              |                    | manually | manually | manually | manually | manually      |
| no. of combined axles        |                    | ī        | ī        | ī        | ī        | 1             |
| no. of brake chambers per    | axle line KDZ      | 2        | 2        | 2        | 2        | 2             |
| The power output correspor   |                    | 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:                 |                    |          |          |          |          | Alberta 1900s |
| chamber pressure(rdyn mir    | )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      | 4.7      | 4.7      | 4.7           |
| piston force ThA             | at pm6,5bar N      | 6578     | 6578     | 4485     | 4485     | 4485          |
| brake force (rdyn min) T lac | l. at pm6,5bar N   | 50826    | 50826    | 34530    | 34530    | 34530         |
| brake force(rdyn max) T lac  | . at pm6,5bar N    | 50826    | 50826    | 34530    | 34530    | 34530         |
| Brake force incl. 1 % roll   | ing resistance     |          |          |          |          |               |
| proportion                   | 용                  | 22.3     | 22.3     | 18.5     | 18.5     | 18.5          |

braking rate z laden 0.597 for rdyn min z = sum (TR)/PRmax 0.597 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

2.6

pcha in bar: 0.8 0.8 0.8 0.8 0.8

0.8

0

0.1

0.2

0.3

0.4

0.5

0.6

0.7

0

0.1

0.2

0.3

0.4

0.5

0.6

0.7

0.8

Tansport Special. -brake calculation no: TP 52791A date 18.12.2023 page 5 / 9

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 52791A

tire circumference main axle 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 = 0.1346.5 bar z = 0.600

| control pressure pm |                      | 6,5                   | control pressure pm  |                    | 0.8                 | 2.0 | 6.5            |     |
|---------------------|----------------------|-----------------------|----------------------|--------------------|---------------------|-----|----------------|-----|
| axle                | axle load<br>unladen | bellow pr.<br>unladen | brake pr.<br>unladen | axle load<br>laden | bellow pr.<br>laden |     | ake p<br>laden |     |
| 1                   | 1650                 | to be                 | 2.1                  | 8000               | to be               | 0.4 | 1.3            | 5.7 |
| 2                   | 1650                 | entered by            | 2.1                  | 8000               | entered by          | 0.4 | 1.3            | 5.7 |
| 3                   | 1150                 | the vehicle           | 1.5                  | 6350               | the vehicle         | 0.3 | 1.4            | 4.7 |
| 4                   | 1150                 | manufact.             | 1.5                  | 6350               | manufact.           | 0.3 | 1.4            | 4.7 |
| 5                   | 1150                 |                       | 1.5                  | 6350               |                     | 0.3 | 1.4            | 4.7 |

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 | l pcyl | axle load | pcyl |
| 1650      | 2.1    | 1650      | 2.1  | 1150      | 1.5  | 1150      | 1.5  | 1150      | 1.5  |
| 2150      | 2.4    | 2150      | 2.4  | 1650      | 1.8  | 1650      | 1.8  | 1650      | 1.8  |
| 2650      | 2.7    | 2650      | 2.7  | 2150      | 2.1  | 2150      | 2.1  | 2150      | 2.1  |
| 3150      | 3.0    | 3150      | 3.0  | 2650      | 2.4  | 2650      | 2.4  | 2650      | 2.4  |
| 3650      | 3.2    | 3650      | 3.2  | 3150      | 2.7  | 3150      | 2.7  | 3150      | 2.7  |
| 4150      | 3.5    | 4150      | 3.5  | 3650      | 3.0  | 3650      | 3.0  | 3650      | 3.0  |
| 4650      | 3.8    | 4650      | 3.8  | 4150      | 3.3  | 4150      | 3.3  | 4150      | 3.3  |
| 5150      | 4.1    | 5150      | 4.1  | 4650      | 3.7  | 4650      | 3.7  | 4650      | 3.7  |
| 8000      | 5.7    | 8000      | 5.7  | 6350      | 4.7  | 6350      | 4.7  | 6350      | 4.7  |

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
                                                                          : 02.03.2017
         test report :
                                  ATPRO185
                                                                date
axle 2 : reference axle: HENDRICKSONSBW 1937
                                                                brake lining: WABCO 230
        test report :
                                  ATPR0185
                                                                date : 02.03.2017
axle 3 : reference axle: HENDRICKSONSBW 1937
                                                                brake lining: WABCO 230
         test report :
                                  ATPR0185
                                                                date : 02.03.2017
axle 4 : reference axle: HENDRICKSONSBW 1937
                                                                brake lining: WABCO 230
         test report
                    :
                                  ATPR0185
                                                                date : 02.03.2017
axle 5 : reference axle: HENDRICKSONSBW 1937
                                                                brake lining: WABCO 230
                                                                date : 02.03.2017
         test report :
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 = 24.2 \% Fe
axle 2
                  (rdyn 421 mm)
                                                T = 24.2 \% Fe
axle 3
                  (rdyn 421 mm)
                                                T = 18.3 \% Fe
axle 4
                  (rdyn 421 mm)
                                                T = 18.3 \% Fe
axle 5
                                                T = 18.3 \% Fe
                  (rdyn 421 mm)
calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)
axle 1
                  (sp = 58 mm)
                                              s = 48 \text{ mm}
axle 2
                  (sp = 58 mm)
                                              s = 48 \text{ mm}
axle 3
                  (sp = 56 mm)
                                              s = 48 \text{ mm}
axle 4
                  (sp = 56 mm)
                                              s = 48 \text{ mm}
axle 5
                  (sp = 56 mm)
                                              s = 48 \text{ mm}
average thrust output in N at pm = 6.5 bar (however max. pcha = 7.0 bar)
                                            ThA = 6578 N
                                            ThA = 6578 N
axle2
                                            ThA = 4485 N
axle3
axle4
                                            ThA = 4485 N
axle5
                                            ThA = 4485 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
                                             T = 27637 N
                 (rdyn 421 mm)
axle 4
                  (rdyn 421 mm)
                                              T = 27637 N
axle 5
                  (rdyn 421 mm)
                                              T = 27637 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
                                                      >= 0,4 and
(items 1.5.3 and 1.7.2 to annex 11)
                                                      >= 0,6*E (0.36)
                                             T = 40650 N
axle 1
                  (rdyn 421 mm)
axle 2
                 (rdyn 421 mm)
                                            T = 40650 N
axle 3
                 (rdyn 421 mm)
                                            T = 27637 N
axle 4
                 (rdyn 421 mm)
                                             T = 27637 N
axle 5
                 (rdyn 421 mm)
                                             T = 27637 N
                                         basic test
                                                       type III
                                         of subject
                                                       (calculated)
                                         trailer (E) residual
braking rate of the vehicle
                                                       (hot)braking
```

0.60

0.48

>= 0,4 and

>= 0,6\*E (0.36)

(item 4.3.2 to appendix 2 to annex 11)

(items 1.5.3 and 1.7.2 to annex 11)

required braking rate

#### spring parking brake

|                          |                   | <u>axle 3</u> | axle 4  |
|--------------------------|-------------------|---------------|---------|
| no of TRISTOP-actuators  | per axle line KDZ | 2             | 2       |
| TRISTOP-actuator type    |                   | T.14/24       | T.14/24 |
| lever length             | 1Bh 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 bra | ake TFZ in N      | 6160          | 6160    |
| sp.brake chamber no Mer  | itor              | 4             | 4       |
| release pressure         | pLs in bar        |               |         |
|                          |                   | 4.8           | 4.8     |

#### calculation:

| ratio until road   | 4.0466  | 4.0466 |
|--|---------|--------|
| iFb = lBh*Eta*C*rBt/(rBn*rstat)  |         |        |
| for rstat in   | mm 401  | 401    |
| <pre>brake force of spring br. Tf in Tf = (TFZ*KDZ-2*Co/1Bh)*iFb</pre> | N 49151 | 49151  |
| braking rate $zf$ laden $zf = sum (Tf)/P + 0,01$                       | 0.296   |        |

#### Test of the frictional connection required by the parking brake

Min. wheelbase/min. supporting width (theoretical proof / no ECE regulation!): In the event of non-compliance, carry out a practical test or use the procedure described in ECE / Appendix 20.

```
min Ef =
                   minimum distance between front axle(s) (trailer) or support (semitraile)
and the rear axle(s) (resultant of the bogie)
                   wheel base
             0.80 maximum permissible frictional connection required
fzul
zferf =
             0.18 maximum required braking ratio of the parking brake
          2100 mm height of center of gravity - laden
h
      = 19050 kg maximum bogie mass - laden
      = 35050 kg maximum total mass - laden
P
            2
nf
      =
                   no. of axle(s) with TRISTOP spring brake actuators
             3
                   no. of bogie axle(s)
ng
```

| axle manufacturer type of brake type of axle test report of characteristic value   | axle 1 + 2 + 3 + 4 + 5<br>HENDRICKSON<br>SBW 1937<br>SBW 1937<br>ATPR0185  |
|--|--|
| adm. stat. axle load tested axle load max. adm. tyre radius adm. cam. torque (6,5 bar) lining area per brake no. of brake cylinder brakefactor (SB) Bf | Pstat in kg 9000 Pe in kg 10200 Rezul in mm 999 Czul in Nm 640 AB in cm² 292 - 2 - 23.49                               |
| brakefactor (PB) Bf  | - 23.49  |
| date brake lining cam torque brake force stroke tested tyre radius tested lever length threshold torque (Co,e)   | Mo in Nm 6  02.03.2017  WABCO 230  Ce in Nm 638  TeIII in daN 4649  seIII in mm 48  Re in mm 520  le in mm 69  in Nm 5 |

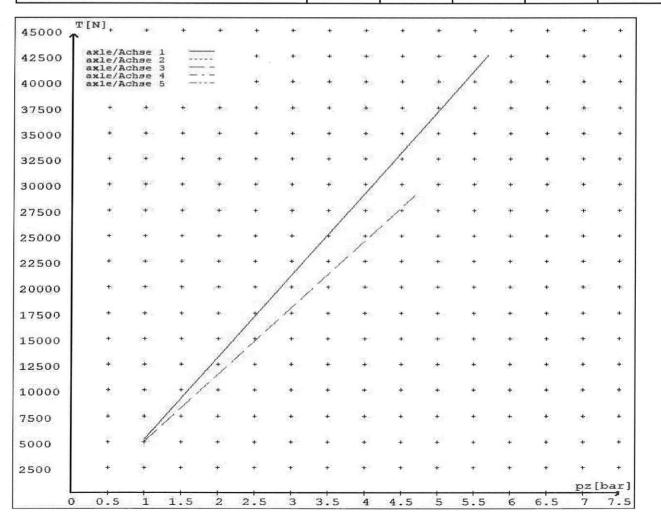
#### reference values

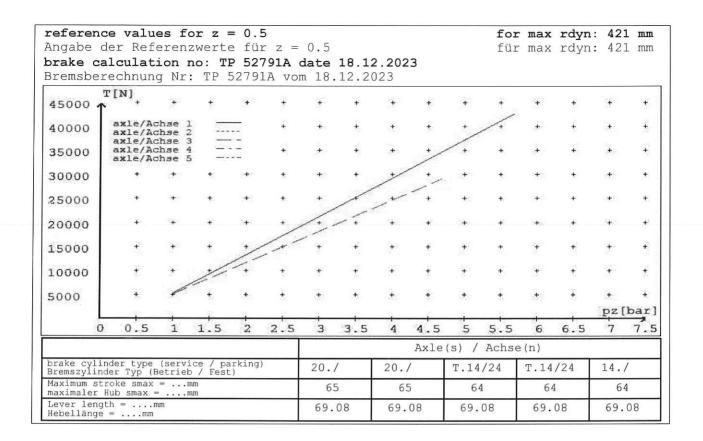
reference values for z = 50% for max rdyn: 421 mm

|        | pz [bar]   | T [N]         | T [N]         |
|--------|------------|---------------|---------------|
| axle 1 | 1.0<br>5.7 | 5184<br>42568 |               |
| axle 2 | 1.0<br>5.7 | 5184<br>42568 |               |
| axle 3 | 1.0<br>4.7 |               | 4984<br>28920 |
| axle 4 | 1.0<br>4.7 |               | 4984<br>28920 |
| axle 5 | 1.0<br>4.7 |               | 4984<br>28920 |

VIN - no.:

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









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

| CLIENT                    |                             |                     |                |  |  |  |
|---------------------------|-----------------------------|---------------------|----------------|--|--|--|
| MANUFACTURER:             | DOMETT TRAILERS             |                     |                |  |  |  |
| ADDRESS:                  | TAURII                      | (URA DRIVE, TAURANG | A 3110         |  |  |  |
| FLEET:                    |                             | BOOTHS TRANSPORT    |                |  |  |  |
| VEHICLE DETAILS           |                             |                     |                |  |  |  |
| VEHICLE TYPE:             | 5AFT CURTAINSIDE            | CERT #:             | JH231221       |  |  |  |
| YEAR:                     | 2023                        | CALCULATION #:      | TP52791        |  |  |  |
| MAKE:                     | DOMETT                      | REGO #:             | N/A            |  |  |  |
| MODEL:                    | E2001 PH-33                 | LT400 #:            | A11463         |  |  |  |
| CHASSIS #:                | 2398                        | ORDER #:            | 9863           |  |  |  |
| VIN #:                    | 7 A 9 E 2 0 0 1 2 P 2 0 2 3 | 3 9 8               |                |  |  |  |
| GVM: t                    | 33                          | PRIME MOVER:        | EBS / EUROPEAN |  |  |  |
| LOAD CONFIGURATION:       | MIXED FREIGHT               | ]                   |                |  |  |  |
| GROUP RATINGS: t          | FRONT                       | REAR                |                |  |  |  |
|                           | 16                          | 19                  |                |  |  |  |
| WHEEL BASE: m             | 7.94                        | 1                   |                |  |  |  |
|                           | UNLADEN COG m               | MAX HEIGHT m        | HEIGHT DECK m  |  |  |  |
|                           | 1.03                        | 4.3                 | 1.083          |  |  |  |
| COG: m                    | 2.094                       |                     |                |  |  |  |
|                           | FRONT                       | REAR                | TOTAL          |  |  |  |
| TARE: t                   | 3.3                         | 3.5                 | 6.8            |  |  |  |
|                           | FRONT                       | REAR                |                |  |  |  |
| TYRE SIZE:                | 265 70 R19.5                | 265 70 R19.5        |                |  |  |  |
| ROLLING CIRCUMFERENCE: mm | 2645                        | 2645                |                |  |  |  |
| AXLE SPACING: m           | 1.31                        | 3                   |                |  |  |  |

| BRAKE & AXLE DETAILS         |                  |           |                                    | STATE OF STATE       |
|------------------------------|------------------|-----------|------------------------------------|----------------------|
|                              | M                | AKE       | MODEL                              | TEST REPORT          |
| AXLE:                        | HENDF            | RICKSON   | HND-PAN 19 DISC                    | ATPR0185             |
| POLE WHEEL FRONT:            | 1                | 00        | POLE WHEEL REAR:                   | 100                  |
| LINING MATERIAL:             | WABO             | CO 230    | BRAKE FACTOR:                      | 23.49                |
| SENSED AXLE(S):              | 2                | + 4       |                                    | NOTES:               |
| SERIAL NUMBERS:              | 1                | N/        | A                                  | AANL230              |
|                              | 2                | N/        | A                                  | AANL230              |
|                              | 3                | N/        | A                                  | AANL230              |
|                              | 4                | N/A       | A                                  | AANL230              |
|                              | 5                | N/A       | Ą                                  | AANL230              |
| CHAMBER AND VALVING DETAIL   | S                |           |                                    |                      |
| CHAMBERS:                    | AXLE             | 1 & 2     | AXLE 3 & 4                         | AXLE 5               |
| BRAND:                       | TSE_CH           | AMBERS    | TSE_CHAMBERS                       | TSE_CHAMBERS         |
| SIZE:                        | 20H:             | SCLD      | 1424TLD2H                          | 14HSCLD              |
| STROKE: mm                   | 6                | 5         | 64                                 | 64                   |
| TEST REPORT #:               | BC 0041.         | 0 Jul '07 | BC0143.0                           | TSE derived          |
| SPRINGBRAKE FORCE: kN        | N,               | /A        | 6.16                               | N/A                  |
| <b>HOLDOFF PRESSURE:</b> Bar | N,               | /A        | 4.8                                | N/A                  |
| FOUNDATION BRAKE:            | WABCO            | PAN19     | WABCO PAN19                        | WABCO PAN19          |
| LEVER LENGTH: mm             | 6                | 9         | 69                                 | 69                   |
| BRAKE VALVES:                | MA               | KE:       | PART NUMBER:                       | PM PRESS. kPa        |
| ECU PART #:                  | WAI              | ВСО       | 480 102 08. 0 (MV)                 | 80 kPa               |
| 3RD MODULATOR #:             | WAI              | ВСО       | 480 207 202 0 (12V)                | 80 kPa               |
| ANTI-COMPOUNDING:            | YE               | ES        |                                    |                      |
| SPRING BRAKE RELAY:          | WABCO            | _PREV     | 971 002 900 0                      | ]                    |
| YARD RELEASE VALVE:          | LVE: WABCO-PREV  |           | 971 002 900 0                      | ]                    |
| INLINE RELAY FITTED:         | N/               | 'A        | N/A                                | ]                    |
| ECU DIRECTION:               | ☑ FRONT          | REAR      | FRONT FRICTION: $\boldsymbol{\mu}$ | 0.48                 |
| SUBSYSTEMS:                  | ☐ SMARTBOARD     |           | PTI-LINK                           | ROUTER 446 122 050 0 |
|                              | ☐ ELEX 446 122 0 | 70 0 🔲 T  | AILGUARD                           | Page 2               |

# SUSPENSION

**CONTROL LINE:** 

**REAR CHAMBER:** 

**DUOMATIC COLOUR CODED:** 

|                        | FRONT                    | REAR               |
|------------------------|--------------------------|--------------------|
| SUSPENSION TYPE:       | PNEUMATIC                | PNEUMATIC          |
| MAKE:                  | HENDRICKSON_AIR          | HENDRICKSON_AIR    |
| MODEL:                 | HENDRICKSON_INTRAX       | HENDRICKSON_INTRAX |
| BELLOW SIZE:           | ZMD SHOCKLESS            | ZMD SHOCKLESS      |
| HEIGHT CONTROL VALVE:  | HALDEX 90554950          | HALDEX 90554950    |
| OTHER VALVES:          | N/A                      | N/A                |
| RIDE HEIGHT mm:        | 255                      | 255                |
| HANGER HEIGHT mm:      | 203                      | 203                |
| PEDESTAL HEIGHT mm:    | 40                       | 40                 |
| LIFTAXLE:              |                          | N/A                |
| TIPPING DUMP SWITCH:   |                          | N/A                |
| LIFTAXLE VALVE:        |                          | N/A                |
| PRESSURE LIMITING:     |                          | N/A                |
| AIR TANKS              |                          |                    |
| AIR TANKS STANDARD:    | SAE J10A / EN286-2       |                    |
|                        | FRONT                    | REAR               |
| BRAKE TANK SIZE: L     | 46                       | 46 + 25            |
| AUXILLARY TANK SIZE: L | N/A                      | 46                 |
| PRESSURE PROTECTION:   | WABCO PEM: 461 513 002 0 |                    |
| ĄIR LINES              |                          |                    |
| TEST POINTS:           |                          |                    |

TANK:

FRONT CHAMBER:

X 1

X 2

YES

X 1

X 1

| <b>HEAVY VEHICLE BRAKE RULE 32</b>                                       | 015                     |                           |                |
|--|-------------------------|---------------------------|----------------|
| ☐ SCHEDULE 4   | SCHEDULE 5              | ☐ SECTION 6               | ☐ APPROVED STD |
| CHECKS AT COMMISSION OF VE   | HICLE                   |                           |                |
| CHAMBER BUNGS REMOVED:   | <b>V</b>                | VALVE MOUNTING:           |                |
| ECU BLANKING PLUGS CHECKED RESPONSE TIME: ms:                            | MODULATOR 2.1           | MODULATOR 2.2             | RELAY VALVE    |
| NOTES, SKETCHES AND SPECIAL  |                         |                           |                |
| FILES RECEIVED: 15.10.2023 FILE UPDATE: 12.04.2023                       | FILES CREATED: 18.12.20 | 023                       |                |
| REQUEST A COPY OF THE TARE WEIGHT OFF-ROAD MANDELWAR ASSIST              | T DOCKET                |                           |                |
|  |                         |                           |                |
|  |                         |                           |                |
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|  |                         |                           |                |
| P  |                         |                           |                |
| FILES RETURNED AS COMPLETE:  |                         |                           |                |
| REASON FOR CERTIFICATION:  | NEW TRAILER BUILD       |                           |                |
|  |                         | D DELOW AND HOLD A CURDEN | T. (4115       |
| I UNDERSTAND AND DECLARE THAT I AI<br>APPOINTMENT. I CERTIFY THAT AT THE |                         |                           |                |
| DESIGN AND THIS CERTIFICATION COM  |                         |                           | 0              |
| STANDARDS COMPLIANCE 2002 AND M  |                         |                           |                |
| INFORMATION CONTAINED IN THIS CER  |                         |                           | OE 1112        |
| NEW ZEALAND HEAVY VECHLE BRA   |                         |                           |                |
|  | ,                       | // //                     |                |
| DATE:  | 18/12/2023              |                           |                |
| SIGNED:  |                         |                           |                |
| CERTIFIER NAME & ID:   | CHRIS CLARKE            | CJC                       |                |
| SODC BY:   | JØHN-HIRST              | JEH                       |                |
| PHONE (BUS):   | 09-980-7300             |                           |                |
| POSTAL ADDRESS:  | P.O. Box 98-971, Manu   | ukau 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.

IF THIS VEHICLE IS OPERATED IN CONJUNCTION WITH NON-CODED VEHICLES, THERE MAY BE OPERATIONAL FACTORS WHICH NEED TO BE TAKEN INTO CONSIDERATION.

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

#### **EXCERPT FROM NZ HEAVY VEHICLE BRAKE RULE 32015**

#### 10.1 Responsibilities of operators

A person who operates a vehicle must ensure that the vehicle complies with this rule.

#### 10.2 Responsibilities of repairers

A person who repairs or adjusts a brake must ensure that the repair or adjustment:

(a) does not prevent the vehicle from complying with this rule; and (b) complies with Land Transport Rule: Vehicle Repair 1998.

#### 10.3 Responsibilities of modifiers

A person who modifies a vehicle so as to affect the braking performance of the vehicle must:

(a) ensure that the modification does not prevent the vehicle from complying with this rule; and

(b) notify the operator that the vehicle must be inspected and, if necessary, certified by person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.

#### 10.5 Responsibilities of manufacturers and retailers

A person may manufacturer, stock, or offer for sale a brake or its components. Intended for fitting to a vehicle to be used on New Zealand roads, only if that brake or component:

- (a) Complies with this rule: and
- (b) Does not prevent a repair to a vehicle, its structure, systems, components and equipment from complying with this rule.

#### IF YOU ARE UNSURE ABOUT YOUR RESPONSIBILITIES, PLEASE CONTACT THE VEHICLE MANUFACTURER, OR MYSELF.

COMPLAINTS. Complaints and Warranty issues which relate to Brake Certification will be acknowledged within 3 working days and a resolution proposed within 20 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy.

Customers have the right to appeal to the NZ Transport Agency if dissatisfied with a Compliance issue. (refer NZTA Notice Of Appointment Para 47.4)

NZ Transport Agency Helpdesk 0800 699 000 or a form can be found at

Vehicle certification complaints form (VCCPF01) | Waka Kotahi NZ Transport Agency (nzta.govt.nz)





## **NOTICE TO VEHICLE OPERATOR**

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015, 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 the ignition is switched on, the system must be checked. If the light remains illuminated when the vehicle is in motion, Brake Rule compliance is compromised. Repairs must be made as soon as possible.

#### NB:

If this vehicle is fitted with mechanical (spring) suspension, the load sensing has been adjusted to suit the performance of the original springs. In the event of replacement being required, original equipment springs **must** be fitted to ensure correct ongoing operation.

Fitment of non-genuine springs can affect operation and therefore, compliance.

If you are unsure of your responsibilities and/or obligations, please contact either the vehicle manufacturer or myself.

| _ |       |      |       |  |
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## NOTICE TO VEHICLE OPERATOR

## **WABCO** Park Release Emergency Valve (PREV)

# This trailer is equipped with a WABCO PREV Part # 971 002 900 0

Application of the park brake via the cab control valve will actuate and apply all service brakes on the trailer. In the event of a leak in the service brake system the Spring Brakes will automatically override and hold the vehicle in compliance with Land Transport Rule: Heavy-vehicle Brakes Rule 32015.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated midway down the chassis rail.

The cab control in the prime mover does not have to be applied for this test procedure.

If you are unsure of any aspect relating to this instruction, please contact either the vehicle manufacturer or myself.

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|--------|-------|--|
| (JEH   | HVEK) |  |