

4.6L ENGINE TORQUE SPECIFICATIONS

Components	English Specifications	Metric Specifications
Step 2 Crankshaft position sensor retaining screw	71-106 inch lbs.	8-12 Nm
Crankshaft pulley bolt	89 ft. lbs.	120 Nm
Step 1 Loosen the bolt one full turn		47-53 Nm
Step 2 Tighten the bolts an additional 85-95°	35-39 ft. lbs.	
Step 3		
Step 4		
Cylinder head bolts ①	27-32 ft. lbs.	37-43 Nm
Step 1 Tighten the bolts an additional 85-95°		
Step 2 Loosen the bolts 85-95°		
Step 3		
Step 4		
Step 5		
Step 6		
EGR valve	27-32 ft. lbs.	37-43 Nm
EGR valve-to-exhaust manifold tube nut	Tighten the bolts an additional 85-95°	
Engine filling eye bolts	Tighten the bolts an additional 85-95°	
Engine oil dipstick tube bolt	Tighten the bolts an additional 85-95°	
Engine-to-transaxle bolts	15-22 ft. lbs.	20-30 Nm
Exhaust manifold heat shield bolts	26-33 ft. lbs.	35-45 Nm
Exhaust manifold nuts ①	29-40 ft. lbs.	40-55 Nm
Flywheel bolts	71-106 inch lbs.	8-12 Nm
Front engine support isolator nuts and bolt	25-34 ft. lbs.	34-46 Nm
Lower cylinder block ①	9-12 ft. lbs.	8-12 Nm
Lower intake manifold bolts ①	13-16 ft. lbs.	17-21 Nm
Lower radiator support	54-64 ft. lbs.	73-87 Nm
Oil pan baffle nuts	50-68 ft. lbs.	67-93 Nm
Oil pan bolts ①		
Oil pan drain plug		
Oil pan-to-transaxle bolts		
Oil pressure sender		
Oil pump bolts ①		
Oil pump screen cover and tube bolts		
Oil pump screen cover and tube support-main bearing retaining nut		
Oil separator bolt		
Power steering pump bolts		
Spark plugs		
Splash shield assembly		
Thermostat water outlet		
Throttle body bolts		
Timing chain guide retaining bolts		
Timing chain tensioner retaining bolts		
Timing cover bolts ①		
Torque converter inspection cover bolt		
Transaxle oil cooler line bolts		
Water crossover bolts		
Water pump-to-housing bolts		
Water pump housing-to-cylinder head bolts		
Step 1		
Step 2		

5.0L ENGINE TORQUE SPECIFICATIONS

Components	English Specifications	Metric Specifications
Belt driven engine fan	12-18 ft. lbs.	16-25 Nm
Fan-to-fan clutch bolts	15-22 ft. lbs.	20-30 Nm
Fan clutch shaft-to-water pump		

3.8L ENGINE TORQUE SPECIFICATIONS

Components	English	Metric
Accelerator cable mounting bracket	15-22 ft. lbs.	20-30 Nm
Balance shaft thrust plate bolt	70-124 in. lbs.	8-14 Nm
Camshaft sprocket bolts	30-36 ft. lbs.	40-50 Nm
Camshaft thrust plate	6-10 lb.ft.	8-14 Nm
Connecting rod nuts	31-36 lbs.	41-49 Nm
Crankshaft main bearing cap bolts	65-81 ft. lbs.	88-110 Nm
Crankshaft damper and pulley to crankshaft bolts	103-132 ft. lbs.	140-180 Nm
Crankshaft pulley to damper bolt	19-28 ft. lbs.	26-38 Nm
Cylinder head bolts ①		
1st step		
2nd step		
3rd step		
4th step		
Engine front cover-to-cylinder block bolts	37 ft. lbs.	50 Nm
EGR valve-to-intake manifold bolts	45 ft. lbs.	60 Nm
Exhaust manifold bolt	52 lb. ft.	70 Nm
Exhaust pipe to manifold nuts	59 lb. ft.	80 Nm
Engine oil dipstick tube bolt	15-22 ft. lbs.	20-30 Nm
Engine-to-automatic transaxle bolts	15-22 ft. lbs.	20-30 Nm
Wire support bracket retaining nuts	16-24 ft. lbs.	21-32 Nm
Flywheel bolts	15-22 ft. lbs.	20-30 Nm
Automatic transaxle		
Upper intake manifold		
Intake manifold-to-cylinder head retaining bolts		
Tighten in two steps		
(a)	8 ft. lbs.	11 Nm
(b)	11 ft. lbs.	15 Nm
Oil pan bolts	80-106 inch lbs.	9-12 Nm
Oil pan drain plug	15-25 ft. lbs.	20-34 Nm
Low oil level sensor	18-25 ft. lbs.	25-34 Nm
Oil pressure sender-to-engine front cover	12-18 ft. lbs.	16-24 Nm
Power steering pump bolts	30-45 ft. lbs.	41-61 Nm
Spark plugs	6-10 ft. lbs.	7-14 Nm
Thermostat water outlet bolts	15-22 ft. lbs.	20-30 Nm
Throttle body retaining nuts	15-22 ft. lbs.	20-30 Nm
Transaxle mount retaining nuts	50-70 ft. lbs.	68-95 Nm
Rocker arm fulcrum-to-cylinder head		
Tighten in two steps		
(a)	8 ft. lbs.	11 Nm
(b)	11 ft. lbs.	15 Nm
Valve cover bolts	80-106 inch lbs.	9-12 Nm
Water pump bolts	15-22 ft. lbs.	20-30 Nm
Water pump pulley bolts	12-18 ft. lbs.	16-24 Nm

4.6L ENGINE TORQUE SPECIFICATIONS

Components	English Specifications	Metric Specifications
A/C compressor bolts	15-22 ft. lbs.	20-30 Nm
Alternator bolts	34 ft. lbs.	47 Nm
Camshaft journal cap bolts ①	71-106 inch lbs.	8-12 Nm
Camshaft position sensor retaining screw	71-106 inch lbs.	8-12 Nm
Camshaft rear oil seal retainer bolts	71-106 inch lbs.	8-12 Nm