

STELVIO 4V - 1200 » Characteristics » Tightening Torques



HEADS

Name	Torque in Nm
Oil cap (2)	25 Nm (18.44 lbf ft)
Rocking lever support nut - M10x1.5 (8)	15 Nm (11.06 lbf ft) + 42 Nm (30.98 lbf ft)
Camshaft - rocking levers support fixing screws (12)	17 Nm (12.54 lbf ft)
Head fixing screw (4) - pre-tightening	15 Nm (11.06 lbf ft)
Head fixing screw (4) - final tightening	42 Nm (31 lbf ft)
Screw fixing head to chain compartment - M6x120 (4)	10 Nm (7.38 lbf ft)
Oil temperature sensor	11 Nm (8.11 lbf ft) - Loctite 243
Oil temperature sensor container	11 Nm (8.11 lbf ft) - Loctite 601
Head covers fixing screws (8)	8 Nm (5.9 lbf ft)
Spark plug (2)	30 Nm (22.13 lbf ft) - Molykote

CRANKCASE

Name	Torque in Nm
Crankcase stud bolt - cylinder (8)	25 Nm (18.44 lbf ft)
Transmission side flange stud bolt - M8x66 (3)	35 Nm (25.81 lbf ft)
Transmission side flange stud bolt - M8x75 (2)	35 Nm (25.81 lbf ft)
Gear side crankshaft flange screw - TE M8x25 (8)	26 Nm (19.18 lbf ft)
Timing system cover screw - TCEI M8x55 (4)	25 Nm (18.44 lbf ft)
Timing system cover screw - TCEI M6x30 (10)	10 Nm (7.38 lbf ft)
Oil vapour union screw - TCEI M6x20 (2)	10 Nm (7.38 lbf ft)
TCEI M6x40 Screw (2)	10 Nm (7.38 lbf ft)
Timing sensor - TCEI M5x12 (2)	6 Nm (4.42 lbf ft)
Service shaft bearing locking screw (2)	10 Nm (7.38 lbf ft)
Oil pressure sensor (1)	25 Nm (18.44 lbf ft)
Screw fixing oil pressure sensor support - TCEI M10x20 (1)	18 Nm (13.28 lbf ft)
Oil cap (2)	25 Nm (18.44 lbf ft)

OIL SUMP

Name	Torque in Nm
Oil pipe on sump reduction (1)	20 Nm (14.75 lbf ft)
Oil pipe on sump	20 Nm (14.75 lbf ft)
Oil sump lower screw - TCEI M6x30 (4)	10 Nm (7.38 lbf ft)
Oil sump screw - TCEI M6x55 (14)	10 Nm (7.38 lbf ft)
Oil sump screw - TCEI M6x60 (2)	10 Nm (7.38 lbf ft)
Oil drainage plug - M10x1 (1)	20 Nm (14.75 lbf ft)
Oil filter (1)	15 Nm (11.06 lbf ft)
Oil filter fitting (1)	40 Nm (29.5 lbf ft) - Loctite 243
Oil pipe in sump	20 Nm (14.75 lbf ft) - Loctite 648
Pressure-relief plug	40 Nm (29.5 lbf ft)
Cap on oil sump flange (2)	20 Nm (14.75 lbf ft)
Cap (1)	40 Nm (29.5 lbf ft)

CRANKSHAFT - FLYWHEEL

--	--

Name	Torque in Nm
Connecting rod screw (4) - pre-tightening	40 Nm (29.5 lbf ft)
Connecting rod screw (4) - final tightening	80 Nm (59 lbf ft)
Screw fixing clutch disc on crankshaft - M8x25 (6)	42 Nm (30.98 lbf ft) - Loctite 243
Screw fixing clutch bell on disc - M7x16 (6)	20 Nm (14.75 lbf ft)
Start-up crown gear fixing screw (6)	10 Nm (7.38 lbf ft)

OIL PUMP

Name	Torque in Nm
Oil pump fixing screws - M6x45 (3)	10 Nm (7.38 lbf ft)
Oil pump gear nut - M10x1.25 (1)	20 Nm (14.75 lbf ft)
Pressure-relief plug	40 Nm (29.5 lbf ft)
Cooling oil intake filter fixing screw (5)	10 Nm (7.38 lbf ft)
Lubrication oil intake filter fixing screw (2)	10 Nm (7.38 lbf ft)

TIMING SYSTEM

Name	Torque in Nm
Service shaft flange screw - TBEI M6x14 (2)	8 Nm (5.9 lbf ft)
Timing system gear nut on service shaft - M18 (1)	150 Nm (110.6 lbf ft)
Timing system gear nut on crankshaft - M25 (1)	200 Nm (147.51 lbf ft)
Timing system upper gear TE screw (2)	30 Nm (22.13 lbf ft)
Screw fixing timing system upper gear closing cap - TBEI M5x10 (4)	7 Nm (5.16 lbf ft)
Cylinder chain tensioner cap (2)	30 Nm (22.13 lbf ft)
Screw fixing movable chain slider (2)	25 Nm (18.44 lbf ft)

GENERATOR

Name	Torque in Nm
Generator fixing screw - TCEI M8x45 (1)	22 Nm (16.23 lbf ft)
Generator fixing nut - M10x1.5 (1)	30 Nm (22.13 lbf ft)
Generator pulley nut on crankshaft - M16 (1)	80 Nm (59 lbf ft) - Loctite 243
Belt tension	50 Nm (36.88 lbf ft)
Alternator belt cover screw - TCEI M6x16 (4)	10 Nm (7.38 lbf ft)
Alternator belt cover screw (radiator bracket retainer) TCEI M6x40 (2)	10 Nm (7.38 lbf ft)

GEAR

Name	Torque in Nm
Gear shift cable lever nut	10 Nm (7.38 lbf ft)
Gear shift tie rod lever nut on gear pre-selector	10 Nm (7.38 lbf ft)
Gearbox to crankcase fixing nut - M8 (5)	20 Nm (14.75 lbf ft)
TE flanged screw fixing gearbox to crankcase - M8x45 (1)	20 Nm (14.75 lbf ft)
Oil cap M18x1.5 (1)	28 Nm (20.65 lbf ft)
Breather cap (1)	8 Nm (5.9 lbf ft)
Gear in neutral sensor (1)	10 Nm (7.38 lbf ft)
Oil drainage plug - M10x1 (1)	24 Nm (17.7 lbf ft)
Transmission shaft ring nut (1)	100 Nm (73.76 lbf ft)

OIL RADIATOR

Name	Torque in Nm
Radiator to chassis retainer M6x30 (3)	10 Nm (7.38 lbf ft)

Nipples to radiator retainer M16x1.5 (2)	20 Nm (14.75 lbf ft)
Oil pipes to radiator and engine retainer M16x1.5 (2 + 2)	20 Nm (14.75 lbf ft)

CHASSIS TO ENGINE UNIT

Name	Torque in Nm
M6x40 TCEI DA screw	8 -12 Nm
Reduction	20 Nm

FUEL SUPPLY CONTROL UNIT

Name	Torque in Nm
M5x12 TCEI screw	6 -7 Nm
Stainless steel M5x16 TBEI flanged screw	6 -7 Nm
M6x25 TCEI DA screw	8 -12 Nm

CHASSIS

Name	Torque in Nm
Front engine to chassis retainer	80 Nm
Transmission to chassis retainer (M12x250 + M12x230)	50 Nm
Right fixing plate - transmission retainer	25 Nm
Plate clamp - blow-by retainer	10 Nm
Coil plate retainer	10 Nm
Electronic control unit retainer	10 Nm
Bushings to electronic control unit retainer - M6x35 (1)	10 Nm (7.38 lbf ft) - Loct 243
Tank support rubber rings to chassis retainer (2)	Manual - Loct 243
Filter casing fixing bolts	10 Nm
Left and right footrest plate to chassis upper retainer M8x30 (2+2)	20 Nm (14.75 lbf ft)
Left and right footrest plate to chassis lower retainer M8x75 (2+2)	20 Nm (14.75 lbf ft)
Brake switch on plate retainer	Manual
Chrome-plated ring to plate retainer M5x10 (6)	6 Nm (4.42 lbf ft)
Retainer for cable guide on right footrest plate	6 Nm

FOOTRESTS AND LEVERS

Name	Torque in Nm
Footrest rubber retainer	10 Nm
Rider footrest sliding pin - M8	25 Nm
Passenger footrest support to lateral plates retainer	38 Nm
Rider heelrest to plates retainer	6 Nm
Passenger heelrest retainer	3 Nm
Rod retainer (nut)	10 Nm
Gear shift lever / brake pin retainer	10 Nm
Gear shift lever / pre-selector retainer	10 Nm
Gear shift lever pin - brake retainer M8 (1+1)	15 Nm (11.06 lbf ft) - Loct 243

SIDE STAND

Name	Torque in Nm
Stand plate to engine upper retainer	50 Nm
Stand plate to engine lower retainer	25 Nm
Side stand retainer pin	10 Nm
Switch fixing screw - M6x20 (1)	10 Nm (7.38 lbf ft) - Loct 243

Lock nut	30 Nm
Stand cable guide to engine retainer M8 (1)	25 Nm (18.44 lbf ft)
Side lever arm retainer - M6x16 (2)	10 Nm (7.38 lbf ft) - Loct 243

SWING ARM

Name	Torque in Nm
Fork on bushing clamp retainer	10 Nm
Fork on bevel gear pair retainer	50 Nm
Reaction rod to bevel gear pair retainer	50 Nm
Reaction rod to chassis retainer	50 Nm
Fork bolt to fork retainer	60 Nm
Preloading bushing to fork bolt retainer	10 Nm

FRONT SUSPENSION

Name	Torque in Nm
Tube lock plate to steering base retainer	6 Nm
Fork stem on upper plate retainer - M8x30 (2)	20 Nm (14.75 lbf ft)
Fork stem on lower plate retainer - M8x30 (4)	20 Nm (14.75 lbf ft)
Headstock ring nut	40 Nm
Headstock counter ring nut	manual + 90 degrees
Upper plate fixing cover	100 Nm
Fork hub closing - M6x30 (2+2)	10 Nm (7.38 lbf ft)

REAR SUSPENSION

Name	Torque in Nm
Shock absorber to chassis retainer - 8.8	50 Nm
Double connecting rod/shock absorber retainer - 10.9	40 Nm
Single connecting rod/double connecting rod retainer - 10.9	50 Nm
Single connecting rod to chassis retainer, 8.8	50 Nm
Double connecting rod/fork retainer - 10.9	50 Nm

AIR FILTER CASING - BLOW BY

Name	Torque in Nm
Blow-by expansion tank spacer to engine retainer	10 Nm
Filter housing to chassis retainer	10 Nm

EXHAUST

Name	Torque in Nm
Exhaust pipe to engine retainer	25 Nm
Silencer to chassis connecting pipe retainer	25 Nm
Muffler to chassis retainer - M8x45 (1)	25 Nm (18.44 lbf ft)
Heat guard retainer - M6 (3)	10 Nm (7.38 lbf ft)
Lambda probe retainer	38 Nm
Clamps retainer - M8 (3)	20 Nm (14.75 lbf ft)

FRONT WHEEL

Name	Torque in Nm
Wheel pin nut	80 Nm

REAR WHEEL

Name	Torque in Nm
Disc retainer	25 Nm
Rear wheel retainer, 10.9	110 Nm

FRONT BRAKING SYSTEM

Name	Torque in Nm
------	--------------

Front brake right and left calliper retainer	50 Nm
--	-------

REAR BRAKING SYSTEM

Name	Torque in Nm
Rear brake calliper retainer	50 Nm
Rear brake fluid reservoir retainer	3 Nm
Rear brake fluid reservoir support to plate retainer	10 Nm
Rear brake rod lock nut	manual
Brake pump retainer - M6x20 (2)	10 Nm (7.38 lbf ft) - Loctite 243

HANDLEBAR AND CONTROLS

Name	Torque in Nm
Retainer for handlebar lower U-bolts on steering upper plate	50 Nm
Retainer for handlebar upper U-bolts	25 Nm
Anti-vibration weights retainer	10 Nm
Brake pump and clutch U-bolts retainer	10 Nm
Right and left light switch retainer	1.5 Nm
Clutch control cylinder to gear retainer	10 Nm
Rear-view mirror	Manual

ELECTRICAL SYSTEM

Name	Torque in Nm
Coil retainer	2 Nm
Horn retainer	15 Nm
Odometer sensor on bevel gear pair retainer	3 Nm

INSTRUMENT PANEL AND LIGHTS

Name	Torque in Nm
Instrument panel retainer	3 Nm
Front arrows retainer - M4 (2)	3 Nm (2.21 lbf ft)
Front headlamp retainer - M6x30 (6)	10 Nm (7.38 lbf ft)
Rear light to license plate retainer - M5x16 (4)	6 Nm (4.42 lbf ft)

FUEL PUMP FLANGE

Name	Torque in Nm
Pump support to tank retainer	6 Nm

FUEL TANK

Name	Torque in Nm
Filler to tank retainer	5 Nm
Screws on cap ring nut (aesthetic)	5 Nm
Tank to chassis front retainer	10 Nm

ENGINE COVER

Name	Torque in Nm
Right cover plate retainer - M10x20 (2)	40 Nm (29.5 lbf ft)
Left cover plate retainer - M10 (1)	40 Nm (29.5 lbf ft)
Front oil sump guard retainer - M8x25 (4)	20 Nm (14.75 lbf ft)

FRONT BODYWORK

Name	Torque in Nm
Front mudguard retainer	6 Nm
Air deflector self-tapping retainer (4+4)	Manual
Fairing junction - M5 (2+2)	Manual
Glove-box - self-tapping (4)	Manual
Compartment lock - M6 (2)	Manual
Hinge locking bracket - self-tapping (2)	Manual
Rear tank cover - M5 (2)	4 Nm (2.95 lbf ft)

Rear tank cover - M6 (2)	10 Nm (7.38 lbf ft)
Left - right fairing - M5 (2)	4 Nm (2.95 lbf ft)
Left - right fairing - M6 (2)	10 Nm (7.38 lbf ft)

REAR BODYWORK

Name	Torque in Nm
Left - right fairings retainer - M6 (3+3)	10 Nm (7.38 lbf ft)
reflector to support retainer	4 Nm
Retroreflector support to license plate holder retainer	4 Nm
License plate holder and light reinforcing retainer - M5 (1)	4 Nm (2.95 lbf ft)
Cases support retainer - M6 (2)	10 Nm (7.38 lbf ft)
Cases support retainer - M8 (2+2)	25 Nm (18.44 lbf ft)
Passenger grab handle to chassis retainer - M8 (2)	25 Nm (18.44 lbf ft)
Passenger grab handle to chassis retainer - M6 (4)	10 Nm (7.38 lbf ft)
License plate holder to chassis retainer - M5 (4)	4 Nm (2.95 lbf ft)
Luggage carrier brackets retainer - M8 (2+2)	25 Nm (18.44 lbf ft)

FINISHINGS

Name	Torque in Nm
Ignition lock retainer – shear head screw	- Nm

