NAASRA/NRTC MASS REQUIREMENTS FOR CLASS 1 RESTRICTED ACCESS VEHICLES

**MASS REQUIREMENTS FOR ALL CLASS 1 HEAVY VEHICLES**

**Mass Limits relating to Tyre Width**

**Mass Limits for Single Axles**

The mass on the single axle, fitted with 2, 4 or 8 tyres, of a class 1 heavy vehicle must not be more than the mass limits specified in Table 1.

**TABLE 1 - MASS LIMITS RELATING TO TYRE WIDTH – SINGLE AXLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tyre width of narrowest tyre on axle (mm) | | Mass limit (tonnes) | | |
| At least | but less than | 2 tyred axle | 4 tyred axle | 8 tyred axle |
| 190 | 228 | 4.5 | 9.0 | 18 |
| 228 | 254 | 5.0 | 9.5 | 19 |
| 254 | 279 | 6.0 | 10.0 | 20 |
| 279 | 305 | 6.5 | 11.0 | 22 |
| 305 | 330 | 7.0 | 12.0 | 24 |
| 330 | 356 | 7.5 | 13.0 | 26 |
| 356 | 381 | 8.0 | 14.0 | 28 |
| 381 | 406 | 9.0 | 14.0 | 28 |
| 406 | 458 | 10.0 | 14.0 | 28 |
| 458 | 508 | 11.0 | 14.0 | 28 |
| 508 |  | 12.0 | 14.0 | 28 |

**Mass Limits for Single Tyred Tandem and Tri Axle groups**

The mass on axle groups of a class 1 heavy vehicle must be no greater than the mass limits specified in Table 2.

**TABLE 2 – MASS LIMITS FOR SINGLE TYRED TANDEM AND TRI AXLE GROUPS**

|  |  |  |  |
| --- | --- | --- | --- |
| Tyre width of narrowest tyre on axle (mm) | | Mass limit (tonnes) | |
|
| At least | but less than | Tandem axle group with 4 tyres | Tri-axle group with 6 tyres |
| 381 | 406 | 16.5 | 22.0 |
| 406 | 431 | 17.0 | 23.0 |
| 431 | 458 | 17.5 | 24.0 |
| 458 | 482 | 18.0 | 25.0 |
| 482 | 508 | 18.5 | 26.0 |
| 508 |  | 19.0 | 27.0 |

**MASS REQUIREMENTS FOR LOAD CARRYING CLASS 1 HEAVY VEHICLES**

The notice is applicable to a load carrying Class 1 heavy vehicle consisting of a tandem drive prime mover towing:

* A semi trailer; or
* A low loader dolly and semi trailer; or
* A jinker; or
* A low loader dolly and a jinker; or
* A platform trailer fitted with 8 tyres per axle; or
* A low loader dolly and a platform trailer fitted with 8 tyres per axle.)

**Mass Limits – Prime Mover**

The axle/axle group masses of a prime mover must be no greater than the mass limits indicated in Table 3.

**TABLE 3 – PRIME MOVER**

|  |  |  |
| --- | --- | --- |
| Axle group | | Mass limit (tonnes) |
| Single Steer Axle |  | 6 |
| Twinsteer (Non load sharing) |  | 10 |
| Twinsteer (Load sharing) |  | 12 |
| Tandem axle Group -dual tyres | Maximum | 18.5 |
| Tri drive | Torque sharing | 25 |
| Non torque share | 20 |

**Mass Limits – Trailing Groups**

The mass on a trailer’s single axle or axle group must not be greater than the mass limits specified in Table 4 for:

* the single axle, or
* the axle group as described by the number of tyres, minimum ground contact and number and spacing of axles in that axle group.

**TABLE 4 -TRAILING GROUPS – MASS LIMITS**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Minimum axle group ground contact width (m) | Number and spacing of axles in axle group | | | | | | | | | | |
| 1 | 2@1.2 | 2@1.8 | 3@1.2 | Oversize triaxle 3 @ 1.2 > 3.2 overall | 3@1.8 | 4@1.2 | 4@1.6 | 4@1.2, 2.4, 1.2 | 5@1.2 | 5@1.8 |
| 4 tyred axle mass limit (tonnes) | | | | | | | | | | | |
| 2.4 | 9 | 18.5 | 18.5 | 25 | 27 | 27 | 30 | 30 | 35 | 35 | 43 if 3 axles have +ve steering |
| 8 tyred axle mass limit (tonnes) | | | | | | | | | | | |
| 2.4 | 12 | 21 | 21.5 | 25 | 27 | 27 | 30 | 30 | 35 | 35 |  |
| 2.6 | 12.5 | 21 | 23 | 26 | 28 | 29 | 31.5 | 31.5 | 36 | 36 |  |
| 2.7 | 12.5 | 21 | 24 | 27 | 29 | 31 | 33 | 33 | 37.5 | 37 |  |
| 2.8 | 13.5 | 22 | 25 | 28 | 30 | 33 | 34 | 34 | 39 | 39 |  |
| 2.9 | 13.5 | 23 | 26 | 29 | 31 | 34.5 | 35 | 35 | 40 | 40 |  |
| 3.0 | 15.5 | 24 | 27 | 30 | 32 | 36 | 36 | 36 | 41 | 41 |  |
| 3.1 | 15.5 | 25 | 28 | 31 | 33 | 37.5 | 37.5 | 37.5 | 42 | 42 |  |
| 3.2 | 16.5 | 26 | 29 | 32 | 34 | 39 | 39 | 39 | 43.5 | 43.5 |  |
| 3.3 | 16.5 | 27 | 30 | 33 | 35 | 40 | 40 | 40 | 44.5 | 44.5 |  |
| 3.4 | 16.5 | 27.5 | 30.5 | 34 | 36 | 41 | 41 | 41 | 46 | 46 |  |
| 3.5 | 16.5 | 28 | 31 | 35 | 37 | 42 | 42 | 42 | 47 | 47 |  |
| 3.6 | 17.5 | 28.5 | 31.5 | 36 | 38 | 43 | 43 | 43 | 48 | 48 |  |
| 3.7 | 17.5 | 29 | 32 | 37 | 39 | 44 | 44 | 44 | 49 | 49 |  |
| 3.8 | 18 | 30 | 33 | 38 | 40 | 45 | 45 | 45 | 50 | 50 |  |
| 3.9 | 18 | 30.5 | 33.5 | 39 | 40 | 46 | 46 | 46 | 51 | 51 |  |
| 4.0 | 18 | 31 | 34 | 40 | 40 | 47 | 47 | 47 | 52 | 52 |  |
| 4.1 | 18 | 31 | 34 | 40 | 40 | 48 | 48 | 48 | 53 | 53 |  |
| 4.2 | 18 | 31 | 34 | 40 | 40 | 48 | 49 | 49 | 54 | 54 |  |
| 4.3 | 18 | 31 | 34 | 40 | 40 | 48 | 50 | 50 | 55 | 55 |  |
| 4.4 | 18 | 31 | 34 | 40 | 40 | 48 | 51 | 51 | 56 | 56 |  |
| 4.5 | 18 | 31 | 34 | 40 | 40 | 48 | 52 | 52 | 57 | 57 |  |
| 4.6 | 18 | 31 | 34 | 40 | 40 | 48 | 52.5 | 52.5 | 57.5 | 57.5 |  |

**Mass Limits – Prime Mover Tandem Drive, Single Axle Dolly**

The sum of the masses on a prime mover tandem drive, single axle dolly combination as described by the number of tyres on each dolly axle, minimum dolly ground contact width and overall axle spacing must be no greater than the mass limits specified in Table 5 for the combination.

**TABLE 5 – PRIME MOVER TANDEM DRIVE – SINGLE AXLE DOLLY COMBINATION MASS LIMITS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Minimum dolly ground contact width (m) | Overall Axle Spacing | | | | | | |
| 2.8 | 3.0 | 3.2 | 3.4 | 3.6 | 3.8 | 4.0 |
| Combination tandem drive - 4 tyred dolly axle mass limit (tonnes) | | | | | | | |
| 2.4 | 25 | 26 | 27 | 28\* | 29\* | 30\* | 30\* |
| Combination tandem drive - 8 tyred dolly axle mass limit (tonnes) | | | | | | | |
| 2.4 | 25 | 26 | 27 | 28 | 29 | 30 | 30 |
| 2.6 | 26 | 27 | 28 | 29 | 30 | 31 | 31 |
| 2.8 | 27 | 28 | 29 | 30 | 31 | 32 | 32 |
| 3.0 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| 3.2 | 29 | 30 | 31 | 32 | 33 | 34 | 35 |
| 3.4 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| 3.6 | 31 | 32 | 33 | 34 | 35 | 36 | 36 |
| 3.8 | 31 | 32 | 33 | 34 | 35.5 | 36.5 | 36.5 |
| 4.0 | 31 | 32 | 33 | 34 | 35.5 | 36.5 | 36.5 |
| 4.2 | 31 | 32 | 33 | 34 | 35.5 | 36.5 | 36.5 |

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**Mass Limits Prime Mover Tandem Drive, Tandem Axle Dolly**

The sum of the masses on a prime mover tandem drive, tandem axle dolly combination as described by the number of tyres on each dolly axle, minimum dolly ground contact width and overall axle spacing must be no greater than the mass limits specified in Table 5 for the combination.

**TABLE 6 - PRIME MOVER TANDEM DRIVE – TANDEM AXLE DOLLY COMBINATION MASS LIMITS**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dolly width | Overall Axle Spacing | | | | | | | | | | | | |
| 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 |
| Combination tandem drive - 4 tyred tandem axle dolly mass limit (tonnes) | | | | | | | | | | | | | |
| 2.4 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38\* | 39\* | 39.5\* | 40\* |
| Combination tandem drive - 8 tyred tandem axle dolly mass limit (tonnes) | | | | | | | | | | | | | |
| 2.4 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 39.5 | 40 |
| 2.6 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 40.5 | 41 |
| 2.8 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 41.5 | 42 |
| 3.0 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 42.5 | 43 |
| 3.2 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 43.5 | 44 |
| 3.4 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 43.5 | 45 | 45.5 |
| 3.6 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 46.5 |
| 3.8 | 35.5 | 36.5 | 37 | 38.5 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 4.0 | 35.5 | 37 | 38 | 39 | 40.5 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 4.2 | 35.5 | 37 | 38 | 39.5 | 41 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 4.4 | 35.5 | 37 | 38 | 39.5 | 41.5 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
| 4.6 | 35.5 | 37 | 38 | 39.5 | 41.5 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |