

PANIGALE V4

TORQUE SETTINGS – V4, V4S

VERSION 1.0

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***Denotes +/- 5% tolerance**

Parts	Qty	Size	Nm	Notes
ACCESSORIES				
Passenger footrests to rear sub-frame fasteners	4	M8	22.0	
Seat side panels (biposto) bracket to under-tray / tool compartment	2	M5	8.0	
Seat side panels (biposto) to side panels bracket	6	M4	3.0	
HYDRAULICS				
ABS support bracket to engine fasteners	2	M6	10.0	Pre-applied threadlock
Front brake master cylinder to handlebar fasteners	2	M6	10.0	(Seq: 1-(UP)-2-1)
Front brake reservoir bracket to master cylinder bolt	1	M6	10.0	
Front brake reservoir to bracket fastener	1	M5	5.0	LOCK 1
Front brake master cylinder banjo bolt	1	M10	23.0	
ABS banjo bolts	4	M10	23.0	
Brake caliper banjo bolts	3	M10	23.0	
ABS support bracket rubbers to support bracket fasteners	2	M6	6.8	LOCK 2
Front brake caliper bolts	4	M10	45.0	GREASE B Pre-torque 2Nm
Rear brake master cylinder fasteners	2	M6	8.0	LOCK 2
Rear brake reservoir fastener	1	M6	2.0	
Rear brake caliper bolts	2	M8	25.0*	GREASE B
Front brake line guide (front mudguard) fastener	1	M6	4.0	
Brake line guide bracket to clutch cover fasteners	3	M5	6.0	
Front brake line guide to front frame fastener	1	M5	5.0	LOCTITE 243
Rear brake line guide to swing arm fasteners	2	M5	5.0	
Rear brake line to swing arm fastener	1	M6	6.0	
NUMBERPLATE HOLDER				

Number plate holder top half to bottom half fasteners	4	AF	5.0	
Number plate bracket to number plate holder	2	M6	5.0	
Number plate holder to rear sub-frame	2	M5	6.0	
Rear reflector to number plate fasteners	2	M4	2.0	
HANDLEBARS & CLUTCH				
LH handlebar clamp to fork leg pinch bolt	1	M8	22.0	GREASE B
RH handlebar clamp to fork leg pinch bolt	1	M8	22.0	GREASE B
LH handlebar pinch bolts	2	M6	15.0	
RH handlebar pinch bolts	2	M6	15.0	
Bar end weight fasteners	1+1	M6	8.0	
Clutch master cylinder to handlebar fasteners	2	M6	10.0	(Seq: 1-(UP)-2-1)
Clutch reservoir bracket to master cylinder fastener	1	M6	10.0	
Clutch reservoir to bracket fastener	1	M5	5.0	LOCK 1
Banjo bolt to master cylinder	1	M10	23.0	
Banjo bolt to slave cylinder	1	M10	23.0	
Clutch slave cylinder to engine fastener	1	M6	10.0	
Clutch slave cylinder and metal plate to engine fastener	1	M6	10.0	
REAR SUSPENSION				
Upper suspension support bracket to rear cylinder head fasteners	2	M8	30.0*	GREASE B (only on thread)
Upper to lower suspension mounts to engine fasteners	2	M8	35.0*	GREASE B (only on thread)
Lower suspension support bracket to engine fasteners	2	M8	35.0*	GREASE B (only on thread)
Rocker link to lower support bracket fastener	1	M12	120.0*	GREASE B (only on thread)
Upper shock absorber bolt to upper support bracket	1	M10	54.0*	GREASE B (on thread & under head)
Lower shock absorber bolt to rocker arm	1	M10	54.0*	GREASE B (on thread & under head)
Suspension link rods to rocker arm fastener	1	M12	120.0*	GREASE B (only on thread)
Suspension link rods to swing arm fasteners	1	M12	120.0*	GREASE B (only on thread)
PEDALS AND LEVERS				
LH footrest to swing arm support fasteners	2	M8	25.0*	GREASE B
Gear change arm pinch bolt	1	M6	10.0	

DQS unit to gear change rod	1	M8	15.0	LOCK 1
DQS to gear change arm fastener	1	M6	10.0	Pre-applied threadlock
DQS to gear change pedal	1	M6	10.0	LOCK 1
LH heel guard fasteners	2	M5	6.0	LOCK 2
RH footrest to swing arm support fasteners	2	M8	25.0*	GREASE B
Gear change lever pivot bolt	1	M8	25.0*	GREASE D
RH heel guard fasteners	2	M5	6.0	LOCK 2

FRAME

Tripod to rear cylinder head fasteners	3	M8	24.0*	GREASE B (on thread & under head)
Front frame to engine fasteners	4	M12	90.0*	GREASE B (on thread & under head)
Front sub-frame to front frame fasteners	4	M6	10.0	GREASE B
LH sub-frame cover to sub-frame fasteners	2	M4	3.0	
RH sub-frame cover to sub-frame fasteners	2	M4	3.0	
Sub-frame to front frame fasteners	1+1	M8	31.0*	Replace whenever removed/re-fitted
Sub-frame to rear cylinder head fasteners	1+1	M8	35.0*	Replace whenever removed/re-fitted
Sub-frame cross brace fasteners	2	M8	18.0	
Seat support bracket to sub-frame fasteners	4	M6	8.0	
Seat under-tray / tool compartment to rear sub-frame front fasteners	2	M8	22.0*	
Seat under-tray / tool compartment to rear sub-frame rear fastener	1	M8	22.0*	
Seat lock assembly to seat under-tray / tool compartment	2	M5	5.0	
Passenger grab handle to sub-frame fasteners	2	M8	18.0	

FRONT WHEEL

Valve stem fastener	1		9.0	LOCK 2
Front brake disc bolts	10	M8	30.0*	
Front axle nut	1		63.0*	GREASE B (on thread & under head)

REAR WHEEL

Eccentric hub assembly				GREASE B
Rear sprocket carrier nuts	6	M10	44.0*	LOCK 2
Axle nut (sprocket side)	1	M48	230.0*	GREASE B (on thread & under head)

Rear ABS ring fasteners	4	M5	8.0*	Pre-applied threadlock
Valve stem fastener	1		9.0	LOCK 2
Axle nut (wheel side)	1	M48	230.0*	GREASE B (on thread & under head)
FUEL TANK				
Front bracket to fuel tank fasteners	2	M6	6.0	LOCK 1
Fuel tank to rear sub-frame front fasteners	2	M5	6.0	
Fuel tank to rear sub-frame rear fasteners	2	M5	6.0	
Dual Lock / Velcro to fuel tank fasteners	4	M4	3.0	
EXHAUST				
Front exhaust manifold nuts	3+3	M6	10.0	GREASE B (on thread & under head)
Rear exhaust manifold nuts	3+3	M6	10.0	GREASE B (on thread & under head)
Silencer to LH semi support bracket fastener	1	M8	22.0	
Silencer to RH bracket fastener	1	M8	22.0	
LH silencer cover to silencer	2	M5	5.0	
RH silencer cover to silencer	2	M5	5.0	
Heat shield to front header fasteners	3	M5	5.0	
Heat shield to sub-frame fasteners	4	M6	8.0	Pre-applied threadlock
Starter motor heat shield to front exhaust heat shield	1	M5	5.0	
OIL COOLER & RADIATOR				
Oil cooler to radiator duct fasteners	2	M5	6.0	
Oil lines to oil cooler	2	M20	15.0	
Oil lines to engine sump fasteners	2	M6	10.0	LOCTITE 1
Radiator duct upper fasteners to front frame	2	M5	6.0	
Expansion tanks to radiator duct	3+3	M5	5.0	
Water coolant pipes - jubilee clips (all)			2.5	
Air conveyor to radiator duct fasteners	4	M5	6.0	
AIRBOX AND FILTER				
Air box cover to air box lower fasteners	2	M4	3.0	
Outer air filter duct to front frame fasteners	4	M5	6.0	
Inner air filter duct to front frame fasteners	4	M5	6.0	

Air separator to front frame fastener	1	M4	3.0	
FUEL INJECTION				
Fuel pump to fuel tank bolts	6	M5	5.0	GREASE B
Inlet manifold to cylinder head fasteners	8	M8	10.0*	
Throttle bodies to inlet manifold fasteners	16	M5	8.0	Pre-applied threadlock
Fixed trumpets to throttle body fasteners	8	M5	6.0	Pre-applied threadlock
Variable trumpet stud to throttle bodies	4	M12	5.0	LOCK 5
Lever support to throttle body fasteners	4	M5	8.0	LOCK 1
Injector caps to throttle body fasteners	4	M4	3.0	
Fuel distributor to bottom of air box fastener	1	AF	1.0	
Injector caps to air box cover fasteners	4	M4	3.0	
Fuel canister bracket to engine fasteners	2	M6	10.0	
BODYWORK				
Headlight fairing to sub-frame fasteners	2	M5	5.0	
Plexiglass screen to headlight fairing	6	M4	0.2	Torx bolts
LH side fairing to LH lower fairing fasteners	3	M5	2.5	
LH upper fairing to headlight fairing	2	M5	2.5	
LH fairing to swing-arm support fastener	1	M5	6.0	
RH side fairing to RH lower fairing fasteners	3	M5	2.5	
RH upper fairing to headlight fairing	2	M5	2.5	
RH fairing to swing-arm support fastener	1	M5	6.0	
LH upper fairing to radiator duct fastener	1	M5	2.5	
RH upper fairing to radiator duct fastener	1	M5	2.5	
Battery cover to fairing fasteners	2+2	M5	2.5	
Instrument cover to front sub-frame fasteners	4	M5	3.0	
Ignition switch cover fasteners	2	M5	8.0	
Front mudguard bolts	4	M6	8.0	Pre-applied threadlock
Rear hugger to swing arm fasteners	5	M5	8.0	Pre-applied threadlock
Rider's seat pad fasteners	2	M5	5.0	
Sub-frame side cover to sub-frame fasteners	4	M5	6.0	
Under-seat panel to sub-frame	4	M5	2.5	
Under seat panel to seat under-tray / tool-kit compartment	2	M5	2.5	
Air duct covers to ignition switch cover	1+1	M5	2.5	
Air duct covers to instrument cover	1+1	M5	2.5	
SWING ARM				
LH swing arm support to engine fasteners	2	M8	25.0	GREASE B
LH swing arm pinch bolt	1	M8	20.0*	GREASE B

RH swing arm support to engine fasteners	2	M8	25.0	GREASE B
RH swing arm pinch bolt	1	M8	20.0*	GREASE B
LH swing arm pivot bolt	1	M20	100.0*	GREASE B
RH swing arm pivot bolt	1	M20	100.0*	GREASE B
Brake caliper support plate locating pin to swing arm	1	M12	33.0*	LOCK 5
Eccentric hub pinch bolts	2	M10	20.0*	GREASE B (seq: 1-2-1)
Chain guide to swing arm fasteners	4	M6	5.0	
Chain guide tunnel to swing arm fasteners	2	M6	5.0	

ELECTRONICS / ELECTRICAL SYSTEM

Battery support to air box fasteners	4		3.0	
Battery cables to battery	2			
Battery cables to starter solenoid/relay fasteners	2	M6	4.0	
Starter motor cable fastener	1	M5	3.0	GREASE D
Voltage regulator to battery support fasteners	2	M5	5.0	
Wiring guide to bottom of air box	3	AF	1.0	
Exhaust valve motor to bracket fasteners	3	M5	6.0	
Exhaust valve closing cable to silencer bracket fastener	1	M6	2.5	
Exhaust valve opening cable to silencer bracket fastener	1	M6	2.5	
ECU to air box fastener	1	M4	3.0	
Smart EC to air box fastener	1	M4	3.0	
GPS blanking plug to instrument cover fastener	2	M4	1.5	
IMU to bracket fasteners	2	M6	4.0	
Silent block to IMU bracket fasteners	3	M5	3.0	
IMU bracket silent block to sub-frame fasteners	3	M5	3.0	
Rear brake light switch	1	M8	5.0	
Ignition switch to front frame fasteners	2	M6	10.0	
Horn to bottom yoke fastener	1	M8	18.0	LOCK 2
Side stand switch fasteners	2	M4	3.0	LOCK 2
VIS actuator to bracket fasteners	3	M5	6.0	
Secondary air actuator to support fasteners	2	M5	4.0	
MAP sensor support to air box fasteners	2	M4	3.0	
Front MAP sensors to air box fasteners	2	M4	3.0	
Front wheel speed sensor bolt	1	M6	10.0	
Rear wheel speed sensor bolt	1	M6	10.0	
Front lambda sensor	1	M12	25.0	Pre-applied grease
Rear lambda sensor	1	M12	25.0	Pre-applied grease

SIDE STAND

Magnet to side stand				Swage edges of hole
Upper spring locating pin	1	M6	8.0	
Lower spring locating pin	1	M6	5.0	LOCK 5
Side stand pivot bolt	1	M8	25.0	GREASE B

CHAIN & SPROCKETS

Front sprocket fastener	1	M10	55.0*	GREASE B
Sprocket cover and plate to engine fastener	1	M6	10.0	
Sprocket cover, plate and slave cylinder to engine fastener	1	M6	10.0	
Chain guard to silencer cover fastener	1	M5	--	

LIGHTING / INDICATORS / MIRRORS

Headlight to front sub-frame fasteners	2	M5	5.0	GREASE B
Headlight to headlight fairing fasteners	2	M5	5.0	
Resonator to air conveyor fasteners	2	AF	0.5	
Resonator to headlight fasteners	2	AF	0.5	
Air conveyor to headlight fasteners	2	AF	0.5	
Rear indicator fasteners	2	M5	3.0	
Rear light to under tray / tool compartment	1	AF	3.0	
Rear view mirrors/indicators to front sub-frame	4	M5	6.0	

INSTRUMENTATION

Silent block to instrument panel	3	M5	1.0	
Silent block to front sub-frame fasteners	3	M5	3.0	

FRONT FORKS / STEERING

Steering shaft to lower yoke	1		40.0	
Lock stop fasteners	2		10.0	LOCK 2
Front axle pinch bolts	2+2		19.0*	GREASE B
Bottom yoke pinch bolts	6		8.0*	GREASE B
Splash guard to bottom yoke bolts	3		5.0	
Steering stem nut to steering shaft	1		35.0	GREASE D
Top yoke to fork pinch bolts	2		22.0	GREASE B
Tope yoke pinch bolt to steering stem nut	1		22.0	GREASE B
Steering damper to front frame fastener	1		10.0	LOCK 1
Rod end to steering damper (S model only)	1		10.0*	LOCK 2
Steering damper to RH handlebar clamp fastener	1		10.0	LOCK 1