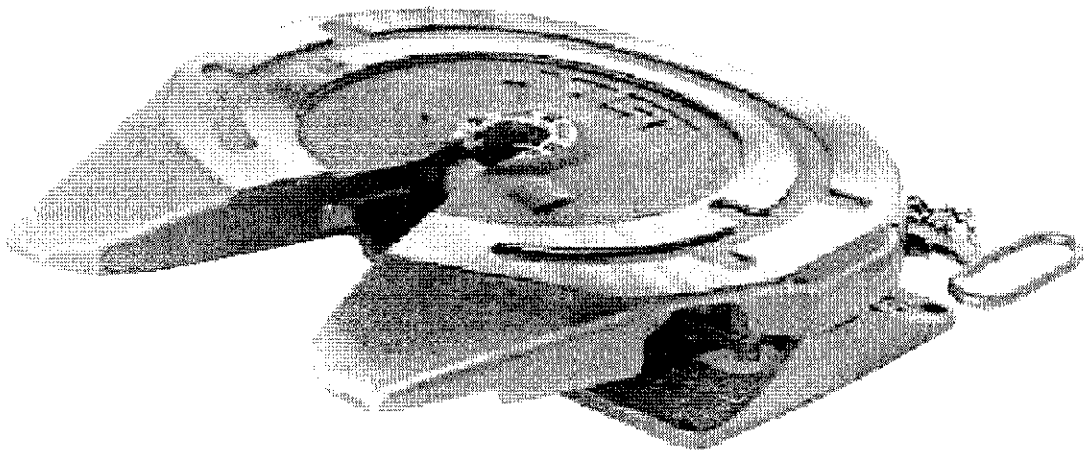


JSK 36 C

JOIST



Fifth wheel couplings
2"



Report to Jost Australia

February 08 **00**

FORS. COMPONENT REGISTRATION # (C.C.1) H 358

SUMMARY OF EVIDENCE REPORT: JOST JSK 36 CV 50MM FIFTH WHEEL ASSEMBLY

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*This document is confidential
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commercial information*

Roaduser International Report 00-474-JSK36CV(2)

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SUMMARY OF EVIDENCE REPORT: JOST JSK 36 CV 50MM FIFTH WHEEL ASSEMBLY

1 INTRODUCTION

The purpose of this report is to certify the performance of the Jost JSK36CV 50mm fifth wheel assembly to the dynamic test and static overturning moment test requirements of AS 1773-1996 ARTICULATED VEHICLES-FIFTH WHEEL ASSEMBLIES (Appendix B & C respectively).

2 FIFTH WHEEL COMPONENTS

Table 1 shows a list of the JSK 36 CV fifth wheel assembly components with an assembly D-value of 190 kN.

Table 1 Fifth Wheel Components with an Assembly D-value of 190 kN

Component	Part No.	D-Rating (kN)	Dynamic Test Report No	Overturning Moment Test Report No	Notes
Coupler Plate	JSK36CV	190	98-418-01	92-93-36	50mm jaw
Feet	SK2104-01	190	00-474-SK2104	00-474-SK2104	185mm bolt-on
	SK2104-01X	190	00-474-SK2104	00-474-SK2104	185mm weldable
	SK2104-02	190	00-474-SK2104	00-474-SK2104	150mm bolt-on
	SK2104-02X	190	00-474-SK2104	00-474-SK2104	150mm weldable
	SK2104-21	190	00-474-SK2104	00-474-SK2104	170mm bolt-on
Base plates	MPA 0118	260	00-474-FLAT	00-474-FLAT	16mm flat plate
	MPA 0119	260	00-474-FLAT	00-474-FLAT	20mm flat plate
	MPA 4111/350	190	00-474-RIPPLE	00-474-RIPPLE	40mm ripple plate

Table 2 shows a list of the JSK 36 CV fifth wheel assembly components with an assembly D-value of 163 kN.

Table 2 Fifth Wheel Components with an Assembly D-value of 163 kN

Component	Part No.	D-Rating (kN)	Dynamic Test Report No	Overturning Moment Test Report No	Notes
Coupler Plate	JSK36CV	190	98-418-01	92-93-36	50mm jaw
Feet	SK2104-14	163	00-600-02	00-600-02	250mm bolt-on
	SK2104-20	163	00-600-02	00-600-02	300mm bolt-on
Base plates	MPA 0115	163	00-474-FLAT	00-474-FLAT	12mm flat plate
	MPA 0118	260	00-474-FLAT	00-474-FLAT	16mm flat plate
	MPA 0119	260	00-474-FLAT	00-474-FLAT	20mm flat plate
	MPA 4111/350	190	00-474-RIPPLE	00-474-RIPPLE	40mm ripple plate
	MPA 2101	163	00-474-RIPPLE	00-474-RIPPLE	22mm ripple plate
	MPA 2103/350	163	00-474-RIPPLE	00-474-RIPPLE	22mm ripple plate
MPA 5111/350	163	00-474-RIPPLE	00-474-RIPPLE	50mm ripple plate	

SUMMARY OF EVIDENCE REPORT: JOST JSK 36 CV 50MM FIFTH WHEEL ASSEMBLY

Table 3 shows a list of the JSK 36 CV fifth wheel assembly components with an assembly D-value of 108 kN.

Table 3 Fifth Wheel Components with an Assembly D-value of 108 kN

Component	Part No.	D-Rating (kN)	Dynamic Test Report No	Overturning Moment Test Report No	Notes
Coupler Plate	JSK36CV	190	98-418-01	92-93-36	50mm jaw
Feet	SK2104-01	190	00-474-SK2104	00-474-SK2104	185mm bolt-on
	SK2104-01X	190	00-474-SK2104	00-474-SK2104	185mm weldable
	SK2104-02	190	00-474-SK2104	00-474-SK2104	150mm bolt-on
	SK2104-02X	190	00-474-SK2104	00-474-SK2104	150mm weldable
	SK2104-14	163	00-600-02	00-600-02	250mm bolt-on
Base plates	SK2104-21	190	00-474-SK2104	00-474-SK2104	170mm bolt-on
	MPA 1101/350	108	00-474-RIPPLE	00-474-RIPPLE	100mm ripple plate
	MPA 1103/350	108	00-474-RIPPLE	00-474-RIPPLE	100mm ripple plate
	MPA 6503/350	108	00-474-RIPPLE	00-474-RIPPLE	65mm ripple plate

1 D-RATING AND TEST LOADS

Each of the components listed in Table 1 has passed dynamic testing for a minimum D-rating of 190 kN. This implies that the test loads applied were equal to or greater than those shown in Table 4.

Table 4 Fifth Wheel Assembly Test Loads for 190 kN D-rating

Load Direction	Magnitude (kN)	Frequency (Hz)	Total Cycles
Longitudinal	+/- 114	2.1	2.1×10^6
Vertical	110 to 165	2.0	2.0×10^6

Each of the components listed in Table 2 has passed dynamic testing for a minimum D-rating of 163 kN. This implies that the test loads applied were equal to or greater than those shown in Table 5.

Table 5 Fifth Wheel Assembly Test Loads for 163 kN D-rating

Load Direction	Magnitude (kN)	Frequency (Hz)	Total Cycles
Longitudinal	+/- 97.8	2.1	2.1×10^6
Vertical	110 to 165	2.0	2.0×10^6

Each of the components listed in Table 3 has passed dynamic testing for a minimum D-rating of 108 kN. This implies that the test loads applied were equal to or greater than those shown in Table 6.

Table 6 Fifth Wheel Assembly Test Loads for 108 kN D-rating

Load Direction	Magnitude (kN)	Frequency (Hz)	Total Cycles
Longitudinal	+/- 64.8	2.1	2.1×10^6
Vertical	98 to 147	2.0	2.0×10^6

Each component has withstood a static overturning moment of 112 kN.m for a time in excess of 10 seconds.

SUMMARY OF EVIDENCE REPORT: JOST JSK 36 CV 50MM FIFTH WHEEL ASSEMBLY

4 CERTIFICATION

The performance of the Jost JSK36CV 50mm fifth wheel assembly is rated to the dynamic test requirements of AS 1773-1996 ARTICULATED VEHICLES-FIFTH WHEEL ASSEMBLIES (Appendix B), for the D-ratings shown in Table 1, Table 2 and Table 3.

The performance of the Jost JSK36CV 50mm fifth wheel assembly is rated to the overturning moment test requirements of AS 1773-1996 ARTICULATED VEHICLES-FIFTH WHEEL ASSEMBLIES (Appendix C), for an overturning moment of 112 kN.m.

5 REFERENCES

- (1) Sweatman, P. Komadina, J. Dynamic Test of Jost JSK36CV 50mm Fifth Wheel Assembly, Roaduser International Report 98-418-01.
- (2) Sweatman, P. Static Overturning Moment Test on Jost SO36CV Turntable-base Fifth Wheel Assembly, Roaduser Research Report 92-93-36.
- (3) Kennington, G. Sweatman, P. (2000) D-rating of the Jost SK2104 Range of Fifth Wheel Feet, Roaduser International Report 00-474-SK2104.
- (4) Kennington, G. DiCristoforo, R. Sweatman, P. (2000) D-Rating of Jost Flat Fifth Wheel Base Plates, Roaduser International Report 00-474-FLAT
- (5) Kennington, G. DiCristoforo, R. Sweatman, P. (2000) D-Rating of the Jost Ripple Fifth Wheel Base Plates, Roaduser International Report 00-474-RIPPLE
- (6) Kennington, G. Sweatman, P. (2000) Finite Element Analysis of the Jost SK2104-14 and SK2104-20 Cast Fifth Wheel Pedestals, Roaduser International Report 00-600-02.