### Prime mover, engine, and modifier details

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Vehicle make: | | | | Vehicle model: | | | | | | Month and year of manufacture: | | | | | | |
|  | | | |  | | | | | |  | | | | | | |
| VIN (if applicable): | | | | Vehicle chassis no. (if applicable): | | | | | | Vehicle modifier (company name): | | | | | | |
|  | | | |  | | | | | |  | | | | | | |
| Engine make/mode: | | Engine no.: | | | Rated power @ rpm: | | | | Governed rpm: | Max. torque @ rpm: | | | | | | |
|  | |  | | |  | kW @ |  | RPM |  |  | | Nm @ | |  | | RPM |
| Tail shaft series/size: | | | Manufacturers max torque: | | | | | |  | T800 torque @ rpm: | | | | | | |
|  | mm (if applicable) | |  | | | | | Nm |  |  | Nm @ | |  | | RPM | |

### Prime mover component details

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Component | | | | Make/model | | | | | | | | | | | | | Manufacturer’s max. GCM rating | | | | | | | | Low/top ratios | | | | | | | | |
| Transmission | | | |  | | | | | | | | | | | | |  | | | | kg | | | | 1: |  | | | | 1: | |  | |
| Aux. transmission | | | |  | | | | | | | | | | | | |  | | | | kg (if applicable) | | | | 1: |  | | | | 1: | |  | |
| Rear axle(s) | | | |  | | | | | | | | | | | | |  | | | | kg | | | | 1: |  | | | | 1: | |  | |
| Rear suspension | | | |  | | | | | | | | | | | | |  | | | | kg | | | |  | | | | | | | | |
| Front axle(s) | | | |  | | | | | | | | | | | | |  | | | | kg (if applicable) | | | | 1: |  | | | | 1: | |  | |
| Front suspension | | | |  | | | | | | | | | | | | |  | | | | kg (if applicable) | | | |  | | | | | | | | |
| Tyres front | | | |  | | | | | | | | | | | | |  | | | | | | | |  | | | | | | | | |
| Tyres rear | | | |  | | | | | | | | | | | | |  | | | | | | | |  | | | | | | | | |
| Chassis section | | | |  | | | | | | | | | | | | |  | | | | kg | | | |  | | | | | | | | |
| Tow coupling / fifth wheel | | | |  | | | | | | | | | | | | | D-rating | | |  | | | | | | | | | | | kN | | |
| Tow coupling overhang | | | | Applicable: | | | | | | Yes | |  | | No |  | | Amount | | |  | | | | | | | | | | | mm | | |
| Wheelbase | | | | mm | | | | | |  | | | | | | | Rear overhang | | |  | | | | | | | | | | | mm | | |
| B-double prime mover tests | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speed limited by: | | | Gearing | |  | | | Road Speed Governor | | | | | | | |  | | Maximum governed speed: | | | | |  | | | | km/h | | | | | | |
| Brake timing test | | | Combination of vehicles | | | | | |  | | Individual vehicle | | | | |  | | Test results | Application: | | |  | | ms | **Release:** | | | |  | | | | **ms** |
| Startability at GCM |  | % | Gradeability at GCM | | | | | | | | | | % | | | | | Gradeability at 70 km/h, at GCM | | | | | | | | | |  | | | | | % |
| Modified B-double GCM assigned | | | | | | | Vehicle make/model, if used for comparison | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | **kg** |  | | | | | | | | | | | | | | | | | | | | | | | | | | |

### Assessment

| Assessment Check Yes, No, N/A as applicable: | | | | | Yes | | No | N/A | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Is the modified GCM within the component manufacturers’ limits? | | | |  |  | |  | |
| 2 | Are the tow couplings and attachments adequate for the GCM/ATM and do they meet the requirements of the design requirements portion of Modification Code S9? | | | |  |  | |  | |
| **3** | Has gradeability been established to exceed 12% at the modified GCM? | Gradeability rating: |  | % |  |  | | |  |
| 4 | Has startability been established to exceed 15% at the modified GCM? | Startability rating: |  | % |  |  | | |  |
| 5 | Are the ratings of all driveline components adequate for the GCM rating of the B-double? | | | |  |  | |  | |
| 6 | In the case of a prime mover with GCM rating exceeding 42.5 tonnes, does the driveline meet the axle configuration restrictions of the design requirements portion of Modification Code S9? | | | |  |  | |  | |
| 7 | Does the vehicle satisfy the speed limiting requirements of Australian Design Rule (ADR) 65/.. or Modification Code A5 if it is applicable? | | | |  |  | |  | |
| 8 | Does the vehicle meet the brake requirements, including but not limited to trailer signal response time for brake application and release as well as air compressor capacity (if applicable), of the design requirements portion of this code? | | | |  |  | |  | |
| 9 | Are all axle groups on the vehicle ‘conforming’ axle groups and do they comply with the applicable heavy vehicle regulator’s requirements for axle group spacing? | | | |  |  | |  | |
| 10 | Do the vehicle's dimensions meet the requirements of the design requirements portion of Modification Code S9? | | | |  |  | |  | |
| 11 | Does the vehicle meet the electrical requirements of the design requirements portion of Modification Code S9? | | | |  |  | |  | |
| 12 | Is the vehicle in satisfactory mechanical condition? | | | |  |  | |  | |

### Advanced braking systems

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Braking systems Check Yes, No, N/A as applicable: | | Yes | No | N/A |
| 1 | Is the advanced braking system (where fitted) un-affected or re-certified after the vehicle modification? |  |  |  |

### Compliance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Modification Check Yes, No as applicable: | | Yes | No | N/A |
| 1 | Does this modification meet all the requirements of the manufacturer’s guidelines / Modification Code S8? |  |  |  |
| 2 | Does the vehicle meet the requirements of ADR 64/.. ? |  |  |  |
| 3 | Are all supporting modifications performed and certified in accordance with the relevant sections of VSB6? |  |  |  |
| 4 | Is the vehicle in satisfactory mechanical condition? |  |  |  |
| 5 | Are all supporting modifications performed and certified in accordance with the relevant sections of VSB6? |  |  |  |
| 6 | Is the quality of the work to an accepted industry standard? |  |  |  |
| 7 | Does the vehicle continue to comply with ADRs and heavy vehicle standards regulations affected by the modification? |  |  |  |

### Authorisation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **If the answer to any relevant question is NO, the modification is not acceptable.** | | | | |
| **Comments:** |  | | | |
| Examined by: | | Company (if applicable): | | AVE no.: |
|  | |  | |  |
| Signed: | | Modification certificate no.: | Modification plate no.: | Date: |
|  | |  |  |  |