

Appendix

Development of a six-wheel drive vehicle: A comparative study on steering performance

Abd Rahim Shuib, Mohd Azwan Mohd Bakri, Mohd Khairul Fadzly Md Radzi

Appendix 1.

Technical specifications of 6WD with 4WS transporter

Item	Specifications
Engine	KUBOTA Diesel V2203-E, 4-cylinder, naturally aspirated, water cooled Bore x stroke (mm), 87 X 92.4 with a displacement of 2197 cc Rated Power (Pr), 45.3 Hp @ 3000 rpm
Transmission	EATON MD 72400 hydrostatic tandem pump, piston-type Max. displacement, 41 cc/rev. Max. operating pressure 280 bar
Steering System	Fully hydrostatic front and rear wheel steering
Traveling motor	6000 series CHAR LYNN @245 cc/rev
Axle ratio	4.67 : 1, traveling motor coupled direct to axle
Wheel	Permanently engaged 6-wheels drive with independent rocking arm assembly bar mounted for middle and rear axle. The front axle is oscillating to ease the steering.
Tyres	Six equal size tyres 12.4 -16 - 6 ply (traction lugged)
Fuel Tank, L	50
Oil Tank, L	110
Overall	Length, mm 4990
Dimensions	Width, mm 1990
	Height, mm 2815
	Maximum dumping height, mm 750
	Payload, kg 1000
Mass, kg	2700