Contents: 1: Figure 12: Engine Electrical 13: Food Reparation 14: Food Supply 14: Cooling 14: Estaust 15: Food Supply 17: Cooling 18: Estaust 19: Cooling 18: Estaust 23: Secring 23: Secring 23: Secring 23: Secring 23: Secring 23: Secring 23: Secring 24: Food Advanced Components 25: Food Components 25: Food Components 25: Food Components 25: Food Components 25: Food Components 25: Secring 26: Addis, Maylation, Information Systems 27: Optional Accessories 21: Engine 11: Engine 11: Engine 11: Engine Biok 21: Engine Biok 21: Charthormets 22: Secring 23: Main Maylation, Information Systems 27: Optional Accessories 11: Engine Biok 21: Charthormets 22: Main Maylation, Information Systems 27: Optional Accessories 11: Engine Biok 21: Charthormets 22: Main Maylation, Information Systems 27: Optional Accessories 11: Engine Biok 21: Charthormets 22: Main Maylation, Information Systems 27: Optional Accessories 22: Main Maylation, Information Systems 23: Main Maylation, Information Systems 24: Main Maylation, Information Systems 25: Main Maylation, Information Systems 25: Main Maylation, Maylatio	н	exhead Torque Values
12. Engine Electrical13. Fuel regardion16. Fuel Supply17. Cooling18. Exhansis18. Exhansis18. Exhansis23. Gearbox23. Gearbox23. Stearing24. Exhansis24. Exhansis25. Stearing25. Stearing26. Tork Wheel Stearing27. Strating27. Exhansis28. Tork Market Bill28. Tork Market Bill29. Tork Mar	Contents:	
12. Engine Electrical13. Fuel regardion16. Fuel Supply17. Cooling18. Exhansis18. Exhansis18. Exhansis23. Gearbox23. Gearbox23. Stearing24. Exhansis24. Exhansis25. Stearing25. Stearing26. Tork Wheel Stearing27. Strating27. Exhansis28. Tork Market Bill28. Tork Market Bill29. Tork Mar	11: Engine	
13. Fuel PreparationIs Automation15. Fuel SupplyIs Automation17. CoolingIs Automation18. ExhaustIs Automation23. GrachooIs Automation31. Frant Aute, Frant Wheel SteeringIs Automation32. SeeringIs Automation33. Rear automationIs Automation34. BracksIs Automation35. Foot OperationIs Automation36. Wheels and TiresIs Automation16. Frame and Mounted ComponentsIs Automation31. Trim ParelsYale25. SoatsIs Automation Systems27. Optional AccessoriesIs Automation Automation31. Fragine BookIs Automation Automation32. SolatsIs Mino33. Rear Automation SystemsIs Nin34. Solat Automation CorankcaseIs Nin35. SolatsIs Nin35. SolatsIs Nin35. SolatsIs Nin35. SolatsIs Nin36. Solat Automation SystemsIs Nin37. Solat Automation SystemsIs Nin36. Solat Automation SystemsIs Nin37. Solat Automation SystemsIs Nin38. Solat Automation SystemsIs Nin37. Solat Auto	-	
16. Fuel Supply 17. Cooling 18. Exhaust 18. Exhaust 18. Exhaust 23. Goarbox 31. Forat Ade, Frant Wheel Steering 33. Forat Ade, Frant Wheel Steering 34. Stealers 35. Food Operation 36. Wheels and Trees 36. Wheels and Trees 36. Wheels and Trees 36. General Vehicle Electrics 52. Ist 53. Lights 54. Indignation, Information Systems 77. Optional Accessories 11 - Engine Biok 87. Soli, Navigation, Information Systems 77. Optional Accessories 11 - Engine Biok 87. Additional angle of rotation. 98. Nam Malox 30 01 drain plug to crankcase 40 Nm Contabar mount, MG 19 Nm Mids 15 10 drain plug to crankcase Mids 25 Mids 40, botted with sealing ring. A8 x 13 Al 19 Nm Mids 50. Mids 50. Mids 25 Search Search		
17. Cooling 82. Exhaust 23. Bearbaxt 23. Gearbax 31. Front Akle, Front Wheel Steering 23. Stearing 33. Rear ask, rear-wheel drive 34. Brakes 35. Foot Operation 36. Wheels and Tres 46. Frame and Mounted Components 51. Trin Panels 25. Stacts 52. Stacts 63. Uptits 64. Uptits 65. Audio, Maigation, Information Systems 77. Optional Accessories 78. Audio, Maigation, Information Systems 79. Optional Accessories 71. Engine Value 111 - Engine Mount Corankcase 102. Audio Analization Corankcase 103. Bio Crankcase 104. Solo 105. Solo 105. Soloted with sealing ring, Ab x 13. Al 104. Soloted with sealing ring, Ab x 13. Al 105. Soloted with sealing ring, Ab x 13. Al 106. Main Dation Engite Frontation, 90° Mox 25. <td>-</td> <td></td>	-	
38 Exhaust 28 Gardbox 31. Font Adv, front Wheel Steering 29 32. Steering 38 Brack adv, front Wheel Steering 33. Brack adv, front Wheel Steering 20 34. Bracks 20 35. Foot Operation 20 36. Wheels and Tress 20 46. Frame and Mounted Components 21 51. Tim Branels 22 52. Stats 22 53. Internets 22 54. General Vehicle Electrics 22 52. Instruments 22 53. Upits 22 54. Instruments 24 55. Audio, Navigation, Information Systems 27 72. Optional Accessories 24 11 - Engine Bock 24 87. Applies 24 Bracker, engine guard to conkcase 40 Nm Crash bar mount, to conkcase 19 Nm Oldrain pulge to conkcase 24 Mils 4.15 32 Nm Engine block, left 32 Mils 4.15 32 Nm Engine block, left 40 Mils 4.10 19 Nm Mils 4.10 </td <td></td> <td></td>		
21. Clutch 23. Grachov 31. Front Akle, Front Wheel Steering 32. Steering 33. Roar ake, rear-wheel drive 34. Bracks 35. Foot Operation 36. Wheels and Tires 46. Frame and Mouted Components 51. Trim Panels 52. Stats 61. General Vehicle Electrics 62. Instruments 83. Upts 85. Audio, Avaigation, Information Systems 77. Optional Accessories 111 - Engine 114 - Engine Biok 114 - Engine Biok 115. Statis 116. Statis 116. Statis 117. Statis 118. Statis 118. Statis 119. Statis 120. Statis 121. Statis 121. Statis 122. Instruments 123. Statis 124. Statis 125. Audio, Avaigation, Information Systems 77. Optional Accessories 121. Engine Biok 121. Engine Biok 121. Engine Biok 122. Marcessonies 123. Statis		
32. Genow 33. Front XMeel Steering 33. Rar axle, rear-wheel drive 34. Brakes 34. Brakes 35. Foot Operation 36. Wheels and Thres 46. Frame and Mounted Components 51. Trim Panels 52. Soats 63. General Vehicle Electrics 62. Instruments 63. Lights 65. Audio, Navigation, Information Systems 77. Optional Accessories 77. Optional Accessories 78. Optional Accessories 79. Optional Accessories 70. Optional Accessories 71. Engine block 72. Applied To crankcase M10. 80 11. Engine block 70. Optional Accessories 10. drain plug to crankcase M10. 80 10. drain plug to crankcase M10. 810 Tightening torque, 25 Nm M10. 810 M10. 810 70. Maxes M10. 820		
31: Front Wheel Steering 32: Steering 33: Rear ake, rear-wheel drive 34: Bracks 35: Foot Operation 36: Wheels and Tires 46: Frame and Mouted Components 51: Trim Panels 52: Seats 62: Instruments 63: Lights 63: Lights 64: Lights 65: Audio, Navigation, information Systems 77: Optional Accessories 71: Engine Block 70: Application 70: Appli		
32. Steering 33. Rear avic, rear wheel drive 34. Brakes 56 Voto Generation 35. Foot Operation 36 Frame and Mounted Components 35. Tirm Panels 51 Tim Panels 51. General Vehicle Electrics 52 Sets 65. Ander, Navigation, Information Systems 77. optional Accessories 11.1 Engine Dok Value 11.1 Engine lock 0 Nm Crash bar mount, M8 19 Mm 01 drain Jugt to crankcase 1 M18.4 S0, Outer or ankcase 1 M18.4 S0, Jobited with sealing ring, A8 x 13 Al 19 Nm M6 x 10. Tightening torque, 25 Nm M6 x 30, Jobited with sealing ring, A8 x 13 Al 19 Nm M6 x 50, Outed with sealing ring, A8 x 13 Al 19 Nm M6 x 50, Outed with sealing ring, A8 x 13 Al 19 Nm M6 x 50, Outed onthe component 8 Nm Ran, WAB 9 Nm M6 x 50, Outed onthe component 8 Nm Ran, WAB 19 Nm M6 x 50, Outed with sealing ring, A8 x 13 Al 19 Nm M6 x 50, Outed with sealing ring, A8 x 13 Al 19 Nm M6 x 50, Outed with sealing ring, A8 x 13 Al 19 Nm		
33. Rear avie, rear wheel drive 34. Brakes 35. Foot Operation 36. Wheels and Tires 46. Frame and Mounted Components 51. Trin Panels 52. Seats 61. General Vehicle Electrics 62. Instruments 63. Lipht 65. Sudio, Nivgation, Information Systems 77. Optional Accessories 78. Lipht Sock 79. Optional Accessories 79. Optional Accessories 70. Optional Accessories 71. Engine Bock 82. Name 101 seption 11. Engine Bock 83. Name 11. Seption 12. Seption 13. Seption 13. Seption 14. Seption 14. Seption 15. Seption 16. A1.5 15. Seption 16. Seption 16. Seption 16. Seption 16. Seption 16. Seption 17. Sep		
34: Brakes Sk Stoot Operation 35: Foot Operation Sk Stoot Operation 36: Wheels and Tires Sk Stoot Operation 36: Stroot Operation Sk Stoot Operation 37: Option Accessories Sk Stoot Operation 311 - Engine Block Sk Stoot Operation 3113 - Stoot Operation Sk Stoot Operation 3114 - Stoot Operation Sk Stoot Operation 3115 - Stoot Operation Sk Stoot Operation 3116 Stoot Operation Sk Stoot Operation 3117 - Stoot Operation Sk Stoot Operation 3118 Stoot Operation Sk Stoot Operation	-	
35: Foto Operation 36: Wheels and Tires 46: Frame and Mounted Components 51: Tim Panels 52: Seats 52: Seats 61: Central Vehicle Electrics 62: Instruments 62: Linstruments 63: Lights 63: Lights 63: Lights 64: Anne and Mounted Components Systems 70: Opticnal Accessories 71: Opticnal Accessories 70: Opticnal Accessories 72: Opticnal Accessories 70: Opticnal Accessories 73: Display Accessories 70: Opticnal Accessories 70: Opticnal Accessories 70: Opticnal Componentis 70: Opticnal Acces		
36: Wheels and Tires 46: Frame and Mounted Components 31: Tim Panels 51: Sint Panels 52: Seats 52: Seats 61: General Vehicle Electrics 52: Seats 62: Instruments 52: Seats 63: Lights 52: Seats 65: Audio, Navigation, Information Systems 77: Optional Accessories 11: Engine Block 19 Bracket, enging gurd to crankcase 10 M10 x 90 40 Nm Crash bar mount to crankcase 19 Nm Oil drain plug to crankcase 10 Dil drain plug to crankcase 22 Nm Bracket, enging gurd No znakcase 20 Nm M10 x 10 Tightening torque, 25 Nm M10 x 100 S Nm Ka 60, botted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm Ka 75 8 Nm Forn right, M6 x 10 19 Nm M6 x 51 19 Nm M10 x 110 Tightening torque, 25 Nm Forn right, M6 x 10 8 Nm Engine block, right 19 Nm M10 x 110 Tightening torque, 25 Nm M10 x 110 Tightening		
46: Frame and Mounted Components 51: Trim Panels 52: Seats 61: General Vehicle Electrics 62: Instruments 63: Lights 65: Audio, Navigation, Information Systems 77: Optional Accessories 77: Optional Accessories 77: Optional Accessories 78: Audio, Navigation, Information Systems 79: Optional Accessories 70: Optional Accessories 70: Optional Accessories 70: Optional Accessories 70: Optional Accessories 71: Engine Block 8: Descenter, engine guard to crankcase M10 x 90 Cash Bar mount, M& Uldrain Jugits or cankcase Rubber mount, MB Uldrain Jugits or cankcase M10 x 110 Tightening torque, 25 Nm Additional angle of rotation, 90" M6 x 50 8 Nm M6 x 50 8 Nm M6 x 25 8 Nm Engine guard to engine Image: Cash Cash Cash Cash Cash Cash Cash Cash	•	
51: Tim Panels 52: Seats 63: General Vehicle Electrics 62: Instruments 63: Lights 65: Wights 65: Mights 77: Optional Accessories 11 - Engine Block Bracket, engine guard to crankcase M10 x 90 Cash bar mount to crankcase M10 x 90 Oil drain plug to crankcase Muber mount, MB Oil drain plug to crankcase M10 x 10 Tightening torque, 25 Nm M10 x 10 Mathina angle of rotation, 90° M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 35 8 Nm Fengine guard to engine Nm M6 x 35 8 Nm Fort right, M6 x 10 9 Nm Fort right, M6 x 10 8 Nm Fengine plucit, mint Additional angle of rotation, 90° M10 x 130 Tightening torque, 25 Nm Fort right, M6 x 10 8 Nm Fengine block, right Tightening torque, 25 Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 Tightening torque, 25 Nm <t< td=""><td></td><td></td></t<>		
52: Setsi Sile Seneral Vehicle Electrics 61: General Vehicle Electrics Sile Sinstruments 63: Lights Sile Sinstruments 63: Lights Sile Sinstruments 63: Lights Value 11 - Engine Value 111 - Engine block Paracket, engine guard to crankcase Rubber mount, M8 19 Nm Old rain plug to crankcase International Accessories M10 x 90 40 Nm Crash bar mount, M8 19 Nm Old rain plug to crankcase International Accessories M10 x 10 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm M6 x 52 8 Nm Engine block, right Internation, 90* M6 x 53 8 Nm Fort right, M8 x 20 19 Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 19 Nm M8 x 80 19 Nm <td></td> <td></td>		
61: Genral Vehicle Electrics 62: Instruments 63: Lights 65: Audio, Navigation, Information Systems 77: Optional Accessories 11 - Engine Value 11 - Engine block Facket, engine guard to crankcase M10 v 90 Crash bar mount to crankcase Mubber mount, M8 Oll drain plug to crankcase Mubber mount, M8 Oll drain plug to crankcase Milo x 10 Tightening torque, 25 Nm Additional angle of rotation, 90° M3 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm Figine guard to engine Nm Rear, Nut M8 19 Nm Font left, M8 x 20 19 Nm Font left, M8 x 20 9 Nm Font left, M8 x 20 19 Nm M10 x 110 Tightening torque, 25 Nm M10 x 110 19 Nm Font left, M8 x 20 19 Nm Font left, M8 x 20 19 Nm M10 x 110 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M10 x 100		
62: Instruments 63: Lights 63: Lights 63: Lights 63: Lights 65: Audio, Navigation, Information Systems 77: Optional Accessories 11 - Engine block Bracket, engine guard to crankcase M10 x 90 Cash bar mount, M8 Old rain plug to crankcase Rubber mount, M8 Old rain plug to crankcase M15 x 1.5 Engine block, left M10 x 110 Tightening torque, 25 Nm M10 x 110 M8 x 60, holted with sealing ring, A8 x 13 Al M8 x 60, holted with sealing ring, A8 x 13 Al M8 x 60, holted with sealing ring, A8 x 13 Al M6 x 50 Rare, Nut M8 Fort left, M6 x 20 So Tool left, M6 x 10 Engine block, right M10 x 110 Tightening torque, 25 Nm M10 x 110 M10 x 110 M10 x 110 M10 x 120 M10 x 130 M8 x 80		
63: Lights 5: Audio, Navigation, Information Systems 75: Optional Accessories Value 111 - Engine block Partexte, engine guard to crankcase M10 x 90 40 Nm Crash bar mount to crankcase Partexte, engine guard to crankcase M10 x 90 40 Nm Crash bar mount to crankcase Partexte, engine guard to crankcase M16 x 1.5 32 Nm Engine block, left Partexte, engine stock, left M10 x 100 Tightening torque, 25 Nm M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm M6 x 25 8 Nm Engine block, right Partexte, engine accessor accestor accessor acce		
65: Audio, Navigation, Information Systems 77: Optional Accessories 11 - Engine Value 111 - Engine block Image: Comparison of Compari		
77: Optimal Accessories 11 - Engine Value 11 - Engine block Image: State of	-	
11 - Engine Value 11 1 - Engine block Image: State of the state of		
111 - Engine block Bracket, engine guard to crankcase M10 × 90 40 Nm Crash bar mount to crankcase 19 Nm Rubber mount, M8 19 Nm 01 drain plug to crankcase 19 Nm M16 × 10. 32 Nm Engine block, left Additional angle of rotation, 90° M8 × 60, bolted with sealing ring, A8 × 13 Al 19 Nm M6 × 50 8 Nm Ka 50, bolted with sealing ring, A8 × 13 Al 19 Nm M6 × 50 8 Nm M6 × 25 8 Nm Engine guard to engine Engine guard to engine Front left, M8 × 20 19 Nm M10 × 130 Tightening torque, 25 Nm M10 × 130 Additional angle of rotation, 90° M10 × 10 Tightening torque, 25 Nm M8 × 80 19 Nm M8 × 35 19 Nm K4 × 35 8 Nm		Value
Bracket, engine guard to crankcase 40 Nm M10 × 90 40 Nm Crash bar mount to crankcase 19 Nm Rubber mount, M8 19 Nm Oil drain plug to crankcase 22 Nm Engine block, left 1 M10 × 1.0 Tightening torque, 25 Nm Additional angle of rotation, 90° Mdx x50, bolted with sealing ring, A8 × 13 Al M5 × 50 8 Nm M6 × 55 8 Nm M6 × 25 8 Nm Engine guard to engine 19 Nm Forn left, M8 × 20 19 Nm front left, M8 × 20 19 Nm M10 × 130 Tightening torque, 25 Nm M10 × 130 Tightening torque, 25 Nm M10 × 130 S M10 × 130 Nm M6 × 35 19 Nm K8 × 35 19 Nm M6 × 35 9 Nm M6 × 35 8 Nm Cylinder, left, to crankcase Imm K8 × 30 19 Nm		
M10 x 9040 NmCrash bar mount to crankcaseIRubber mount, M819 NmOil drain plug to crankcase32 NmEngine block, leftIM16 x 1.0Tightening torque, 25 NmM10 x 110Additional angle of rotation, 90°M8 x 60, bolted with sealing ring, A8 x 13 Al19 NmM6 x 508 NmM6 x 528 NmEngine block, right19 NmM6 x 508 NmEngine guard to engineIFront right, M8 x 2019 Nmfront right, M6 x 108 NmEngine guard to engineIRear, Nut M819 Nmfront right, M6 x 108 NmEngine block, rightIM10 x 110Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM8 x 8019 NmM6 x 358 NmM6 x 358 NmM6 x 358 NmM6 x 359 Nm </td <td></td> <td></td>		
Crash bar mount, M8 19 Nm Rubber mount, M8 19 Nm Oil drain plug to crankcase - M16 x 1.5 32 Nm Engine block, left - M10 x 110 Tightening torque, 25 Nm M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm M6 x 55 8 Nm Engine block, right - Rear, Nut M8 19 Nm Fornt right, M6 x 10 19 Nm Fornt right, M6 x 10 19 Nm Fornt right, M6 x 10 8 Nm Engine block, right - M10 x 130 Tightening torque, 25 Nm M10 x 130 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M8 x 80 19 Nm M6 x 35 8 Nm M8 x 35 19 Nm M6 x 35 8 Nm M8 x 35 19 Nm M6 x 35 8 Nm Cylinder, left, to crankcase - M6 x 35		40 Nor
Rubber mount, M8 19 Nm Oil drain plug to crankcase		40 NM
Oil drain plug to crankcase 32 Nm Engine block, left M16 x 1.5 M10 x 110 Tightening torque, 25 Nm Additional angle of rotation, 90° M8 x 60, bolted with sealing ring, A8 x 13 Al M6 x 50 8 Nm M6 x 55 8 Nm M6 x 55 8 Nm Engine guard to engine Person Rear, Nut M8 19 Nm front left, M8 x 20 19 Nm front right, M6 x 10 8 Nm Engine block, right M10 x 110 M10 x 110 Tightening torque, 25 Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 Additional angle of rotation, 90° M10 x 130 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 Nm M6 x 55 19 Nm M6 x 50 8 Nm M6 x 35 8 Nm K33 19 Nm M6 x 35 8 Nm Cylinder, left, to crankcase M M8 x 30 19 Nm M6 x 35 8 Nm		10 Nor
M16 x 1.5 32 Nm Engine block, left Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 55 8 Nm M6 x 55 8 Nm M6 x 25 8 Nm Engine guard to engine 8 Rear, Nut M8 19 Nm front left, M8 x 20 19 Nm front right, M6 x 10 8 Nm Engine block, right 19 Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 S Nm M10 x 130 Tightening torque, 25 Nm M10 x 130 S Nm M10 x 130 S Nm M6 x 35 19 Nm M8 x 80 19 Nm M6 x 35 8 Nm Cylinder, left, to crankcase Nm K4 x 35 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase Nm M8 x 35 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase Nm M8		19 NM
Engine block, left Tightening torque, 25 Nm M10 x 110 Additional angle of rotation, 90° M8 x 60, bolted with sealing ring, A8 x 13 Al 19 Nm M6 x 50 8 Nm M6 x 55 8 Nm M6 x 25 8 Nm Engine guard to engine 8 Nm Rear, Nut M8 19 Nm front left, M8 x 20 19 Nm front right, M6 x 10 8 Nm Engine block, right 19 Nm M10 x 130 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M10 x 130 Additional angle of rotation, 90° M10 x 130 Tightening torque, 25 Nm M6 x 55 19 Nm M8 x 80 19 Nm M6 x 35 8 Nm Cylinder, left, to crankcase Nm M6 x 35 8 Nm Cylinder, right, to crankcase 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase 19 Nm M6 x 35 8 Nm M8 x 30 19 Nm		22 Nor
M10 x 110Tightening torque, 25 NmAdditional angle of rotation, 90°M8 x 60, bolted with sealing ring, A8 x 13 Al19 NmM6 x 508 NmM6 x 358 NmM6 x 358 NmEngine guard to engineRear, Nut M8Rear, Nut M819 Nmfront left, M8 x 2019 Nmfront right, M6 x 108 NmEngine guard to engineRear, Nut M8front right, M6 x 108 NmM10 x 130Tightening torque, 25 NmM10 x 130Tightening torque, 25 NmM10 x 13019 NmM8 x 8019 NmM8 x 8019 NmM8 x 8019 NmM6 x 358 NmCylinder, left, to crankcase8 NmCylinder, left, to crankcaseNmM8 x 3319 NmM6 x 358 NmCylinder, left, to crankcaseNmM8 x 3519 NmM6 x 358 NmCylinder, right, to crankcaseNmM8 x 3519 NmM6 x 358 NmCylinder, left, to crankcaseNmM8 x 3519 NmM6 x 358 NmCylinder, right, to crankcaseNmM8 x 3519 NmM6 x 358 NmCylinder, head with coverCylinder head cover to cylinder headCylinder head cover to cylinder headMm		32 NM
Additional angle of rotation, 90°M8 x 60, bolted with sealing ring, A8 x 13 Al19 NmM6 x 508 NmM6 x 358 NmM6 x 258 NmEngine guard to engine8 NmRear, Nut M819 Nmfront left, M8 x 2019 Nmfront right, M6 x 108 NmEngine block, right8 NmM10 x 130Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM8 x 8019 NmM8 x 8519 NmM6 x 358 NmM6 x 358 NmM6 x 358 NmM6 x 358 NmM6 x 359 NmM6 x 358 NmCylinder, left, to crankcase8 NmCylinder, right, to crankcase9 NmM6 x 359 NmM6 x 359 NmCylinder head with cover9 NmCylinder head cover to cylinder head6 Nm		
M8 x 60, bolted with sealing ring, A8 x 13 Al19 NmM6 x 508 NmM6 x 358 NmM6 x 258 NmEngine guard to engineNmRear, Nut M819 Nmfront left, M8 x 2019 Nmfront left, M8 x 2019 Nmfront left, M8 x 108 NmEngine block, rightMitten and the second se	M10 X 110	
M6 x 50 8 Nm M6 x 35 8 Nm M6 x 25 8 Nm Engine guard to engine 8 Nm Rear, Nut M8 19 Nm front left, M8 x 20 19 Nm front right, M6 x 10 8 Nm Engine block, right 19 Nm M10 x 130 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M10 x 110 Tightening torque, 25 Nm M8 x 80 19 Nm M6 x 35 19 Nm M6 x 35 19 Nm M6 x 35 8 Nm Cylinder, left, to crankcase Nm M8 x 55 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase Nm M8 x 35 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase Nm M8 x 35 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase Nm M8 x 35 8 Nm Cylinder, right, to crankcase Nm M8 x 35 19 Nm M6 x 35 8 Nm		
M6 x 358 NmM6 x 258 NmEngine guard to engine9 NmRear, Nut M819 Nmfront left, M8 x 2019 Nmfront left, M6 x 108 NmEngine block, right1ightening torque, 25 NmM10 x 130Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM8 x 8019 NmM8 x 8019 NmM6 x 358 NmM6 x 358 NmCylinder, left, to crankcase9 NmM6 x 3519 NmM1 x 1019 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 3519 NmM6 x 358 NmCylinder head with cover20 NmCylinder head with cover20 NmCylinder head ocver to cylinder head20 Nm		
M6 x 258 NmEngine guard to engine19 NmRear, Nut M819 Nmfront left, M8 x 2019 Nmfront right, M6 x 108 NmEngine block, right10 XmM10 x 130Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM8 x 8019 NmM8 x 3519 NmM6 x 358 NmCylinder, left, to crankcase8 NmM6 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase8 NmCylinder, right, to crankcase19 NmM6 x 3519 NmCylinder, right, to crankcaseCylinder, right, to crankcaseCylinder, right, to crankcaseCylinder, right, to crankcaseCylinder, right, to crankcaseCylinder head with coverCylinder head with coverCylinder head		
Engine guard to engineRear, Nut M819 Nmfront left, M8 x 2019 Nmfront right, M6 x 108 NmEngine block, rightImage: Stress of		
Rear, Nut M819 Nmfront left, M8 x 2019 Nmfront right, M6 x 108 NmEngine block, rightTightening torque, 25 NmM10 x 130Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM10 x 110Additional angle of rotation, 90°M8 x 8019 NmM8 x 3519 NmM6 x 358 NmCylinder, left, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder head with cover19 Nmto cylinder head8 Nmto cylinder head cover to cylinder head6 Nm		8 Nm
front left, M8 x 2019 Nmfront right, M6 x 108 NmEngine block, rightNmM10 x 130Tightening torque, 25 NmAdditional angle of rotation, 90°NmM10 x 110Tightening torque, 25 NmM10 x 110Tightening torque, 25 NmM8 x 8019 NmM8 x 3519 NmM6 x 358 NmCylinder, left, to crankcase9 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 3519 NmM6 x 3519 NmM6 x 3519 NmM6 x 358 NmCylinder head with cover20 NmCylinder head cover to cylinder head10 Nm		
front right, M6 x 108 NmEngine block, rightTightening torque, 25 NmM10 x 130Tightening torque, 25 NmAdditional angle of rotation, 90°M10 x 110Tightening torque, 25 NmAdditional angle of rotation, 90°M8 x 8019 NmM8 x 3519 NmM6 x 508 NmCylinder, left, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM10 x 358 NmCylinder, right, to crankcase19 NmM10 x 358 NmCylinder, right, to crankcase19 NmM10 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder head with cover6 NmCylinder head cover to cylinder head6 Nm		
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Additional angle of rotation, 90°M10 x 110Tightening torque, 25 NmAdditional angle of rotation, 90°M8 x 8019 NmM8 x 3519 NmM6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 3519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder head with cover8 NmCylinder head over to cylinder head11 12 - Cylinder head		
M10 x 110Tightening torque, 25 NmAdditional angle of rotation, 90°M8 x 8019 NmM8 x 3519 NmM6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder head with cover19 NmCylinder head cover to cylinder head19 Nm	M10 x 130	
Additional angle of rotation, 90°M8 x 8019 NmM8 x 3519 NmM6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmK x 558 NmCylinder, right, to crankcase19 NmM6 x 358 NmCylinder, right, to crankcase19 NmM1 2 - Cylinder head with cover8 NmCylinder head cover to cylinder head19 Nm		
M8 x 8019 NmM8 x 3519 NmM6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM6 x 3319 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 NmCylinder head with cover8 NmCylinder head cover to cylinder head10 Nm	M10 x 110	
M8 x 3519 NmM6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM8 x 3019 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 NmT12 - Cylinder head with cover1112 - Cylinder head cover to cylinder head		
M6 x 508 NmM6 x 358 NmCylinder, left, to crankcase19 NmM8 x 3019 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 Nm11 2 - Cylinder head with cover8 NmCylinder head cover to cylinder head10 Nm	M8 x 80	
M6 x 358 NmCylinder, left, to crankcase19 NmM8 x 3019 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 Nm11 2 - Cylinder head with cover8 NmCylinder head cover to cylinder head10 Nm	M8 x 35	
Cylinder, left, to crankcase19 NmM8 x 3019 NmM6 x 358 NmCylinder, right, to crankcase19 NmM8 x 5519 NmM6 x 358 Nm11 12 - Cylinder head with cover11 12 - Cylinder head cover to cylinder head		
M8 x 30 19 Nm M6 x 35 8 Nm Cylinder, right, to crankcase 19 Nm M8 x 55 19 Nm M6 x 35 8 Nm 11 12 - Cylinder head with cover Cylinder head cover to cylinder head	M6 x 35	8 Nm
M6 x 35 8 Nm Cylinder, right, to crankcase 9 Nm M8 x 55 19 Nm M6 x 35 8 Nm 11 12 - Cylinder head with cover 9 Nm Cylinder head cover to cylinder head 9 Nm	Cylinder, left, to crankcase	
Cylinder, right, to crankcase 19 Nm M8 x 55 19 Nm M6 x 35 8 Nm 11 12 - Cylinder head with cover 2 Cylinder head cover to cylinder head 2	M8 x 30	
M8 x 55 19 Nm M6 x 35 8 Nm 11 12 - Cylinder head with cover 2 Cylinder head cover to cylinder head 2	M6 x 35	8 Nm
M6 x 35 8 Nm 11 12 - Cylinder head with cover 6 Cylinder head cover to cylinder head 6	Cylinder, right, to crankcase	
11 12 - Cylinder head with cover Cylinder head cover to cylinder head	M8 x 55	19 Nm
Cylinder head cover to cylinder head	M6 x 35	8 Nm
	11 12 - Cylinder head with cover	
M6 x 72 tighten in diagonally opposite sequence	Cylinder head cover to cylinder head	
	M6 x 72	tighten in diagonally opposite sequence

Hexhea	ad Torque Values
	10 Nm
Cylinder head to cylinder	
Nut, tie bolt, M10	tighten by stages in diagonally opposite sequence
	Tightening torque, 20 Nm
	1st additional angle of rotation, 90°
	2nd additional angle of rotation, 90°
M10 x 90	40 Nm
M6 x 30	9 Nm
Cylinder head to cylinder (check torque)	
Nut, tie bolt, M10	In diagonally apposite sequence, slocken and then retighten each put
	In diagonally opposite sequence, slacken and then retighten each nut
	Tightening torque, 20 Nm
	Additional angle of rotation, 180°
M10 x 90	Slacken and then retighten screw
	40 Nm
Oil filler plug	
M34 x 1.5	8 Nm
11 14 - Housing cover	
Belt cover to engine	
M5 x 16	5 Nm
Belt cover to belt cover, rear	
TS5 x 20	3 Nm
Belt cover to alternator	
M5 x 16	5 Nm
Timing case cover to crankcase	
M6 x 30	9 Nm
	5 MII
Bearing cap, front auxiliary shaft on timing case cover	0.04
M6 x 20	8 Nm
Clutch cover to engine	
M6 x 16	8 Nm
11 15 - Crankcase breather	
Breather adapter to cylinder head	
M6 x 14	8 Nm
11 21 - Crankshaft with bearings	
Belt pulley to crankshaft	
M22 x 1.5	1st tightening torque , 40 Nm
	2nd tightening torque , 140 Nm
11 24 - Conrod with bearings	
Threaded fastener, conrod bearing	
Stress bolt, M10 x 1, Replace screw	1st tightening torque, 5 Nm
Install with threads and underside of head lightly oiled	2nd tightening torque, 20 Nm
	Additional angle of rotation, 105°
11.27 Palancing chaft	הממונטוומו מווצוב טו וטנמנוטוו, 203
11 27 - Balancing shaft	
Compensating weight to balancing shaft	
Neck-down screw, M8 x 70 - 10.9, Replace screw	Tightening torque, 10 Nm
	Additional angle of rotation, 90°
Gear wheel to balancing shaft	
Nut, M12 x 1.5	75 Nm
11 31 - Camshaft	
Sprocket to auxiliary shaft	
M5 x 16 - 10.9	8 Nm
Chain sprocket to crankshaft	
M6 x 16	8 Nm
Camshaft sprocket to camshaft	
M10 x 25 x 1.25 - 10.9	65 Nm
Housing for chain tensioner to crankcase	
M6 x 25	8 Nm
	8 Nm
Chain tensioner to cylinder	
Chain tensioner to cylinder, left, M18 x 1.5	32 Nm
Chain tensioner to cylinder, left, M18 x 1.5 Chain tensioner to cylinder, right, M18 x 1.5	32 Nm 32 Nm
Chain tensioner to cylinder, left, M18 x 1.5	

Hexhead	d Torque Values
Pivot screw of timing chain tensioning rail to crankcase	
	10 Nor
M10, Install with sealing washer	18 Nm
11 33 - Rocker/follower with bearing	
Locknut, valve adjusting screw	
M6 x 0.5	8 Nm
Bearing cap to timing-gear carrier	
M8 x 30	18 Nm
M8 x 40	18 Nm
Nut, tie bolt, M10	Tightening torque, 20 Nm
	1st additional angle of rotation, 90°
	2nd additional angle of rotation, 90°
Camshaft bearings	
M8 x 65 - 10.9	15 Nm
Timing-gear carrier to cylinder head	
M6 x 30	8 Nm
M6 x 60	8 Nm
11 40 - Oil supply	
Cooling oil line to crankcase (inside engine)	
Banjo bolt, M14 x 1.5	25 Nm
Cooling oil line to crankcase (inside engine)	
M6 x 16	8 Nm
11 41 - Oil pump with strainer and drive	
Oil pump to crankcase	
M6 x 40, Replace screws	Tightening torque, 4 Nm
Nio x 40, Replace sciews	Additional angle of rotation, 90°
M6 v 45. Doplace corowe	Tightening torque, 4 Nm
M6 x 45, Replace screws	
	Additional angle of rotation, 90°
Oil-intake adapter in crankcase, right	
M6 x 25	8 Nm
Pressure relief valve in crankcase, right	
M20 x 1.5 - 5.8	42 Nm
11 42 - Oil filter and lines	
Oil filter to crankcase	
Sealing ring wetted with engine oil	11 Nm
11 61 - Intake elbow	
Air intake to cylinder head	
M6 x 20	8 Nm
12 - Engine electrical system	Value
12 12 - Ignition wiring, spark plugs	
Primary spark plug to cylinder head	
NGK, M12 x 1.25	Initial torque and retorquing, 20 Nm
Secondary spark plug to cylinder head	
NGK, M12 x 1.25	Initial torque and retorquing, 20 Nm
12 13 - Ignition coil	
Cover, secondary spark plug coil to cylinder head	
	9 Nm
M6 x 12	8 Nm
12 31 - Alternator with drive and fasteners	
Alternator to crankcase	
M8 x 25	18 Nm
Belt pulley to alternator	
M16 x 1.5	50 Nm
Wiring harness to alternator	
M6, Replace nut	6 Nm
Thread-locking compound (mechanical)	
12 41 - Starter with fastener	
Starter with gearing to engine	
M8 x 60	19 Nm
Wiring harness to starter	
M8	10 Nm
12 61 - Oil pressure, oil temperature, oil-level indicators	

Heyhear	Torque Values
Oil-pressure switch to crankcase	
M12 x 1.5	30 Nm
Oil-temperature sensor to crankcase	
M14 x 1.5	16 Nm
12 72 - Transmitter for control unit	
Crankshaft sensor to gearcase cover	
M6 x 16	8 Nm
Knock sensor to cylinder	
M8 x 35	19 Nm
Camshaft sensor to camshaft cover	
M6 x 16	8 Nm
Camshaft cover to cylinder head	
M6 x 20	8 Nm
Temperature sensor in cylinder head, outside	
M10 x 1	10 Nm
13 - Fuel preparation and control	Value
13 53 - Injection nozzles and lines	
Holder for injection nozzle to throttle-valve stub	
M5 x 16	5 Nm
13 62 - Transmitter for control unit	
Oil level sensor to crankcase	
M6 x 16	8 Nm
Thread-locking compound (Loctite 243, Medium strength)	
13 63 - Electromechanical switchgear	
Metal stop with idle actuator to throttle-valve stub	
M5 x 14, Replace screw	6 Nm
Thread-locking compound (Micro-encapsulated)	
13 71 - Intake air silencer	
Intake air silencer to rear frame	
M6 x 8	8 Nm
16 - Fuel supply	Value
16 11 - Fuel tank with filler neck	
Fuel tank with bracket to front frame	
M8 x 45 - 10.9	19 Nm
Filler cap to fuel filler neck	
M5 x 16	2.4 Nm
	2.4 Nm
M5 x 16	2.4 Nm 19 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20	
M5 x 16 Fuel-tank mount to fairing bracket	
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20	19 Nm 2.4 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p	19 Nm 2.4 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank	19 Nm 2.4 Nm ump
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut	19 Nm 2.4 Nm ump 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling	19 Nm 2.4 Nm ump
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler	19 Nm 2.4 Nm ump 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket	19 Nm 2.4 Nm ump 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30	19 Nm 2.4 Nm ump 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket	19 Nm 2.4 Nm ump 35 Nm Value
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30	19 Nm 2.4 Nm ump 35 Nm Value
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines	19 Nm 2.4 Nm ump 35 Nm Value
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 8 Nm 8 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 8 Nm 35 Nm 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 8 Nm 8 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12 Oil cooler line to fairing bracket	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 8 Nm 35 Nm 8 Nm 35 Nm 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12 Oil cooler line to fairing bracket M6 x 12	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 35 Nm 8 Nm 35 Nm 4.6 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12 Oil cooler line to fairing bracket M6 x 12 18 - Exhaust system	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 8 Nm 35 Nm 8 Nm 35 Nm 35 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12 Oil cooler line to fairing bracket M6 x 12 18 - Exhaust system 18 11 - Exhaust pipe	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 35 Nm 8 Nm 35 Nm 4.6 Nm
M5 x 16 Fuel-tank mount to fairing bracket M8 x 20 Fuel filler neck to fuel tank M5 x 20 16 14 - Delivery, preparation and measurement, control unit, fuel p Fuel pump to fuel tank Union nut 17 - Cooling 17 21 - Oil cooler Oil cooler to fairing bracket M6 x 30 17 22 - Oil cooler lines Oil cooler line, flow line, to crankcase M6 x 16 Oil cooler line, return line, to crankcase Banjo bolt, M16 x 1.5 Oil cooler line, return line, to front frame M6 x 12 Oil cooler line to fairing bracket M6 x 12 18 - Exhaust system	19 Nm 2.4 Nm ump 35 Nm Value 8 Nm 35 Nm 8 Nm 35 Nm 4.6 Nm

Herbeau	Torque Values
Bracket, manifold to gearbox M6 x 38	0.Nm
18 12 - Silencer	9 Nm
Silencer to rear frame	10 Nor
M8 x 45	19 Nm
Clamp to silencer and exhaust manifold	
M10 x 1.5	55 Nm
18 30 - Exhaust pipe with catalytic converter or complete system	
Oxygen sensor to exhaust header	
M18 x 1.5	45 Nm
Lubricate thread, Installation tool (Optimoly TA)	
Clamp to manifold, rear	
M6 x 25	8 Nm
21 - Clutch	Value
21 21 - Clutch with driver plate	
Flywheel to crankshaft	
M11 x 1.5 - 12.9, Replace screw	Tightening torque, 40 Nm
Screw oiled	Additional angle of rotation, 40°
Clutch housing cover to clutch housing	
M6 x 20 - 10.9	tighten in diagonally opposite sequence
	12 Nm
21 52 - Clutch actuation (hydraulics)	
Clutch slave cylinder to gearbox	
M6 x 18	8 Nm
Clutch line to clutch lever fitting	
Banjo bolt, M10 x 1	18 Nm
Clutch pipe to slave cylinder	
Banjo bolt with bleeder, M10 x 1	18 Nm
Bleed screw to banjo bolt	5 Nm
23 - Gearbox	Value
	Value
Gearbox oil filler plug	
M14 x 1.5	30 Nm
M14 x 1.5 Gearbox oil drain plug	
M14 x 1.5 Gearbox oil drain plug M18 x 1.5	30 Nm 30 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover	
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block	30 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35	30 Nm 30 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block	30 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75	30 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38	30 Nm 30 Nm 19 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer)	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 10 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 10 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft M6 x 25	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft M6 x 25 Locknut, ball socket on selector rod Nut M6	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft M6 x 25 Locknut, ball socket on selector rod Nut M6 Ball end to selector lever	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 7.5 Nm 7.5 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft M6 x 25 Locknut, ball socket on selector rod Nut M6 Ball end to selector lever Ball end M8	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm 8 Nm
M14 x 1.5 Gearbox oil drain plug M18 x 1.5 23 11 - Housing with cover Gearbox to engine block M8 x 35 M8 x 50 M8 x 75 Gearbox cover to gearbox housing M6 x 38 23 14 - Electrical components Gearbox potentiometer to gearbox M6 x 28 Gearbox potentiometer to gearbox (non-contacting potentiometer) M5 x 16 23 31 - Internal gearshift components Locking lever on gearbox cover Flat-headed screw, M6 23 41 - External gearshift components Gearshift lever to intermediate shaft M6 x 25 Selector lever to selector shaft M6 x 25 Locknut, ball socket on selector rod Nut M6 Ball end to selector lever	30 Nm 30 Nm 19 Nm 19 Nm 19 Nm 10 Nm 8 Nm 5 Nm 8 Nm 8 Nm 8 Nm 8 Nm 7.5 Nm 7.5 Nm

Hexhead Torque Values	
31 - Front axle, front-wheel steering	Value
31 42 - Telescopic forks	
Clamping screw (quick-release axle) in slider tube	
M8 x 35	19 Nm
Leading link to engine	23 (0)
M12 x 20	Tightening torque, 45 Nm
	Additional torque, 73 Nm
Spring strut to front frame	
Hex nut, M10 x 1.25	34 Nm
Thread-locking compound (Loctite 243, Medium strength)	
Sealing screw in fork plug	
M4 x 8, Replace O-ring	2.3 Nm
Spring strut, front, to leading link	
M10 x 50 x 1.25 - 10.9, Replace screw, lubricate head	34 Nm
Thread-locking compound (Micro-encapsulated), Installation tool (Op	timoly TA)
Ball joint to leading link	
M14 x 1.5, Replace nut	130 Nm
Thread-locking compound (Micro-encapsulated)	
Fork bridge to front frame	
M14 x 1.5, Replace nut	130 Nm
Thread-locking compound (Micro-encapsulated)	
Ball joint in slider-tube bridge	
M34 x 1.5	230 Nm
Thread-locking compound (Micro-encapsulated)	
Fork bridge, top, to fork fixed tube	
M10 x 1.25	40 Nm
Thread-locking compound (mechanical)	
or, Thread-locking compound (Loctite 2701, High strength)	
Fork bridge, lower, to slider tube	
M8 x 25, Replace screw	25 Nm
Thread-locking compound (Micro-encapsulated)	
ESA holder to front frame	
M6 x 16, Replace screw	9 Nm
Thread-locking compound (Micro-encapsulated)	
32 - Steering	Value
32 71 - Motorcycle handlebars	
Handlebar weight to handlebar	
M12 x 80 x 1.5, Replace screw	21 Nm
Thread-locking compound (Micro-encapsulated)	
Handlebar clamping block to fork bridge	
M10 x 90 - 10.9	36 Nm
Handlebar to handlebar clamping block	
M8 x 30	16 Nm
32 72 - Handlebar lever	
Handlebar fitting to handlebar	E Nue
M5 x 20	5 Nm
Lever to handlebar fitting	7 Nm
M5, Replace nut Thread-locking compound (mechanical)	7 Nm
Bleed screw to handlebar fitting	
M5	2.2 Nm
Fluid reservoir to handlebar fitting	
Screw for plastic, 3.5 x 20, Replace screw	1.7 Nm
33 - Rear axle, rear-wheel drive and rear-wheel guida	value
33 11 - Final-drive unit housing with cover	
Housing cover to bevel gears	tichton in diagonally annosita sagurana
M8 x 30	tighten in diagonally opposite sequence
Hay put to bayal pipian	30 Nm
Hex nut to bevel pinion	200 Nm
Clean the threads, M24 x 1.5	200 Nm

Hexhead	Torque Values
Thread-locking compound (Loctite 2701, High strength)	
Threaded ring	
M65 x 1.5	180 Nm
Oil drain plug in bevel gears	
M12 x 1	20 Nm
Oil filler plug in final drive housing	
M12 x 1.5	20 Nm
with sealing ring 12 x 16	
33 17 - Rear-wheel drive hanger	
Final drive to swinging arm	
M12 x 1.5, Replace screw	100 Nm
Thread-locking compound (Micro-encapsulated)	
Paralever reaction link to frame	
M10 x 55-10.9, Replace screw	42 Nm
Thread-locking compound (Micro-encapsulated)	
Paralever reaction link to final drive	
M10 x 55-10.9, Replace nut	42 Nm
Thread-locking compound (mechanical)	
Lock nut, swinging arm to main frame, left	
M24 x 1.25	145 Nm
Floating-bearing stud, swinging arm to main frame, left	
M24 x 1.25	Tightening torque, 20 Nm
Lubricate thread and bearing seat, Installation tool (Optimoly TA)	slacken
	Tightening torque, 7 Nm
Fixed bearing stud, swinging arm to main frame, right	
M6 x 16	9 Nm
Cover screw in bearing stud, right	
M6 x 8	9 Nm
Link left to link right	
M6 x 16, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
33 53 - Springs with mounts	
Spring strut to rear swinging arm	
M10 x 80 - 10.9	58 Nm
use thread-locking compound for repair, Thread-locking compound (
Spring strut to main frame	
M10 x 1.25 x 65 - 10.9, Replace nut, lubricate screw head	50 Nm
	A)
Thread-locking compound (mechanical), Installation tool (Optimoly T	A)
	A)
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20	19 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes	
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake	19 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel	19 Nm Value
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw	19 Nm Value Ighten by stages in diagonally opposite sequence
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated)	19 Nm Value
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 5 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 5 Nm 24 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25 Brake caliper, rear, bleed screw	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 5 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25 Brake caliper, rear, bleed screw Brake disc to wheel carrier	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 5 Nm 24 Nm 5 Nm
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25 Brake caliper, rear, bleed screw Brake disc to wheel carrier M8 x 15.5, Replace screw	19 Nm Value Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 5 Nm 24 Nm 5 Nm tighten by stages in diagonally opposite sequence
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25 Brake caliper, rear, bleed screw Brake disc to wheel carrier	19 Nm Value tighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 24 Nm 5 Nm ighten by stages in diagonally opposite sequence 11 Units 12 Units 13 Units 14 Units 15 Nm 15 Units 15 Units
Thread-locking compound (mechanical), Installation tool (Optimoly T Knob for spring-strut adjustment to rear frame M8 x 20 34 - Brakes 34 11 - Front brake Brake disc to front wheel Pan-head screw, M8 x 22 - 10.9, Replace screw Thread-locking compound (Micro-encapsulated) Brake caliper to slider tube M8 - 10.9 Brake caliper, front, bleed screw Grubscrew, brake pads Bleed screw on handbrake fitting M5 34 21 - Rear brake Brake caliper to bevel gears M8 x 25 Brake caliper, rear, bleed screw Brake disc to wheel carrier M8 x 15.5, Replace screw	19 Nm Value ighten by stages in diagonally opposite sequence 19 Nm 30 Nm 10 Nm 6 Nm 2 5 Nm 24 Nm 5 Nm ighten by stages in diagonally opposite sequence

Heybear	d Torque Values
Piston rod, footbrake cylinder	9 Nm
Locknut, M6	8 Nm
Footbrake cylinder to rear frame	
M6 x 20, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
Brake fluid reservoir to rear frame	
M6 x 10, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
34 32 - Brake lines	
Brake hose cover to strut	
M6 x 16	8 Nm
Brake hose with banjo bolt to components	
M10 x 1	24 Nm
Connecting element to rear frame	
M6 x 16	8 Nm
Brake line with union screw to components	
M10 x 1, M12 x 1	14 Nm
Brake line to front frame	
M6 x 16	11 Nm
34 51 - Mechanical, hydraulic components	
ABS pressure modulator on retainer	
M6 x 12	8 Nm
Bracket for ABS pressure modulator to engine	
M6 x 20, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
34 52 - Electronic components	
Speed sensor to slider tube	
M5 x 10	4 Nm
Speed sensor to final drive housing cover	
M5 x 10	4 Nm
Cable clip to final drive housing cover	
M5 x 10	4 Nm
35 - Foot operation	Value
35 21 - Footbrake lever with connecting linkage	
Footbrake lever to rear frame	
M8 x 35	21 Nm
36 - Wheels and tyres	Value
36 31 - Wheels with bearings	
Quick-release axle in axle holder	
M24 x 1.5	50 Nm
Rear wheel to wheel carrier	
M10 x 53 x 1.25	tighten in diagonally opposite sequence
	60 Nm
Nipple on spoke	
M4	1st tightening torque, 1 Nm
	2nd tightening torque, 4 Nm
RDC sensor, front, to wheel rim	
Replace union nut	Tightening torque, 12 Nm
Thread-locking compound (Micro-encapsulated)	Slacken the nut
	Tightening torque, 12 Nm
RDC sensor to wheel rim	
Replace union nut	Tightening torque, 12 Nm
Thread-locking compound (Micro-encapsulated)	Slacken the nut
	Tightening torque, 12 Nm
Counter-hold spokes	
Grubscrew, M4	1 Nm
46 - Frame and mounted components	Value
46 51 - Motorcycle frame	
Rear frame to gearbox	
M8 x 55 10.9, Replace screw	1. Insert all screws; 2. tighten gearbox screw first; 3. then tighten remaining scre
mo x 33 ±0.3, heplace sciew	יוואטריג מוו אטרפאיא, בי מצוונפון צבמו אטא אטרפא ווואנ, אי נוופון מצוונפון ופווומוווווצ גרפי

Hexhea	d Torque Values
	28 Nm
Rear frame to engine	
Bottom, M12 x 50, Replace screw	55 Nm
Rear frame to engine, top, M10 x 40, Replace screw	38 Nm
Thread-locking compound (Micro-encapsulated)	
Front frame to engine	
M12 x 210, Install with thread-locking compound for repair	110 Nm
Thread-locking compound (Loctite 243, Medium strength)	
Frame strut to engine	
M10 x 40, Replace screw	38 Nm
Thread-locking compound (Micro-encapsulated)	
Frame struts to front frame	
M10 x 106 x 1 - 10.9, Replace screw	70 Nm
Thread-locking compound (Micro-encapsulated)	
46 52 - Centre stand	
Centre stand to main frame	
	40 Nm
M10 x 30, Replace screw Thread-locking compound (Micro-encapsulated)	40 Nm
Spring engagement plate to centre stand	20 Nm
M8 x 30	20 Nm
46 53 - Side stand	
Side stand to pivot mount	
M10 x 1, Replace screw	40 Nm
Thread-locking compound (Micro-encapsulated)	
46 54 - Luggage system	
Tail section to rear frame, rear	
M6 x 16, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
Locknut to mushroom head	16 Nm
Tail section to rear frame, front	
M6 x 50, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
Luggage carrier to rear frame	
M6 x 35, Replace screw	8 Nm
Thread-locking compound (Micro-encapsulated)	
Adjuster mechanism to case bottom	3 Nm
Seat lock to tail section	
M5 x 12	4 Nm
Adjuster mechanism to adjuster frame	3 Nm
Topcase support to rear frame	
M6 x 25	12 Nm
Lever to adjuster mechanism	1.5 Nm
Clamp, case carrier to rear frame	
M6 x 50	1. Tighten top screws 2. tighten bottom screws
	8 Nm
Locking mechanism to bottom of case	4 Nm
Cover to bottom of case	1 Nm
Case carrier through tail section to rear frame at top	
M6 x 35, Replace screw	8.5 Nm
Thread-locking compound (Micro-encapsulated)	
Lock strip to case lid	1.5 Nm
46 61 - Front-wheel cover	
Front-wheel cover, top, to fairing bracket	
M5 x 16	2.4 Nm
Front-wheel cover, bottom, to fork slider tube bridge	
M5 x 14, Replace screw	2.4 Nm
Thread-locking compound (Micro-encapsulated)	
Spoiler, top, to front-wheel cover	
M5 x 16	2.4 Nm
46 62 - Rear-wheel cover, number-plate carrier	

Hexhead Torque Values		
M5 x 16	2.4 Nm	
Rear-wheel cover to frame, rear	2.4 1011	
M5 x 16	2.4 Nm	
Spray guard to rear-wheel drive		
M6 x 20, Replace screw	8 Nm	
Thread-locking compound (Micro-encapsulated)		
Spray guard to bracket, rear-wheel drive		
M6 x 65, Replace screw	8 Nm	
Thread-locking compound (Micro-encapsulated)		
Bracket, diagnosis plug to rear-wheel cover		
3.5 x 12 - 3.6	2.4 Nm	
46 63 - Motorcycle fairing, windscreen		
Trim panels		
M5	2.5 Nm	
Fairing bracket to front frame		
Bottom, M6 x 16, Replace screw	11 Nm	
Thread-locking compound (Micro-encapsulated)		
Top, M6 x 25, Replace screw	11 Nm	
Thread-locking compound (Micro-encapsulated)		
Windscreen to windscreen holder		
M5 x 18	2.5 Nm	
Bracket for side panel to fairing bracket		
M5 x 16	5 Nm	
Headlight carrier to fairing bracket		
M5 x 16	5 Nm	
Holder for Rider's Manual to air-filter box		
M5 x 16	3 Nm	
	Value	
51 - Trim panels	Value	
51 16 - Mirrors, covers, ashtrays, stowage compartments		
Mirror (locknut) to adapter		
Left-hand thread, M10 x 1.25	22 Nm	
Adapter to clamping block		
M10 x 14 - 4.8	25 Nm	
51 25 - Other fasteners		
Ignition/steering lock to fork bridge		
Non-removable screw, M8, Replace screw	20 Nm	
Thread-locking compound (Micro-encapsulated)		
Locking bar to seat lock		
Plastic screw, 4 x 10	2 Nm	
Cap to ignition switch/steering lock		
Cap to ignition switch/steering lock M3 x 20	0.6 Nm	
Cap to ignition switch/steering lock		
Cap to ignition switch/steering lock M3 x 20	0.6 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench	0.6 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat	0.6 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame	0.6 Nm Value	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5	0.6 Nm Value	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame	0.6 Nm Value 4 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5	0.6 Nm Value 4 Nm 4 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness	0.6 Nm Value 4 Nm 4 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics	0.6 Nm Value 4 Nm 4 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12	0.6 Nm Value 4 Nm 4 Nm Value	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14	0.6 Nm Value 4 Nm 4 Nm Value	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14 61 13 - Plug, terminal	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm 1.6 Nm 1.6 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14 61 13 - Plug, terminal Wiring harness earth to cylinder head M6 x 10	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14 61 13 - Plug, terminal Wiring harness earth to cylinder head	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm 1.6 Nm 1.6 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14 61 13 - Plug, terminal Wiring harness earth to cylinder head M6 x 10 Wiring harness earth to crankcase M6 x 12 - 10.9	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm 1.6 Nm 8 Nm 8 Nm	
Cap to ignition switch/steering lock M3 x 20 52 - Seats and seat bench 52 53 - Seat Front-seat bracket to rear frame Nut, M5 Latch for front seat to rear frame Nut, M5 61 - General vehicle electrics 61 11 - Wiring harness Wiring harness with cable duct to rear frame M5 x 12 Wiring harness with cable duct to front frame M4 x 14 61 13 - Plug, terminal Wiring harness earth to cylinder head M6 x 10 Wiring harness earth to crankcase	0.6 Nm Value 4 Nm 4 Nm Value 1.5 Nm 1.5 Nm 1.6 Nm 8 Nm 8 Nm	

Hexhead Torque Values	
61 21 - Battery with holder	
Wiring harness to battery	
M6	3.5 Nm
Battery holder to intake air silencer	
M5 x 16	5 Nm
61 31 - Switch, sensor	
Multifunction switch to handlebar grip	
PT screw K30 x 10	0.6 Nm
Handlebar grip, left, to handlebar	
M3.5 x 32	2 Nm
Cover to multifunction switch	
PT screw K30 x 10	0.6 Nm
Cover to throttle-twistgrip unit	
Pan-head screw, 4 x 30	3 Nm
Throttle-twistgrip unit to handlebar (clamp)	
M5 x 20	5 Nm
Clutch switch to handlebar fitting	
Screw, M2 x 12	0.3 Nm
Grub screw, M4 x 8	0.6 Nm
Thread-locking compound (Micro-encapsulated)	
for re-use, Thread-locking compound (Loctite 243, Medium strength)	
61 33 - Horn	
Horn to frame	
M6 x 12	6 Nm
62 - Instruments	Value
62 21 - Instrument carrier	
Bracket, instrument cluster to headlight housing	
Screw for plastic, 3,5 x 12	1 Nm
• • •	
63 - Lights	Value
63 12 - Headlight	
Headlight to headlight carrier	
M6 x 30	5 Nm
63 13 - Flashing turn indicators, front	
Flashing turn indicator to headlight carrier	
M6 x 16	2 Nm
Glass to turn indicator housing, front	0.6 Nm
63 14 - Position lights and side lights, reflectors	
Adapter, license-plate carrier, US, to license-plate carrier	
M5 x 16	5 Nm
63 21 - Rear-light cluster	
Rear light to number-plate carrier	
M6, Replace nut	4 Nm
Thread-locking compound (mechanical)	
63 23 - Flashing turn indicators, rear	
Flashing turn indicator to number-plate carrier	
M6 x 22	2 Nm
Thread-locking compound (mechanical)	
Glass to turn indicator housing, rear	0.6 Nm
65 - Audio, navigation, information systems	Value
65 75 - Anti-theft alarm	
Anti-theft alarm to rear-wheel cover	
M5 x 12	1 Nm
65 81 - On-board computer	
Temperature sensor to fairing bracket	
M5 x 16	2.4 Nm
77 - Optional accessories, motorcycle	Value
77 12 - Housing cover, cover, cover panel	
Cylinder-head cover guard to cylinder-head cover	
M6	10 Nm
77 25 - Frame, footrests, mounted parts	

Hexhead Torque Values	
Frame guard to frame	
M5	5 Nm
Frame guard to clamp	
M6	8 Nm