

C5 Corvette Torque Values

In this section you will find the most common torque values for your C5 Corvette. While every effort has been made to assure the accuracy of the values they may be incorrect for any number of reasons. One being values can change. Always refer to an approved source for all final torque values. Use a calibrated torque wrench and choose an appropriate range. Your final value should be in the middle of the calibrated range of the torque device. In essence, try to avoid ultra-high and ultra-low settings.

Tips: *Never use a torque wrench if it's been dropped and not retested. Use a good quality torque wrench, examples can be found at major tool stores. Always have it calibrated before critical tasks. When you are finished using a torque wrench, always return it back to the lowest setting. Failure to do so can change the calibration.*

Torque Angle Meter

The Torque Angle Meter is one tool that not everyone has in their toolbox. It measures angle of rotation after pre-torque in torque-angle applications. To use the Torque Angle Meter, tighten the fastener to the specified torque value using a standard torque wrench. Then install the Torque Angle Meter over the head of the fastener and place the standard wrench onto the top of the Torque Angle Meter. Turn the wrench the specified number of degrees stated for that fastener as indicate in degrees of rotation on the meter. Watch the torque meter closely for the correct amount of degrees to be applied. Stop torquing when this value is attained. This tool is required when servicing many late model engines that use torque-to-yield fasteners.



Note: Always check the TSB's (Technical Service Bulletins) for revised torque settings in the Members Area. Torque specs change at any time. Use the following torque table for reference only and never use it for final torque. We do not warranty the accuracy of the information provided. Corvette-web-central LLC assumes no liability for damage or injury in the use of this information.

Front Suspension	
Xmember Mounting Nuts (Use New Nuts)	110 N·m 81 lb ft
Lower Control Arm Ball Joint Stud Nut (1st Pass)	30 N·m 22 lb ft
Lower Control Arm Ball Joint Stud Nut (Final Pass)	+180 deg
Lower Control Arm Mounting Bolt Nuts	170 N·m 125 lb ft
Shock Absorber Lower Mounting Nuts	28 N·m 21 lb ft
Shock Absorber Upr Mounting Nut	26 N·m 19 lb ft
Stabilizer Shaft Insulator Clamp Bolts	58 N·m 43 lb ft
Stabilizer Shaft Link Nuts	72 N·m 53 lb ft
Steering Linkage Outer Tie Rod End Stud Nut (1st Pass)	20 N·m 15 lb ft
Steering Linkage Outer Tie Rod End Stud Nut (2nd Pass)	160 deg
Steering Linkage Outer Tie Rod End Stud Nut (Final Pass)	45 N·m 33 lb ft
Steering Linkage Tie Rod End Jam Nut	60 N·m 44 lb ft
Transverse Spring Retainer Bolts (Use New Bolts)	62 N·m 46 lb ft
Upr Control Arm Ball Joint Stud Nut (1st Pass)	20 N·m 15 lb ft
Upr Control Arm Ball Joint Stud Nut (Final Pass)	+250 deg
Upr Control Arm Mounting Bolts	65 N·m 48 lb ft
Wheel Hub/Bearing Mounting Bolts	130 N·m 96 lb ft
Rear Suspension	
Lower Control Arm (Fr) Cam Bolt Nut	145 N·m 107 lb ft
Lower Control Arm (Rr) Cam Bolt Nut	95 N·m 70 lb ft
Lower Control Arm Ball Joint Stud Nut (1st Pass)	30 N·m 22 lb ft
Lower Control Arm Ball Joint Stud Nut (Final Pass)	+180 deg
Outer Tie Rod End Stud Nut (1st Pass)	20 N·m 15 lb ft
Outer Tie Rod End Stud Nut (2nd Pass)	160 deg
Outer Tie Rod End Stud Nut (Final Pass)	45 N·m 33 lb ft
Rr Xmember Mounting Nuts (Use New Nuts)	110 N·m 81 lb ft
Rr Drive Axle Spindle Nut	160 N·m 118 lb ft
Rr Susp Adjustment Link to Xmember Nut	60 N·m 44 lb ft
Shock Absorber Lower Mounting Bolt	220 N·m 162 lb ft
Shock Absorber Upr Mounting Bolts	29.5 N·m 22 lb ft
Stabilizer Shaft Insulator (Lower) Clamp Nut	95 N·m 70 lb ft
Stabilizer Shaft Insulator (Upr) Clamp Bolt	65 N·m 49 lb ft
Stabilizer Shaft Link Nuts	72 N·m 53 lb ft
Tie Rod End Jam Nut	60 N·m 44 lb ft
Transverse Spring Mounting Bracket Bolts	62 N·m 46 lb ft
Upr Control Arm Ball Joint Stud Nut (1st Pass)	20 N·m 15 lb ft
Upr Control Arm Ball Joint Stud Nut (Final Pass)	+250 Deg
Upr Control Arm Mounting Bolt	110 N·m 81 lb ft
Wheel Hub Mounting Bolts	130 N·m 96 lb ft
Transmission	
Bearing Hsng Assm to Coupling Bolts	70 N·m 52 lb ft
Bearing Hsng Assm to Driveline sup Tube Bolts	65 N·m 48 lb ft
Clutch Actuator Cylinder Mounting Bolts	12 N·m 106 lb in
Coupling to Propeller Shaft Bolts	70 N·m 52 lb ft
Driveline Tunnel Closeout Panel Bolts	10 N·m 89 lb in
Driveline sup Assm to Engine Flywheel Hsng Bolts	50 N·m 37 lb ft
EBTCM LH Mounting Bracket Mounting Bolts	50 N·m 37 lb ft
Flexplate to Flexplate Spindle Bolts	50 N·m 37 lb ft

Hub to Flexplate Spindle Bolt (Automatic trans)	50 N·m 37 lb ft
Input Shaft Bearing Positioning Bolts	35 N·m 26 lb ft
Brakes	
Brake Caliper Bleed Screw	12 N·m 106 lb in
Brake Caliper Guide Pin Bolt	31 N·m 23 lb ft
Brake Caliper Inlet Fitting Bolt	40 N·m 30 lb ft
Fr Brake Caliper Mounting Bracket Bolt	175 N·m 125 lb ft
Rr Brake Caliper Mounting Bracket Bolt	175 N·m 125 lb ft
Engine	Nm Ft Lb in-lb
AIR Pipe-to-Exh Man Bolts	20 15 --
AIR Rt Side Pipe Bracket-to-head Bolt	50 37 --
Camshaft Retainer Bolts	25 18 --
Camshaft Sensor Bolt	25 18 --
Camshaft Sprocket Bolts	35 26 --
Connecting Rod Bolts (1st Pass)	20 15 --
Connecting Rod Bolts (Final Pass)	60 deg 97'-00'
Connecting Rod Bolts (Final Pass)	75 deg 01'-04
Coolant Temperature Gauge Sensor	20 15 --
Crank Balancer Bolt (Installation Pass-to Ensure	330 240 --
Crank Balancer Bolt (1st Pass-Loosen the Bolt after the Installation Pass) See Fin Pass Below	50 37 --
Crank Balancer Bolt (Finish Pass)	140 deg
Crank Bearing Cap Bolts (Inner Bolts-1st Pass in Sequence)	20 15 --
Crank Bearing Cap Bolts (Inner Bolts-fin Pass in Sequence)	80 deg
Crank Bearing Cap Side Bolts	25 18 --
Crank Bearing Cap Studs (Outer Studs-1st Pass in Sequence)	20 15 --
Crank Bearing Cap Studs (Outer Studs-fin Pass in Sequence)	53 deg
Crank Oil Deflector Nuts	25 18 --
Crank Position Sensor Bolt	25 18 --
Head Bolts (1st Pass all M11 Bolts in Sequence)	30 22 --
Head Bolts (2nd Pass all M11 Bolts in Sequence)	90 deg
Head Bolts (fin Pass all M11 Bolts in Sequence - the Medium Length	90 deg
Head Bolts (fin Pass M11 Medium Length Bolts at From Rr of Each head	50 deg
	Nm Ft Lb in-lb
Head Bolts (M8 Inner Bolts in Sequence)	30 22 --
Head Coolant Plug	20 15 --
Head Core Hole Plug	20 15 --
Drive Belt Idler Pulley Bolt	50 37 --
Drive Belt Tensioner Bolts	50 37 --
Engine Block Coolant Drain Plugs	60 44 --
Engine Block Heater	40 30 --
Engine Block Oil Gallery Plugs	60 44 --
Engine Coolant Air Bleed Pipe Bolts	12 -- 106
Engine Flywheel Bolts (1st Pass)	20 15 --
Engine Flywheel Bolts (2nd Pass)	50 37 --
Engine Flywheel Bolts (fin Pass)	100 74 --
Engine Flywheel Hub Collar Bolt (auto trans)	130 96 --
Engine Fr Cover Bolts	25 18 --
Engine Mount Bracket-to-Engine Block Bolts	50 37 --

Engine Rr Cover Bolts	25	18	--
Engine Service Lift Bracket M10 Bolts	50	37	--
Engine Service Lift Bracket M8 Bolt	25	18	--
Engine Valley Cover Bolts	25	18	--
Exh Man Bolts (1st Pass)	15	11	--
Exh Man Bolts (fin Pass)	25	18	--
Fuel Injection Fuel Rail Bolts	10	--	89
Generator and Power Steering Pump Bracket Bolts	50	37	--
Generator Rr Bracket Bolts	50	37	--
Ground Strap-to-LH head Bolt	32	23	--
Ground Strap-to-LH Frame Rail Bolt	10	--	89
Input Shaft to Coupling Bolts	70 N·m	52 lb ft	
Negative Battery Cable Bolt	15 N·m	11 lb ft	
Output Flange Bolt	50 N·m	37 lb ft	
Propeller Shaft Hub Clamp Bolt	130 N·m	96 lb ft	
Rr Exhaust Hanger Mounting Bolts	50 N·m	37 lb ft	
Rr Shock Absorber Lower Mounting Bolt	220 N·m	162 lb ft	
Rr Susp Xmember Mounting Nuts	110 N·m	81 lb ft	
Shift Control Mounting Bolts	30 N·m	22 lb ft	
Shift Control Closeout Boot Retaining Nuts	12 N·m	106 lb in	
Transaxle Mount Bracket to Differential Bolts	50 N·m	37 lb ft	
Transaxle Mount to Rr Susp Xmember Nuts	50 N·m	37 lb ft	
Transmission to Driveline sup Assm Bolts/Studs	50 N·m	37 lb ft	
Transmission Oil Cooler Rr Pipe Fr Fittings to Junction Fittings at Engine Flywheel Hsng Oil	27 Nm	20lb ft	
Transmission Oil Cooler Rr Pipe Rr Fittings to trans Fittings	40 N·m	30 lb ft	
Transmission Oil Cooler Rr Pipe Fr & Rr Retaining Clamp Bolts	12 N·m	106 lb in	
Transmission Shift Control Cable Bracket Retaining Nuts	20 N·m	15 lb ft	
Transmission Shift Rod Clamp Bolt	30 N·m	22 lb ft	
Transmission Wiring Harness to LH trans Case Retaining Bolt	2.5 N·m	22 lb in	
Rear Drive Shaft Spindle Nut	160 N·m	118 lb ft	
Differential			
Differential Case Bolts	55 N·m	41 lb ft	
Differential-to-trans Bolts and Nuts	50 N·m	37 lb ft	
Drain Plug	35 N·m	26 lb ft	
Driveline sup Assm-to-Engine Flywheel Hsng Bolts	50 N·m	37 lb ft	
Electronic Brake and Traction Control Module (EBTCM) LH Mounting Bracket	50 N·m	37 lb ft	
Fill Plug	35 N·m	26 lb ft	
Left Side Cover Bolts	25 N·m	18 lb ft	
Negative Battery Cable Bolt	15 N·m	11 lb ft	
Pinion Hsng/Cage Bolts	25 N·m	18 lb ft	
Pinion Nut	500 N·m	370 lb ft	
Propeller Input Shaft Bearing Positioning Bolts	35 N·m	26 lb ft	
Propeller Shaft Hub Clamp Bolt	130 N·m	96 lb ft	
Rr Cover Bolts and Stud	10 N·m	89 lb in	
Rr Shock Absorber Lower Mounting Bolt	220 N·m	162 lb ft	
Rr Susp Xmember Mounting Nuts	110 N·m	81 lb ft	
Right Side Cover Bolts	25 N·m	18 lb ft	
Ring Gear Bolts	195 N·m	144 lb ft	
Shift Control Closeout Boot Retaining Nuts	12 N·m	106 lb in	

Shift Control Mounting Bolts	30 N·m	22 lb ft	
Transaxle Mount Bracket-to-Differential Bolts	50 N·m	37 lb ft	
Transaxle Mount-to-Bracket Nuts	59 N·m	43 lb ft	
Transaxle Mount-to-Rr Susp Xmember Nuts	50 N·m	37 lb ft	
Trans Oil Cooler Rr Pipe Fitting-to-Junction Fittings at Engine Flywheel Hsng	27 Nm	20lb ft	
Transmission Shift Rod Clamp Bolt	30 N·m	22 lb ft	
Transmission Stud Mount Bolts	10 N·m	89 lb in	
Transmission Stud-to-Mount	42 N·m	31 lb ft	
Transmission Wiring Harness-to-LH trans Case Retaining Bolt	2.5 N·m	22 lb in	
Vehicle Speed Sensor Bolt	10 N·m	89 lb in	
Clutch			
Clutch Actuator Cylinder Mounting Bolts	12 N·m	106 lb in	
Clutch Pedal Nut	50 N·m	37 lb ft	
Clutch Pressure Plate Bolts	63 N·m	47 lb ft	
Cruise Release Switch Bracket Retaining Bolts	12 N·m	106 lb in	
Engine Flywheel Inspection Cover Retaining Bolts	25 N·m	18 lb ft	
Negative Battery Cable Bolt	15 N·m	11 lb ft	
Ignition	Nm	Ft Lb	in-lb
Ignition Coil Bolts	12	--	106
Ignition Coil Wire Harness Connector Bolts	12	--	106
Int Man Bolts (1st Pass in Sequence)	5	--	44
Int Man Bolts (fin Pass in Sequence)	10	--	89
Knock Sensors --	20	15	
Oil Filter	30	22	--
Oil Filter Fitting	55	40	--
Oil Level Indicator Tube Bolt	16	12	--
Oil Level Sensor	13	--	115
Oil Pan Baffle Bolts	12	--	106
Oil Pan Cover Bolt (Left Side)	12	--	106
Oil Pan Cover Bolt (Rt Side)	12	--	106
Oil Pan Cover Bolts	12	--	106
Oil Pan Drain Plug	25	18	--
Oil Pan M8 Bolts (Oil Pan-to-Engine Block and Oil Pan-to-Cover)	25	18	--
Oil Pan M6 Bolts (Oil Pan-to-Rr Cover)	12	--	106
Oil Pressure Sensor	20	15	--
Oil Pump-to-Engine Block Bolts	25	18	--
Oil Pump Cover Bolts	12	--	106
Oil Pump Relief Valve Plug	12	--	106
Oil Pump Screen Nuts	25	18	--
Oil Pump Screen-to-Oil Pump Bolt	12	--	106
Oil Temperature Sensor	20	15	--
Oxygen Sensor	42	31	--
Power Steering Pump Bolts	25	18	--
Power Steering Reservoir Bracket Bolt	50	37	--
	Nm	Ft Lb	in-lb
Spark Plugs (head-New)	20	15	--
Spark Plugs (head-all Subsequent Installations)	15	11	--
Starter Motor Bolts	50	37	--

