Remaining nuts, chassis	M6	10 Nm (7.4 lbf ft)
Remaining screws on fuel tank	M6	5 Nm (3.7 lbf ft)
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
SAS valve screw on frame	M6	4 Nm (3 lbf ft)
Screw, ABS control unit	M6	5 Nm (3.7 lbf ft)
Screw, ABS module retaining bracket on frame	M6	10 Nm (7.4 lbf ft)
Screw, air filter box, on frame	M6	6 Nm (4.4 lbf ft)
Screw, battery cable to starter motor	M6	6 Nm (4.4 lbf ft)
Screw, battery compartment	M6	2 Nm (1.5 lbf ft)
Screw, battery terminal	M6	4.5 Nm (3.32 lbf ft)
Screw, brake assembly	M6	5 Nm (3.7 lbf ft)
Screw, brake fluid reservoir for rear brake	M6	5 Nm (3.7 lbf ft)
Screw, brake hose bracket	M6	6 Nm (4.4 lbf ft) **Loctite®243™**
Screw, chain guard	M6	2 Nm (1.5 lbf ft) **Loctite®243™**
Screw, chain guide	M6	10 Nm (7.4 lbf ft)
Screw, chain sliding guard	M6	10 Nm (7.4 lbf ft) **Loctite®243™**
Screw, clutch assembly	M6	5 Nm (3.7 lbf ft)
Screw, coolant compensating tank	M6	2 Nm (1.5 lbf ft)
Screw, electrical holder in fuel tank	M6	2 Nm (1.5 lbf ft)
Screw, electrical holder under 12-V battery	M6	10 Nm (7.4 lbf ft)
Screw, front brake disc	M6	14 Nm (10.3 lbf ft) **Loctite®243™**
Screw, ignition lock	M6	10 Nm (7.4 lbf ft) **Loctite®243™**
Screw, inertial measurement unit	M6	8 Nm (5.9 lbf ft)
Screw, license plate holder, bottom	M6	8 Nm (5.9 lbf ft)
Screw, license plate holder, top	M6	8 Nm (5.9 lbf ft)
Screw, magnetic holder on side stand	M6	6 Nm (4.4 lbf ft) **Loctite®243™**
Screw, push rod ball joint on the rear brake cylinder	M6	10 Nm (7.4 lbf ft) **Loctite®243™**
Screw, radiator bleeding	M6	8 Nm (5.9 lbf ft)
Screw, radiator bracket, bottom	M6	8 Nm (5.9 lbf ft)
Screw, radiator bracket, top	M6	10 Nm (7.4 lbf ft)
Screw, rear brake disc	M6	14 Nm (10.3 lbf ft) **Loctite®243™**
Screw, rear fender	M6	4 Nm (3 lbf ft)
Screw, seat lock	M6	5 Nm (3.7 lbf ft)

Screw, seat support, front	M6	5 Nm (3.7 lbf ft)
Screw, upper part of the air filter box	M6	2 Nm (1.5 lbf ft)
Screw, voltage regulator	M6	8 Nm (5.9 lbf ft)
Screw, wheel speed sensor	M6	6 Nm (4.4 lbf ft) **Loctite®243™**
Nut, manifold on cylinder head	M8	Tighten the nuts evenly. The plate should not be bent. Copper paste
Nut, rear sprocket screw	M8	35 Nm (25.8 lbf ft) **Loctite®2701™**
Remaining nuts, chassis	M8	25 Nm (18.4 lbf ft)
Remaining screws, chassis	M8	25 Nm (18.4 lbf ft)
Screw, bottom triple clamp	M8	12 Nm (8.9 lbf ft)
Screw, chain sliding piece	M8	15 Nm (11.1 lbf ft)
Screw, connection lever on frame	M8	30 Nm (22.1 lbf ft) **Loctite®243™**
Screw, exhaust clamp	M8	12 Nm (8.9 lbf ft) Copper paste
Screw, foot brake lever	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, fork stub	M8	15 Nm (11.1 lbf ft)
Screw, front brake caliper	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, front footrest bracket	M8	25 Nm (18.4 lbf ft)
Screw, fuel tank roller	M8	15 Nm (11.1 lbf ft)
Screw, fuel tank, bottom	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, fuel tank, top	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, grab handle	M8	10 Nm (7.4 lbf ft)
Screw, handlebar clamp	M8	20 Nm (14.8 lbf ft)
Screw, heel protector	M8x12	5 Nm (3.7 lbf ft) **Loctite®243™**
Screw, main silencer clamp	M8	12 Nm (8.9 lbf ft) Copper paste
Screw, main silencer holder	M8	25 Nm (18.4 lbf ft)
Screw, main silencer holder on fuel tank	M8	25 Nm (18.4 lbf ft)
Screw, rear footrest bracket	M8x16	25 Nm (18.4 lbf ft)
Screw, side stand bracket	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, spring holder plate on side stand bracket	M8	25 Nm (18.4 lbf ft) **Loctite®243™**
Screw, steering stem	M8	20 Nm (14.8 lbf ft) **Loctite®243™**
Screw, top triple clamp	M8	17 Nm (12.5 lbf ft)

Engine carrying screw	M10	45 Nm (33.2 lbf ft) **Loctite®243™**
Remaining nuts, chassis	M10	45 Nm (33.2 lbf ft)
Remaining screws, chassis	M10	45 Nm (33.2 lbf ft)
Screw, bottom shock absorber	M10	45 Nm (33.2 lbf ft) **Loctite®243™**
Screw, engine bearer on frame	M10	45 Nm (33.2 lbf ft)
Screw, engine sprocket	M10	60 Nm (44.3 lbf ft) **Loctite®243™**
Screw, handlebar support	M10	45 Nm (33.2 lbf ft) **Loctite®243™**
Screw, side stand	M10	35 Nm (25.8 lbf ft) **Loctite®243™**
Screw, top shock absorber	M10	45 Nm (33.2 lbf ft) **Loctite®243™**
Banjo bolt	M10x1	8 Nm (5.9 lbf ft)
Banjo bolt, brake line	M10x1	25 Nm (18.4 lbf ft)
Lambda sensor	M12x1.25	25 Nm (18.4 lbf ft) Copper paste
Screw, swingarm pivot	M12x1.5	80 Nm (59 lbf ft)
Nut, angle lever to link fork	M14x1.5	100 Nm (73.8 lbf ft)
Nut, linkage lever to rocker arm	M14x1.5	100 Nm (73.8 lbf ft)
Screw, radiator temperature sensor	M18	20 Nm (14.8 lbf ft)
Screw, bottom steering head	M20x1.5	60 Nm (44.3 lbf ft) **Loctite®243™**
Screw, top steering head	M20x1.5	12 Nm (8.9 lbf ft)
Screw, front wheel spindle	M24x1.5	45 Nm (33.2 lbf ft)
Nut, rear wheel spindle	M25x1.5	90 Nm (66.4 lbf ft)

Brake fluid DOT 4 / DOT 5.1

Standard/classification

– DOT

Guideline

– Use only brake fluid that complies with the specified standard (see specifications on the container) and that exhibits the corresponding properties.

Recommended supplier

Castrol

– **REACT PERFORMANCE DOT 4**

MOTOREX®

– **Brake Fluid DOT 5.1**

Coolant

Guideline

– Only use high-grade, silicate-free coolant with corrosion inhibitor additive for aluminum motors. Low grade and unsuitable antifreeze causes corrosion, deposits and frothing.

– Do not use pure water as only coolant is able to meet the requirements needed in terms of corrosion protection and lubrication properties.

– Only use coolant that complies with the requirements stated (see specifications on the container) and that has the relevant properties.

Antifreeze protection to at least	−25 °C (−13 °F)

The mixture ratio must be adjusted to the necessary antifreeze protection. Use distilled water if the coolant needs to be diluted.

The use of premixed coolant is recommended.

Observe the coolant manufacturer specifications for antifreeze protection, dilution and miscibility (compatibility) with other coolants.

Recommended supplier

MOTOREX®

– **COOLANT M3.0**

Engine oil (SAE 10W/50)

Standard/classification

– JASO T903 MA2 (📖 p. 136)

– SAE (📖 p. 136) (SAE 10W/50)

Guideline

– Use only engine oils that comply with the specified standards (see specifications on the container) and that possess the corresponding properties.

Fully synthetic engine oil

Recommended supplier

MOTOREX®

– **Power Synt 4T**

Fork oil (SAE 4) (48601166S1)

Standard/classification

– SAE (📖 p. 136) (SAE 4)

Guideline

– Use only oils that comply with the specified standards (see specifications on the container) and that exhibit the corresponding properties.

Shock absorber fluid (SAE 2.5) (50180751S1)

Standard/classification

– SAE (📖 p. 136) (SAE 2.5)

Guideline

– Use only oils that comply with the specified standards (see specifications on the container) and that exhibit the corresponding properties.

Super unleaded (ROZ 95)

Standard/classification

– DIN EN 228 (ROZ 95)

Guideline

– Only use super unleaded fuel that matches or is equivalent to the specified standard.
– Fuel with an ethanol content of up to 10% (E10 fuel) is safe to use.

Info

Do **not** use fuel containing methanol (e.g., M15, M85, M100) or more than 10% ethanol (e.g., E15, E25, E85, E100).

Chain cleaner

Recommended supplier
MOTOREX®
– **Chain Clean**

Fuel additive

Recommended supplier
MOTOREX®
– **Fuel Stabilizer**

Long-life grease

Recommended supplier
MOTOREX®
– **Bike Grease 2000**

Motorcycle cleaner

Recommended supplier
MOTOREX®
– **Moto Clean**

Preserving materials for paints, metal and rubber

Recommended supplier
MOTOREX®
– **Moto Protect**

Shine spray for paint, plastic and chromium

Recommended supplier
MOTOREX®
– **Moto Shine**

Silicone spray

Recommended supplier
MOTOREX®
– **Silicone Spray**

Special cleaner for glossy and matte paint finishes, metal and plastic surfaces

Recommended supplier
MOTOREX®
– **Quick Cleaner**

Street chain spray

Guideline

Recommended supplier
MOTOREX®
– **Chainlube Road Strong**

Universal oil spray

Recommended supplier
MOTOREX®
– **Joker 440 Synthetic**

JASO T903 MA2

Different technical development directions required a separate specification for motorcycles – the **JASO T903 MA2** standard.
Earlier, engine oils from the automobile industry were used for motorcycles because there was no separate motorcycle specification.
Whereas long service intervals are demanded for automobile engines, the focus for motorcycle engines is on high performance at high engine speeds.
In most motorcycle engines, the transmission and clutch are lubricated with the same oil.
The **JASO T903 MA2** standard meets these special requirements.

SAE

The SAE viscosity classes were defined by the Society of Automotive Engineers and are used for classifying oils according to their viscosity. The viscosity describes only one property of oil and says nothing about quality.

ABS	Anti-lock braking system	Safety system that prevents locking of the wheels when driving straight ahead without the influence of lateral forces
-	Easy Shift	Engine electronics function for shifting up and down without clutch actuation
OBD	On-board diagnosis	Vehicle system, which monitors the specified parameters of the vehicle electronics

27 LIST OF ABBREVIATIONS

Art. no.	Article number
ca.	circa
cf.	compare
e.g.	for example
etc.	et cetera
i.a.	inter alia
no.	number
poss.	possibly