

# TORQUE SPECIFICATIONS

All readings in ft. lbs.

Year	Engine Displacement Liters (cc)	Engine ID/VIN	Cylinder Head Bolts	Main Bearing Bolts	Rod Bearing Bolts	Crankshaft Damper Bolts	Flywheel Bolts	Manifold		Spark Plugs	Lug Nuts
								Intake	Exhaust		
1990	1.2 (1189)	8	①	30-35	29-33	58-72	65-71	14-22	14-22	13-17	58-72
	1.8 (1781)	4	②	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
	2.2 (2212)	6	④	③	32-34	66-76	51-55	21-25	19-26	13-17	58-72
	2.7 (2672)	9	⑤	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
1991	1.2 (1189)	7	①	30-35	29-33	58-72	65-71	14-22	14-22	13-17	58-72
	1.8 (1781)	4	②	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
	2.2 (2212)	6	④	③	32-34	66-76	51-55	21-25	19-26	13-17	58-72
	2.7 (2672)	9	⑤	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
1992	1.2 (1189)	7	①	30-35	29-33	58-72	65-71	14-22	14-22	13-17	58-72
	1.8 (1781)	4	②	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
	2.2 (2212)	6	④	③	32-34	66-76	51-55	21-25	19-26	13-17	58-72
	3.3 (3318)	3	④	③	32-34	108-123	51-55	17-20	22-29	13-17	58-72
1993	1.2 (1189)	7	①	30-35	29-33	58-72	65-71	14-22	14-22	13-17	58-72
	1.8 (1781)	4	②	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
	1.8 (1820)	1	⑥	⑦	31-44	87-104	51-55	17-20	19-26	13-17	58-72
	1.8 (1820)	2	⑥	⑦	31-44	87-104	51-55	17-20	19-26	13-17	58-72
	2.2 (2212)	6	④	③	32-34	66-76	51-55	21-25	19-26	13-17	58-72
	3.3 (3318)	3	④	③	32-34	108-123	51-55	17-20	22-29	13-17	58-72
1994	1.2 (1189)	7	①	30-35	29-33	58-72	65-71	14-22	14-22	13-17	58-72
	1.8 (1781)	4	②	③	29-31	66-79	51-55	13-16	19-22	13-17	58-72
	1.8 (1820)	1	⑥	⑦	31-44	87-104	51-55	17-20	19-26	13-17	58-72
	1.8 (1820)	2	⑥	⑦	31-44	87-104	51-55	17-20	19-26	13-17	58-72
	2.2 (2212)	6	④	③	32-34	66-76	51-55	21-25	19-26	13-17	58-72
	3.3 (3318)	3	④	③	32-34	108-123	51-55	17-20	22-29	13-17	58-72

- ① Tighten all bolts in sequence to 29 ft. lbs. (39 Nm).  
Tighten all bolts in sequence to 54 ft. lbs. (73 Nm).  
Loosen all bolts 90° or more in the reverse order of the tightening sequence.  
Tighten all bolts in sequence to 51 - 57 ft. lbs. (70 - 77 Nm).
- ② Tighten all bolts in sequence to 22 ft. lbs. (29 Nm).  
Tighten all bolts in sequence to 43 ft. lbs. (59 Nm).  
Tighten all bolts in sequence to 47 ft. lbs. (64 Nm).
- ③ Engine is of the split case design and does not use main bearing caps.  
Tighten the case half bolts as follows:  
3 - 4 ft. lbs. (6 Nm);  
17 - 20 ft. lbs. (8 Nm);  
29 - 35 ft. lbs. (10 Nm).
- ④ Tighten all bolts in sequence to 22 ft. lbs. (29 Nm).  
Tighten all bolts in sequence to 51 ft. lbs. (69 Nm).  
Loosen all bolts 180°, then loosen an additional 180°.  
Tighten bolts 1 and 2 to 25 ft. lbs. (24Nm) for non-turbo engines or 27 ft. lbs. (37 Nm) for turbo engines.  
Tighten bolts 3, 4, 5 and 6 to 11 ft. lbs. (15 Nm) for non-turbo engines or 14 ft. lbs. (20 Nm) for turbo engines.  
Tighten all bolts in sequence to 80 - 90°.  
Tighten all bolts in sequence an additional 80 - 90°.
- ⑤ Tighten all bolts in sequence to 29 ft. lbs. (39 Nm).  
Tighten all bolts in sequence to 47 ft. lbs. (64 Nm).  
Loosen all bolts at least 90° in the reverse order of the tightening sequence.  
Tighten all bolts in sequence to 44 - 50 ft. lbs. (60 - 68 Nm).
- ⑥ Step 1: Tighten all bolts to 22 ft. lbs.  
Step 2: Tighten all bolts to 51 ft. lbs.  
Step 3: Loosen all bolts 180 degrees.  
Step 4: Repeat Step 3.  
Step 5: Tighten bolts 1 and 2 to 25 ft. lbs.  
Step 6: Tighten bolts 3, 4, 5 and 6 to 11 ft. lbs.  
Step 7: Tighten all bolts 80 to 90 degrees.  
Step 8: Repeat Step 7. Do not exceed 180 degrees total tightening.
- ⑦ Split engine case connecting bolts:  
Short bolts: 17 - 20 ft. lbs.  
Long bolts: 33 - 37 ft. lbs.  
Smaller short bolts (if used) 5 ft. lbs.