

HEAVY VEHICLE MODIFICATIONS

Checklist P2

FIFTH WHEEL KING PIN INSTALLATION

1.0 Coupling Selection**(Y=Yes, N=No, N/A=Not Applicable)**

1.1 Based on the D-Value rating of the fifth wheel manufacturer's strength rating, is the fifth wheel of sufficient capacity for the maximum legal GCM for the vehicle combination?

1.2 Is the type of fifth wheel suitable for the application of the vehicle combination?

2.0 Coupling Installation

2.1 Is there at least 5mm clearance between the base plate/sub chassis and chassis flange?

2.2 If the base plate is made of flat plate, is it at least 12 mm thick, or if a "ripple" plate is used, is it constructed as per Figure 7 of this Section?

2.3 Do at least four M20 (3/4") or six M16 (5/8") bolts per side secure the attachment angles/fishplates to the web of the chassis rail?

2.4 Do at least four M20 (3/4") or six M16 (5/8") bolts per side, or at least 450mm (total) of 10mm fillet weld per side, secure the base plate to the attachment angles/fishplates?

2.5 Do at least four M20 (3/4") or six M16 (5/8") bolts per fifth wheel foot, or at least 450mm (total) of 10mm fillet weld per fifth wheel foot, secure the feet to the base plate?

2.6 Are the attachment bolts ISO grade 8.8 (SAE Grade 5) or stronger?

2.7 Does each bolt have a nut suitably locked onto it?

1.8 Is a hardened washer situated under each nut?

2.9 In the case of an aluminium alloy chassis, is a hardened washer situated under each nut and bolt head?

2.10 Is bolt hole clearance less than 1mm?

2.11 If the attachment angles are cut to accommodate a spring hanger, is there at least one bolt in close proximity to each side of the cutout, and are all bolts at least 50 mm rearward of the rear edge of the base plate?

2.12 Is the length of the attachment angle (or fishplate overall spacing) greater than the chassis width?

2.13 On the attachment angle or fishplates, is there at least one bolt at least 50 mm forward of the leading edge of the base plate, and at least one bolt at least 50mm rearward of the rear edge of the base plate?

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- 2.14 If attachment angles are used, are they at least 100 x 75 x 10 mm (4 x 3 x 3/8") in dimension?
- 2.15 If fishplates are used, is the thickness of the plates at least 10mm, and are all bolt holes at least 50 mm from all edges?
- 3.0 Sliding Assemblies**
- 3.1 If a sliding fifth wheel assembly is used, is at least one bolt located at or beyond each end of travel of the slide plate?
- 3.2 Are slide stops on both slide rails attached at each end of travel?
- 3.3 Is each slide stop secured by at least one grade 8.8 M16 bolt, or a total of 125 mm of 10 mm weld on three sides of the stop?
- 3.4 Is the stop face of the slide stop free from weld?
- 3.5 Is the locking mechanism of the sliding fifth wheel assembly a positive locking type?
- 4.0 "B" Doubles.**
- 4.1 If the vehicle is for "B" Double application, is the fifth wheel a single plate, single oscillating type?
- 5.0 King Pins**
- 5.1 Is the king pin installed as per the king pin manufacturer's instructions?
- 5.2 Is the D Value of the king pin equal to or greater than that required for the rating of the trailer and its installation in conformance with the manufacturers recommendations?
- 5.3 Does the king pin have the correct protrusion below the trailer skid plate or wear plate?
- 5.4 Is the king pin within the dimensional limits given by AS/NZS 4968.3:2011?
- 5.5 If any machining has been performed on the king pin, has it been performed in accordance with the manufacturer's specifications?
- 6.0 General**
- 6.1 Are all components and workmanship in accordance with the relevant Australian Standards mentioned in this section and the Australian Design Rules for Motor Vehicle Safety - 2nd and 3rd Edition?

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- Even if the answer to question 4.1 on “B” Doubles is “NO”, a “Centre of Gravity Compensating” fifth wheel may be acceptable for a vehicle with a high torsional stiffness (i.e. tanker, freezer van). Double oscillating fifth wheels, however, are NOT acceptable.

Make:

Model: Year of Manufacture:

Vehicle Chassis No/VIN:

Vehicle Modifier:

Examined by:

Company (if applicable):

Certifying Officer No:

Modification Cert No:

Signed:
(When Printed)

Date: