

# TECHNICAL SPECIFICATIONS - CHASSIS KTM 640 DUKE 2001

Frame	Central chrome-moly-steel frame
Fork	type . . . . . WP - USD 43 Multi adjuster 0518U795 wheel travel . . . . . 140 mm (5,5 in) standard adjustment compression. . . . . driver only = 14, with passenger = 14 standard adjustment rebound. . . . . driver only = 16, with passenger = 16 fork leg projection upper fork bridge . . . . . 3 mm (0,12 in) oil capacity per fork leg . . . . . appr. 400 ccm (24 cubic in) / SAE 5 air chamber length . . . . . 100 mm (4 in)
Rear suspension	WP central shock absorber with PRO-LEVER linkage to rear- swing-arm with needle bearing
Shock absorber	type . . . . . WP central shock absorber BAVP 118Q785 rear wheel travel . . . . . 170 mm (6.7 in) standard adjustment compression. . . . . driver only = 3, with passenger = 5 standard adjustment rebound. . . . . driver only = 5, with passenger = 3 spring preload . . . . . driver only = 23 mm (0.9 in), with passenger = 28 mm (1.1 in) spring type . . . . . 70 - 260
Front brake	Disc brake with carbon-steel brake disc Ø 320 mm (12,6 in) and 4-piston brake caliper
Rear brake	Disc brake with carbon-steel brake disc Ø 220 mm (8,7 in) and single-piston brake caliper floated
Tyres	front: 120/70 R 17 58H <span style="float: right;">rear: 160/60 R 17 69H</span>
Air pressure rider only	2.0 bar (29 psi) <span style="float: right;">2.2 bar (32 psi)</span>
Air pressure with passenger	2.2 bar (32 psi) <span style="float: right;">2.4 bar (35 psi)</span>
Fuel tank capacity	11 liter (2,9 US gallons), out of this 2,5 liter (0,6 US gallons) reserve
Final drive ratio	17 : 38
Chain	O-ring 5/8 x 1/4"
Lamps	low beam . . . . . HB3 12V 65W (socket P20d) high beam . . . . . HB3 12V 65W (socket P20d) parking light . . . . . 12V 5W (socket W2,1x9,5d) speedometer, tachometer light . . . . . 12V 1,2W (socket W2x4,6d) indicator lamp . . . . . 12V 1,2W (socket W2x4,6d) stop and taillight . . . . . 12V 21/5W (socket BaY15d) flasher . . . . . 12V 10W (socket Ba15s)
Battery	maintenance-free battery 12V 8Ah
Steering angle	64,2°
Wheel base	1460 ± 15 mm (57.5 ± 0.6 in)
Seat high	860 mm (33.9 in)
Ground clearance	250 mm (9.9 in)
Dead weight without fuel	145 kg (3 lbs)
Max. permissible front axle load	150 kg (2 lbs)
Max. permissible rear axle load	200 kg (4 lbs)
Max. permissible laden weight	350 kg (773 lbs)

# TECHNICAL SPECIFICATIONS - CHASSIS 640 DUKE 2001 USA, AUS

Frame	Central chrome-moly-steel frame
Fork	type . . . . . WP - USD 43 Top adjuster 518T780 wheel travel . . . . . 140 mm (5,5 in) standard adjustment compression. . . . . driver only = 14, with passenger = 14 standard adjustment rebound. . . . . driver only = 14, with passenger = 14 fork leg projection upper fork bridge . . . . . 3 mm (0,12 in) oil capacity per fork leg . . . . . appr. 400 ccm (45 cubic in) / SAE 5 air chamber length . . . . . 100 mm (4 in)
Rear suspension	WP central shock absorber with PRO-LEVER linkage to rear- swing-arm with needle bearing
Shock absorber	type . . . . . WP central shock absorber BAVP 118Q785 rear wheel travel . . . . . 170 mm (6.7 in) standard adjustment compression. . . . . driver only = 3, with passenger = 5 standard adjustment rebound. . . . . driver only = 5, with passenger = 3 spring preload . . . . . driver only = 23 mm (0.9 in), with passenger = 28 mm (1.1 in) spring type . . . . . 70 - 260
Front brake	Disc brake with carbon-steel brake disc Ø 320 mm (12,6 in) and 4-piston brake caliper
Rear brake	Disc brake with carbon-steel brake disc Ø 220 mm (8,7 in) and single-piston brake caliper floated
Tyres	front: 120/70 R 17 58H rear: 160/60 R 17 69H
Air pressure rider only	2.0 bar (29 psi) 2.2 bar (32 psi)
Air pressure with passenger	2.2 bar (32 psi) 2.4 bar (35 psi)
Fuel tank capacity	12 liter (3,2 US gallons), out of this 2,5 liter (0,6 US gallons) reserve
Final drive ratio	17 : 38
Chain	O-ring 5/8 x 1/4"
Lamps	low beam . . . . . HB3 12V 65W (socket P20d) high beam . . . . . HB3 12V 65W (socket P20d) parking light . . . . . 12V 5W (socket W2,1x9,5d) speedometer, tachometer light . . . . . 12V 1,2W (socket W2x4,6d) indicator lamp . . . . . 12V 1,2W (socket W2x4,6d) stop and taillight . . . . . 12V 21/5W (socket BaY15d) flasher . . . . . 12V 10W (socket Ba15s)
Battery	maintenance-free battery 12V 8Ah
Steering angle	64,2°
Wheel base	1460 ± 15 mm (57.5 ± 0.6 in)
Seat high	860 mm (33.9 in)
Ground clearance	250 mm (9.9 in)
Dead weight without fuel	145 kg (3 lbs)
Max. permissible front axle load	150 kg (2 lbs)
Max. permissible rear axle load	200 kg (4 lbs)
Max. permissible laden weight	350 kg (773 lbs)

<b>TIGHTENING TORQUES - ENGINE</b>			
Hexagon nut at primary gear	M20x1,5	Loctite 243 + 170 Nm	(125 ft.lb)
Collar nut flywheel (LC4, ADVENT, DUKE)	M16x1,25 left	80° C + 150 Nm	(110 ft.lb)
Collar nut flywheel (SC, SXC)	M12x1 left	60 Nm	(44 ft.lb)
Hexagon nut for inner clutch hub	M18x1,5	Loctite 648 + 80 Nm	(59ft.lb)
Kickstarter stop screw	M12x1,5	50 Nm	(37ft.lb)
Allan head screw freewheel hub (E-STARTER)	M6x12/M6x12,5	Loctite 648 + 18 Nm	(13ft.lb)
Allan head screw oil pumps	M6	Loctite 243 + 8 Nm	(6ft.lb)
Hexagon screw camshaft gear	M10	Loctite 243 + 35 Nm	(25ft.lb)
Allan head screw cylinder head top sect.(SC, SXC)	M6x25	8 Nm	(6ft.lb)
Allan head screw cylinder head top sect.(LC4,ADVENT,DUKE)	M6x25/M6x65/M6x70 (8.8)	8 Nm	(6ft.lb)
Allan head screw cylinder head top sect.	M6x50/M6x55 (12.9)	20 Nm	(15ft.lb)
Allan head screw cylinder head top sect.(SC, SXC)	M6x65/M6x70 (8.8)	8 Nm	(6ft.lb)
Cylinder head screws	M10	50 Nm	(37ft.lb)
Collar nuts at cylinder base	M10	40 Nm	(30ft.lb)
Hexagon screw chain sprocket	M10	Loctite 243 + 40 Nm	(30ft.lb)
Oil drain plug	M22x1,5	30 Nm	(22ft.lb)
Magnetic plug	M12x1,5	20 Nm	(15ft.lb)
Plug bypass valve	M12x1,5	20 Nm	(15ft.lb)
Hollow screws oil lines	M8x1	10 Nm	(7ft.lb)
Hollow screws oil lines	M10x1	15 Nm	(11ft.lb)
Jet screw clutch cover	M8	10 Nm	(7ft.lb)
Screw plug timing-chain tensioner	M12x1,5	20 Nm	(15ft.lb)
Counternuts valve adjusting screws	M7x0,75	20 Nm	(15ft.lb)
Crankshaft locking bolt	M8	25 Nm	(19ft.lb)
Spark plug	M12x1,25	20 Nm	(15ft.lb)
Engine mounting bolt	M8	40 Nm	(30ft.lb)
Engine mounting bolt	M10	70 Nm	(52ft.lb)

<b>TIGHTENING TORQUES - CHASSIS</b>			
Collar nut front axle	M16x1,5, M17	40 Nm	(30ft.lb)
Collar nut front axle (400 SXC)	M10	40 Nm	(30ft.lb)
Collar nut rear axle	M20x1,5	80 Nm	(59ft.lb)
Shock absorber top	M10	45 Nm	(33ft.lb)
Shock absorber bottom	M10	45 Nm	(33ft.lb)
Collar screws brake disk front	M6	Loctite 243 + 10Nm	(7ft.lb)
Collar screws brake disk rear	M6	Loctite 243 + 10Nm	(7ft.lb)
Screw brake caliper front	M8	Loctite 243 + 25 Nm	(19ft.lb)
Allan head screw brake caliper front (DUKE)	M10x1,25	Loctite 243 + 45 Nm	(33ft.lb)
Allan head screw brake caliper support rear (DUKE)	M10	40 Nm	(37ft.lb)
Bearing bolt linkage arm/frame	M12	60 Nm	(44ft.lb)
Collar nuts rocker arm bolts	M14x1,5	100 Nm	(74ft.lb)
Engine mounting screw	M10	45 Nm	(33ft.lb)
Ball joint for push rod	M8	Loctite 243 + 25 Nm	(19ft.lb)
Sprocket screws on nuts	M8	Loctite 243 + 35 Nm	(25ft.lb)
Collar nut swingarm bolt	M14x1,5	100 Nm	(74ft.lb)
Clamping screws top triple clamp (USD 43)	M8	20 Nm	(15ft.lb)
Clamping screws top triple clamp (EXTREME)	M8	15 Nm	(11ft.lb)
Clamping screws top triple clamp (USD 48)			
Clamping screws bottom triple clamp (USD 43)	M8	15 Nm	(11ft.lb)
Clamping screws bottom triple clamp (EXTREME)	M8	20 Nm	(15ft.lb)
Clamping screws bottom triple clamp (USD 48)			
Clamping screws fork stubs	M8	10 Nm	(7ft.lb)
Collar nut for eccentric chain adjuster (DUKE)	M10	40 Nm	(30ft.lb)
Screws handlebar clamp	M8	Loctite 243 + 20 Nm	(15ft.lb)
Allan head screw handle bar support	M10	Loctite 243 + 40 Nm	(30ft.lb)
Other screws on chassis	M6	10 Nm	(7ft.lb)
	M8	25 Nm	(19ft.lb)
	M10	45 Nm	(33ft.lb)
Other collar nuts on chassis	M6	15 Nm	(11ft.lb)
	M8	30 Nm	(22ft.lb)
	M10	50 Nm	(37ft.lb)