# Features & Specifications 2018 KingQuad 750AXi Power Steering



# Introduction

- Three decades of ATV manufacturing experience has led to the 2018 KingQuad 750AXi Power Steering, Suzuki's most powerful and technologically advanced ATV. Abundant torque developed by the 722cc fuel-injected engine gives the KingQuad the get up and go that's a must-have for Utility Sport ATVs.
- The advanced Power Steering feature provides responsive handling, and the easiest maneuverability available. With an independent rear suspension, locking front differential, and a handful of other features, the KingQuad 750AXi Power Steering comes loaded with all the necessities to make sure you get the job done. If you're looking for a utility sport ATV, find out what makes this Suzuki worthy of the name KingQuad.

# **Engine Features**

- The powerful 722cc, DOHC, single-cylinder, liquid-cooled, four-stroke engine is tuned to deliver strong low-to-mid range torque as well as high-rpm power.
- The cylinder and head are canted forward for a low center of gravity resulting in reduced engine height and lower seat height. High-mount air intake avoids water and debris.
- The 4-valve cylinder head has large 36mm intake valves and straight ports for superb cylinder charging efficiency. A sportbike-derived chain-and-gear camshaft drive system creates a compact cylinder head.
- A lightweight aluminum cylinder uses SCEM (Suzuki Composite Electrochemical Material) coating for excellent heat transfer and ring sealing resulting in superb combustion chamber efficiency.
- The engine also features dual balancer shafts for smooth operation.
- Advanced Suzuki Fuel Injection improves throttle response and fuel efficiency, while delivering power consistently across the full rev-range, and improves engine starting in all conditions.
- High capacity aluminum radiator with large diameter, thermostatically controlled cooling fan provides stable engine operating temperature.

# **Transmission Features**

- The Quadmatic<sup>™</sup> CVT-type automatic transmission provides versatility and convenience with a fender-mounted gate-type shifter for high/low range selection. Its advanced engine-braking system minimizes free-wheeling with the throttle off and helps control the vehicle during steep descents.
- A compact torque-sensing limited-slip front differential offers potent traction plus light steering. A differential-lock system provides serious four-wheel-drive traction.
- Handlebar-mounted push-button controls permit easy selection between 2WD, 4WD and differentiallock 4WD. An override button on the left handlebar can be used to override the normal speed limiter when stuck in the mud.

# **Chassis Features**

- Stylish bodywork features high-clearance fenders that offer great protection for the rider from flying debris. Refined panels simplify maintenance needs, such as oil level checks.
- Independent double A-arm front suspension (6.7 inches of wheel travel) includes large diameter shock absorbers with 5-way spring preload adjustment.
- Fully independent, A-arm/I-beam rear suspension with 7.7 inches of wheel travel includes large diameter shock absorbers with 5-way spring preload adjustment and large YT9: Flame Red diameter rear sway-bar.



CT I A I K

- Dual hydraulic front disc brakes plus a sealed, multi-plate rear brake system. The rear brake's clutch-type design provides high durability, reduced unsprung weight and low-maintenance.
- High traction 25-inch CARLISLE tires are mounted on strong, yet lightweight, aluminum wheels.
- Suzuki's plush T-shaped seat delivers rider mobility during spirited or difficult terrain riding.
- Reduced effort from the Power Steering permits higher handlebars for increased rider comfort.
- Polyethylene skid plates provide protection with minimal resistance over rocks and rough terrain. Durable plastic guards protect the front and rear half shafts.

# **Utility/Convenience Features**

- Dual 35W headlights (with high and low settings) are part of the distinctive KINGQUAD grille appearance. Bright tail light help make the ATV visible in dark conditions.
- Standard tow hitch, ready to accept a No. 1 type ball, lets you take advantage of the ATV's strong towing capacity.
- Winch-ready mounts and wire conduit makes winch installation simple.
- Instrumentation includes LCD readouts for speedometer, odometer, twin tripmeter, hour meter, clock, fuel level, driving range and drive mode. LED indicators for high, low, neutral, reverse and 2WD/4WD and differential-locked 4WD. LED cautions for fuel injection and engine temperature.
- High-output, three-phase charging system feeds an 18-amp maintenance-free battery for abundant power for easy starting and accessory use. A sealed 12V accessory outlet is standard.
- The large 4.6 gallon (17.5 L) fuel tank is positioned for a low center-of-gravity. It includes a vacuumoperated petcock and a ratchet-style filler cap (which prevents over tightening so it can be easily unscrewed for refilling).
- A large 2.8 liter water resistant front storage compartment includes an easy access screw-on cap.
- The rugged steel-tube cargo racks have wrinkle paint finish for durability and scratch resistance.
- Full floorboards with integrated raised footpegs provide protection.

# **Additional Features**

- A variety of Suzuki Genuine Accessories are available, including winches, windshield, front and rear bumpers, snow plow, aluminum skid pans, rack extensions, utility box and more.
- 12-month limited warranty
- For more details, please visit <u>www.suzukicycles.com</u>.

# **Specifications LT-A750XPL8** E-03: USA, E-33: California

#### DIMENSIONS AND CURB MASS

Overall length	2115 mm (83.3 in)
Overall width	1210 mm (47.6 in)
Overall height	1285 mm (50.6 in)
Wheelbase	1285 mm (50.6 in)
Front track	940 mm (37.0 in)
Rear track	920 mm (36.2 in)
Ground clearance	260 mm (10.2 in)
Seat height	920 mm (36.2 in)
Curb mass	305 kg (672 lbs)

#### ENGINE

Туре	4-stroke, liquid-cooled, DOHC
Number of cylinders	
Bore	104.0 mm (4.094 in)
Stroke	85.0 mm (3.346 in)
Displacement	722 cm <sup>3</sup> (44.1 cu. in)
Compression ratio	9.9 : 1
Fuel system	Fuel injection
Air cleaner	Paper element and Polyurethane form element
Starter system	Electric
Lubrication system	Wet sump
Idle speed	1400 ± 100 r/min

#### **DRIVE TRAIN**

Clutch	
Transmission	Automatic variable ratio (V-belt)
Transfer	2-speed forward with reverse
Gearshift pattern, Transmission	Automatic
Transfer	L-H-N-R (Hand operated)
Automatic transmission ratio	2.763 - 0.779 (Variable change)
Secondary reduction ratio	2.158 (40/21×17/15)
Final reduction ratio (Front & Rear)	3.600 (36/10)
Transfer gear ratio, Low	2.562 (41/16)
- High	1.240 (31/25)
Reverse	1.882 (32/17)
Drive system	

# **Specifications LT-A750XPL8** E-03: USA, E-33: California

#### CHASSIS

Front suspension Rear suspension	
Front wheel travel	
Rear wheel travel	
Caster	
Trail	16.7 mm (0.66 in)
Toe-out	
Camber	-1.3°
Steering angle	46° (right & left)
Turning radius	3.1 m (10.2 ft)
Front brake	Disc brake, twin
Rear brake	Sealed oil-bathed multi-disc
Front tire	AT25 × 8-12☆☆, tubeless
Rear tire	-

#### ELECTRICAL

#### CAPACITIES

Fuel tank	17.5 L (4.6/3.8 US/Imp gal)
Engine oil , oil change	2300 ml (2.4/2.0 US/Imp qt)
with filter change	
overhaul	
Differential gear oil	500 ml (16.9/17.6 US/Imp oz)
Final gear oil	770 ml (26.0/27.1 US/Imp oz)
Coolant	



# Service Data LT-A750XPL8 E-03: USA, E-33: California

#### Valve + Valve Guide

Unit: mm (in)

Item		Standard	Limit
Valve diam.	IN.	36.0 (1.42)	—
	EX.	33.0 (1.30)	—
Tappet clearance (When cold)	IN.	0.10 - 0.20 (0.004 - 0.008)	—
Tapper clearance (when cold)	EX.	0.20 - 0.30 (0.008 - 0.012)	—
Valve guide to valve stem clearance	IN.	0.010 - 0.037 (0.0004 - 0.0015)	—
5	EX.	0.030 - 0.057 (0.0012 - 0.0022)	—
Valve guide I.D.	IN. & EX.	5.500 - 5.512 (0.2165 - 0.2170)	—
Valve stem O.D.	IN.	5.475 – 5.490 (0.2156 – 0.2161)	—
	EX.	5.455 – 5.470 (0.2148 – 0.2154)	—
Valve stem deflection	IN. & EX.	—	0.35 (0.014)
Valve stem runout	IN. & EX.		0.05 (0.002)
Valve head thickness	IN. & EX.		0.5 (0.02)
Valve seat width	IN. & EX.	0.9 – 1.1 (0.035 – 0.043)	—
Valve head radial runout	IN. & EX.		0.03 (0.001)
Valve spring free length	IN. & EX.		46.1 (1.81)
Valve spring tension	IN. & EX.	182 – 210 N (18.6 – 21.4 kgf, 41.0 – 47.2 lbs) at length 36.35 mm (1.43 in)	_

### Camshaft + Cylinder Head

Unit: mm (in)

Item		Limit	
Cam height	IN.	36.330 – 36.380 (1.4303 – 1.4323)	36.030 (1.4185)
Camheight	EX.	35.300 – 35.350 (1.3898 – 1.3917)	35.000 (1.3780)
Camshaft journal oil clearance	IN. & EX.	0.019 – 0.053 (0.0007 – 0.0021)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.	22.012 – 22.025 (0.8666 – 0.8671)	—
Camshaft journal O.D.	IN. & EX.	21.972 – 21.993 (0.8650 – 0.8659)	—
Camshaft runout	IN. & EX.		0.10 (0.004)
Cylinder head distortion			0.05 (0.002)
Cam drive idle gear/sprocket thrust	0.15 – 0.27 (0.006 – 0.011)		
clearance			

GILL

# **Cylinder + Piston + Piston Ring** Unit: mm (in)

ltem			Standard	Limit
Compression pressure (Automatic-decomp. actuated)		Approx. 1 000 kPa (10.0 kgf/cm², 142 psi)		—
Piston-to-cylinder clearance			0.030 - 0.040 (0.0012 - 0.0016)	0.120 (0.0047)
Cylinder bore		1	04.000 - 104.015 (4.0945 - 4.0951)	Nicks or Scratches
Piston diam.			03.965 – 103.980 (4.0931 – 4.0937) sure at 15 mm (0.6 in) from the skirt end.	103.880 (4.0898)
Cylinder distortion				0.05 (0.002)
Piston ring free end gap	1st	R	Approx. 13.1 (0.52)	10.5 (0.41)
Fision ning nee end gap	2nd	RN	Approx. 14.6 (0.57)	11.7 (0.46)
Piston ring end gap	1st	R	0.10 - 0.25 (0.004 - 0.010)	0.50 (0.020)
Fision ning end gap	2nd	RN	0.10 - 0.25 (0.004 - 0.010)	0.50 (0.020)
Piston ring-to-groove clearance	1	st	_	0.180 (0.0071)
Fision ning-to-groove clearance	21	nd	—	0.150 (0.0059)
	1	ct	0.83 – 0.85 (0.0327 – 0.0335)	
Piston ring groove width	1st		1.30 – 1.32 (0.0512 – 0.0520)	
	21	nd	1.01 – 1.03 (0.0398 – 0.0406)	—
	C	Dil	2.01 – 2.03 (0.0791 – 0.0799)	—
	1st -		0.76 – 0.81 (0.0299 – 0.0319)	—
Piston ring thickness	1	150	1.08 – 1.10 (0.0425 – 0.0433)	—
	21	nd	0.97 – 0.99 (0.0382 – 0.0390)	
Piston pin bore I.D.		23.002 - 23.008 (0.9056 - 0.9058)		23.030 (0.9067)
Piston pin O.D.			22.995 - 23.000 (0.9053 - 0.9055)	22.980 (0.9047)

## Conrod + Crankshaft

Unit: mm (in)

Item	Standard	Limit
Conrod small end I.D.	23.006 – 23.014 (0.9057 – 0.9061)	23.040 (0.9071)
Conrod deflection	—	3.0 (0.12)
Conrod big end side clearance	0.10 - 0.75 (0.004 - 0.030)	1.0 (0.04)
Conrod big end width	24.95 - 25.00 (0.982 - 0.984)	_
Crank web to web width	72.9 – 73.1 (2.87 – 2.88)	_
Crankshaft runout	—	0.08 (0.003)

# Oil Pump

Item	Standard	Limit
	140 – 180 kPa	
Oil pressure (at 60 °C, 140 °F)	(1.4 – 1.8 kgf/cm², 20 – 26 psi)	—
	at 3 000 r/min	

#### Clutch

Unit: mm (in)

Item	Standard	Limit
Clutch wheel I.D.	140.0 – 140.2 (5.512 – 5.520)	140.5 (5.53)
Clutch shoe	_	No groove at any part
Clutch engagement r/min	1 500 – 2 000 r/min	—
Clutch lock-up r/min	3 500 – 4 000 r/min	—

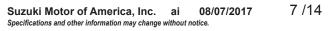
GILL

### **Drive Train**

Unit: mm (in) Except ratio

Item		Standard	Limit
Automatic transmissi	on ratio	Variable change (2.763 – 0.779)	_
Secondary reduction	ratio	2.158 (40/21 x 17/15)	_
-	Front	3.600 (36/10)	_
Final reduction ratio	Rear	3.600 (36/10)	_
	Low	2.562 (41/16)	_
Transfer gear ratio	High	1.240 (31/25)	_
-	Reverse	1.882 (32/17)	_
Drive V-belt width		34.3 (1.35)	33.3 (1.31)
Movable driven face length	spring free	153.0 (6.02)	145.4 (5.72)
	Low	0.10 - 0.30 (0.0040 - 0.0120)	0.50 (0.020)
Shift fork to groove	High	0.10 - 0.30 (0.0040 - 0.0120)	0.50 (0.020)
clearance	Reverse	0.10 - 0.30 (0.0040 - 0.0120)	0.50 (0.020)
	Low	5.50 - 5.60 (0.217 - 0.220)	
Shift fork groove	High	5.50 - 5.60 (0.217 - 0.220)	_
width	Reverse	5.50 - 5.60 (0.217 - 0.220)	_
	Low	5.30 - 5.40 (0.209 - 0.213)	_
Shift fork thickness	High	5.30 - 5.40 (0.209 - 0.213)	_
	Reverse	5.30 - 5.40 (0.209 - 0.213)	_
Front/Rear output sh backlash	aft bevel gear	0.03 - 0.15 (0.001 - 0.006)	_
Front drive (differenti backlash	al) gear	0.05 - 0.10 (0.002 - 0.004)	_
Rear drive (final)	Without gear cover specification	0.02 - 0.06 (0.0008 - 0.0024)	_
gear backlash	Gear cover assembled specification	0.08 – 0.15 (0.0031 – 0.0059)	_
Front differential gea		Hypoid gear oil SAE #90, API grade GL-5	
Rear drive gear oil ty		Mobil 424 or equivalent gear oil	_
Front differential gea		500 ml (0.5/0.4 US/Imp qt)	—
Final gear oil capacit	y l	770 ml (0.7/0.6 US/Imp qt)	_

GILLIK



#### Thermostat + Radiator + Fan + Coolant

Item		Standard	Note
Thermostat valve opening		Approx. 82 °C (180 °F)	_
temperature			
Thermostat valve lift	8 m	nm (0.31 in) and over at 95 °C (203 °F)	—
	20 °C	Approx. 2.45 k $\Omega$	_
	(68 °F) 50 °C		
ECT sensor resistance	(122 °F)	Approx. 0.811 kΩ	—
	80 °C (176 °F) Αρρrox. 0.318 kΩ		_
Radiator cap valve opening pressure	110 – 140 kPa (1.1 – 1.4 kgf/cm <sup>2</sup> , 15.6 – 19.9 psi)		
Cooling for operating temperature	$OFF \rightarrow ON$	Approx. 93 °C (199 °F)	
Cooling fan operating temperature	$ON \rightarrow OFF$	$ON \rightarrow OFF$ Approx. 87 °C (189 °F)	
Engine coolant type	Use an antifi		
	radiator, mixed with distilled water only.		
Engine coolant	Reservoir	Approx. 250 ml (0.26/0.22 US/Imp qt)	—
	Engine	Approx. 2 200 ml (2.32/1.94 US/lmp qt)	

# Injector + Fuel Pump + Fuel Pressure Regulator

Item	Specification	Note
Injector resistance	11 – 13 Ω at 20 °C (68 °F)	
Fuel pump discharge amount	55.5 ml (1.88/1.95 US/Imp qt) and more/10 sec.	
Fuel pressure regulator operating set pressure	Approx. 294 kPa (2.9 kgf/cm², 41 psi)	

#### FI Sensors + Secondary Throttle Valve Actuator

Item		Specification	Note
CKP sensor resistance	150 – 250 Ω		
CKP sensor peak voltage	5.0 V and more		When cranking
IAP sensor input voltage		4.5 – 5.5 V	
IAP sensor output voltage		Approx. 2.37 V at idle speed	
TP sensor input voltage		4.5 – 5.5 V	
TP sensor output voltage	Closed	Approx. 1.1 V	
TF sensor ouput voltage	Opened	Approx. 4.3 V	
ECT sensor input voltage		4.5 – 5.5 V	
ECT sensor output voltage		0.15 – 4.85 V	
ECT sensor resistance		Approx. 2.45 kΩ at 20 °C (68 °F)	
IAT sensor input voltage	4.5 – 5.5 V		
IAT sensor output voltage	0.15 – 4.85 V		
IAT sensor resistance		Approx. 1.60 kΩ at 20 °C (68 °F)	
TO sensor resistance		19 – 20 kΩ	
TO sensor voltage	Normal	0.4 – 1.4 V	
TO sensor voltage	Leaning	3.7 – 4.4 V	When leaning 65°
GP switch voltage		0.6 V and more	From 1st to Top
Injector voltage		Battery voltage	
Ignition coil primary peak voltage	80 V and more		When cranking
ISC valve resistance	Approx. 31 Ω at 20 °C (68 °F)		
PAIR control solenoid valve resistance	20 – 24 Ω at 20 – 30 °C (68 – 86°F)		
Vehicle speed sensor input voltage		Battery voltage	

### **Throttle Body**

Item	Specification	Note
Bore size	42 mm	
I.D. No.	31Ğ1	
Idle r/min	1 400 ± 100 r/min	
Fast idle r/min	1 400 – 1 600 r/min (cold engine)	
Throttle cable play	3 – 5 mm (0.12 – 0.20 in)	

# Electrical

Unit: mm (in)

Ite	m		Specification	Note
Spark plug		Туре	NGK: LMAR7A-9	
opair plug		Gap	0.8 - 0.9 (0.031 - 0.035)	
Spark performance	)		Over 8 (0.3) at 1 atm.	
CKP sensor resista	ance	150 – 250 Ω		
CKP sensor peak v	/oltage		5.0 V and more	
		Primary	1 – 5 Ω	Terminal – Ground
Ignition coil resista	nce	Secondary	25 – 40 kΩ	Plug cap – Terminal
Ignition coil primary	y peak voltage		150 V and more	When cranking
Generator coil resis	stance		0.4 – 1.0 Ω	
Generator maximu	m output		Approx. 400 W at 5 000 r/min	
Generator no-load voltage (When engine is cold)		75 V (AC) and more at 5 000 r/min		
Regulated voltage		13.5 – 15.5 V at 5 000 r/min Standard 12.0 (0.47)		
Starter motor brush	longth	Standard		
Starter motor brusi	riengin	Limit		
Starter torque limite	er slip torque	Standard 41.2 – 62.8 N·m (4.2 – 6.4 kgf-m, 14.5 – 32.5 lbf-ft)		
Starter relay resista	ance	3-5Ω		
Battery	Type designation		YTX20CH-BS	
	Capacity		12 V 64.8 kC (18 Ah)/10 HR	
Headlight HI		10 A 10 A		
Fuse size	Fuel		10 A	
	Ignition		15 A	
	Power source		10 A	
	Fan		15 A	
	Main		30 A	
	EPS		40 A	

# **Wattage** Unit: W

Item		Specification	
Headlight	Н	35 x 2	
Headiigiit	LO	35 x 2	
Brake light/Tail light		21/5	
Speedometer light		LED	
High beam indicator ligh	ıt	_	
Neutral indicator light		LED	
FI indicator light/Engine	coolant	LED	
temp. indicator light			
Reverse indicator light		LED	
Differential lock indicator light		LED	
EPS indicator light		LED	

#### Brake + Wheel

Unit: mm (in)

Item	Standard	Limit
Front brake disc thickness	—	3.0 (0.12)
Front brake disc runout	—	0.30 (0.012)
Front master cylinder bore	12.700 – 12.743 (0.5000 – 0.5017)	—
Front master cylinder piston diam.	12.657 – 12.684 (0.4983 – 0.4994)	—
Front brake caliper cylinder bore	33.960 – 34.010 (1.3370 – 1.3390)	—
Front brake caliper piston diam.	33.878 – 33.928 (1.3338 – 1.3357)	_
Rear brake pedal height	12.5 – 22.5 (0.5 – 0.9)	—
Rear brake pedal free travel	20 - 30 (0.8 - 1.2)	—
Rear brake lever play	6 - 8 (0.2 - 0.3)	—
Rear brake outer distance	26.0 - 27.0 (1.02 - 1.06)	—
Brake side plate spring free length	21.3 (0.84)	20.2 (0.80)
Brake fluid type	DOT 4	—
Steering angle	46° (right & left)	—
Turning radius	3.1 m (10.2 ft)	_
Toe-out (With 75 kg, 165 lbs)	5 ± 4 mm (0.20 ± 0.16)	—
Camber	-1.3°	_
Caster	<b>3.3</b> °	—

#### Tire

Unit: mm (in)

ltem		Standard		
Cold inflation tire pressure	Front	35 kPa (0.35 kgf/cm², 5.1 psi)	—	
(Solo riding)	Rear	30 kPa (0.30 kgf/cm <sup>2</sup> , 4.4 psi)	—	
Tire size	Front	AT25 x 8-12 ☆☆, tubeless	—	
	Rear	AT25 x 10-12 ☆☆, tubeless	—	
Tire tread depth	Front	—	4.0 (0.16)	
	Rear	—	4.0 (0.16)	

# Suspension Unit: mm (in)

Item	Standard	Limit
Front shock absorber spring adjustor	2/5 position	—
Rear shock absorber spring adjustor	2/5 position	—

#### Fuel + Oil

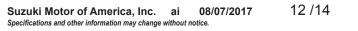
ltem		Specification	Note			
	Use unleaded gase	line with an octane rating of 87 AKI or				
	higher.					
	Do not use leaded	Do not use leaded gasoline.				
	Unleaded gasoline	containing up to 15% MTBE by volume				
	may be used.					
	Unleaded gasoline	containing up to 10% ethanol by volume				
Fuel type	may be used.	may be used.				
	Unleaded gasoline					
		may be used if it also contains appropriate cosolvents and				
	corrosion inhibitors					
Fuel tank capacity		.5 L (4.6/3.8 US/Imp gal)				
Engine oil type	SAE 10 W-40,	API SF/SG or SH/SJ with JASO MA				
	Change	2 300 ml (2.4/2.0 US/Imp qt)				
Engine oil capacity	Filter change	2 500 ml (2.6/2.2 US/Imp qt)				
	Overhaul	3 000 ml (3.2/2.6 US/Imp qt)				

# **Tightening Torque List**

# Engine

ltem		N⋅m	kgf-m	lbf-ft
Spark plug		11	1.1	8.0
Culinder bood cover helt	Initial	10	1.0	7.0
Cylinder head cover bolt	Final	14	1.4	10.0
Cam drive idle gear/sprocket shaft		41	4.1	29.5
Intake pipe bolt		9	0.9	6.5
Cylinder head bolt (M6)		10	1.0	7.0
	Initial	25	2.5	18.0
Cylinder head bolt (L: 200)	Final	37	3.7	27.0
Cylinder head bolt (L: 70)		10	1.0	7.0
Cylinder head bolt (L: 100)		10	1.0	7.0
Cylinder base nut		10	1.0	7.0
Camshaft journal holder bolt		10	1.0	7.0
Cam chain tension adjuster bolt		10	1.0	7.0
Cam chain tension adjuster cap bolt		7	0.7	5.0
Cam chain tensioner bolt		23	2.3	16.5
Crankcase bolt (M6)		10	1.0	7.0
Crankcase bolt (M8)		26	2.6	19.0
Valve timing inspection plug		23	2.3	16.5
Clutch shoe nut		150	15.0	108.5
Movable drive face bolt		110	11.0	79.5
Movable driven face bolt		110	11.0	79.5
Movable driven face ring nut		110	11.0	79.5
V-belt outer cover bolt		8	0.8	6.0
V-belt inner cover bolt		9	0.9	6.5
Generator rotor nut		160	16.0	115.5
Generator stator set bolt	11	1.1	8.0	
Generator lead wire clamp bolt	6	0.6	4.5	
Speed sensor bolt		10	1.0	7.0
Starter clutch bolt		26	2.6	19.0
Exhaust pipe nut		25	2.5	18.0
Muffler connecting bolt		25	2.5	18.0
Muffler mounting bolt		25	2.5	18.0
Muffler cover bolt		10	1.0	7.0
Muffler tail cover bolt		10	1.0	7.0
Spark arrester bolt		10	1.0	7.0
Oil filter		20	2.0	14.5
Engine oil drain plug Engine coolant drain plug		21 13	2.1 1.3	15.0 9.5
		100	10.0	9.5
Drive bevel gear nut Front output shaft nut		100	10.0	72.5
			6.0	43.5
Engine mounting nut		60		
Engine mounting damper stopper bolt		23	2.3	16.5
Rear output shaft nut		100	10.0	72.5
Crank balancer drive gear nut	150	15.0	108.5	
Crank balancer driven gear bolt		50	5.0	36.0
Starter motor mounting bolt		10	1.0	7.0
Starter motor lead wire mounting nut		6	0.6	4.5
Starter motor housing bolt	5	0.5	3.5	
Main oil gallery plug		18	1.8	13.0
Air cleaner box mounting bolt		4.5	0.45	3.0
Left crankshaft spacer nut		38	3.8	27.5
Oil gallery plug (Cylinder head)		10	1.0	7.0
PAIR reed valve cover bolt		10	1.0	7.0

GILL



#### **Drive Train**

Item	N⋅m	kgf-m	lbf-ft
2WD/4WD/Diff-lock actuator mounting bolt	22	2.2	16.0
Front drive (Differential) gear case cover bolt	22	2.2	16.0
Front drive (Differential) gear case mounting nut	50	5.0	36.0
Front drive (Differential) gear oil level plug	8.5	0.85	6.0
Front drive (Differential) gear oil filler plug	35	3.5	25.5
Front drive (Differential) gear oil drain plug	32	3.2	23.0
Final drive gear nut	100	10.0	72.5
Final drive gear bearing stopper	100	10.0	72.5
Final gear case cover bolt (M8)	26	2.6	19.0
Final gear case cover bolt (M10)	55	5.5	40.0
Final gear case mounting nut	75	7.5	54.0
Final gear case mounting bolt	75	7.5	54.0
Rear propeller shaft boot clamp screw	2	0.2	1.5
Final gear oil drain plug	23	2.3	16.5
Rear propeller shaft coupling nut	100	10.0	72.5
Front output shaft bolt	10	1.0	7.0
Rear output shaft nut	100	10.0	72.5
Rear output shaft drive bevel gear nut	100	10.0	72.5
Rear output shaft driven gear nut	100	10.0	72.5
Front propeller shaft boot clamp screw	1.3	0.13	1.0
Rear propeller shaft boot clamp screw	2	0.2	1.5

# FI System, Intake Air System and Fuel System

Item	N⋅m	kgf-m	lbf-ft
CKP sensor mounting bolt	6	0.6	4.5
CKP sensor bracket bolt	6	0.6	4.5
Fuel delivery pipe mounting screw	3.5	0.35	2.5
ECT sensor	18	1.8	13.0
ISC valve mounting screw	2	0.2	1.5
TP sensor mounting screw	2	0.2	1.5
GP switch	6.5	0.65	4.7
Air cleaner outlet tube clamp screw	1.5	0.15	1.0
Intake pipe clamp screw	1.5	0.15	1.0
PAIR control solenoid valve bracket bolt	10	1.0	7.0

### **Cooling System**

Item	N⋅m	kgf-m	lbf-ft
Water pump cover screw	6	0.6	4.5
Water pump mounting bolt	10	1.0	7.0
Thermostat cover bolt	23	2.3	16.5
Cooling fan assembly mounting bolt	8.5	0.85	6.0
Water bypass union	12	1.2	8.5
Radiator reservoir tank mounting bolt	6	0.6	4.5
Water union bolt	10	1.0	7.0

GILLIK

#### Chassis

ltem	N⋅m	kgf-m	lbf-ft
Handlebar clamp bolt	26	2.6	19.0
Handlebar holder nut	60	6.0	43.5
Rear brake lever holder clamp bolt	10	1.0	7.0
Throttle lever case bolt	4	0.4	3.0
Steering shaft upper nut	120	12.0	87.0
Steering shaft bolt	26	2.6	19.0
EPS control unit mounting nut	12	1.2	8.5
EPS body assembly mounting bolt	26	2.6	19.0
EPS body assembly mounting nut	28	2.8	20.0
Steering shaft lower nut	162	16.2	117.0
Front suspension arm pivot nut (Upper)	60	6.0	43.5
Front suspension arm pivot nut (Lower)	65	6.5	47.0
Steering knuckle end nut (Upper and Lower)	29	2.9	21.0
Tie-rod end nut	29	2.9	21.0
Tie-rod lock-nut	29	2.9	21.0
Front shock absorber mounting bolt (Upper)	55	5.5	40.0
Front shock absorber mounting nut (Lower)	60	6.0	43.5
Front wheel hub nut	110	11.0	79.5
Rear wheel hub nut	121	12.1	87.5
Wheel set nut (Front and Rear)	60	6.0	43.5
Brake hose union bolt	23	2.3	16.5
Front brake air bleeder valve	6	0.6	4.5
Front brake pad mounting pin	18	1.8	13.0
Front brake caliper mounting bolt	26	2.6	19.0
Caliper holder pin	18	1.8	13.0
Caliper holder slide pin	23	2.3	16.5
Brake pipe flare nut	16	1.6	11.5
Brake disc bolt	23	2.3	16.5
Brake disc cover mounting bolt	10	1.0	7.0
Brake master cylinder holder bolt	10	1.0	7.0
Footrest mounting bolt (M8)	26	2.6	19.0
Footrest mounting bolt (M10)	55	5.5	40.0
Rear stabilizer joint nut	60	6.0	43.5
Rear shock absorber mounting nut (Upper and Lower)	60	6.0	43.5
Rear suspension arm pivot nut (Upper and Lower)	60	6.0	43.5
Rear knuckle end nut (Upper and Lower)	60	6.0	43.5
Rear brake cam lever nut	11	1.1	8.0
Rear brake case bolt	26	2.6	19.0
Rear brake pedal shaft nut	60	6.0	43.5
Rear brake pedal screw	4.5	0.45	3.0
Trailer towing mounting bolt	60	6.0	43.5
Front brake lever pivot bolt	6	0.6	4.5
Front brake lever pivot bolt lock-nut	6	0.6	4.5
Rear brake lever pivot bolt	6.5	0.65	4.7
Rear brake lever pivot bolt lock-nut	6.5	0.65	4.7
Front propeller shaft boot clamp screw	1.3	0.13	1.0
Rear propeller shaft boot clamp screw	2	0.2	1.5

GILLIK