

# 3-58 ENGINE AND ENGINE OVERHAUL

## 5.0L ENGINE TORQUE SPECIFICATIONS

Components	English Specifications	Metric Specifications
Camshaft		
Thrust plate bolts	9-12 ft. lbs.	12-16 Nm
Connecting rod nuts	19-24 ft. lbs.	26-32 Nm
Crankshaft damper retaining bolt	70-90 ft. lbs.	95-122 Nm
Crankshaft main bearing bolts	60-70 ft. lbs.	81-95 Nm
Cylinder head bolts	①	①
EGR tube-to-valve/manifold nut	26-33 ft. lbs.	35-45 Nm
EGR valve-to-manifold bolts	15-22 ft. lbs.	20-30 Nm
Electric cooling fan retaining screws	27-53 inch lbs.	3-6 Nm
Engine mounts		
Through-bolts	80 ft. lbs.	108 Nm
Nuts	70 ft. lbs.	95 Nm
Engine-to-transmission retaining bolts	50 ft. lbs.	68 Nm
Exhaust manifold retaining bolts	18-24 ft. lbs.	24-32 Nm
Exhaust manifold-to-exhaust pipe/catalytic converter bolts	20-30 ft. lbs.	27-41 Nm
Flywheel/flexplate retaining bolts	75-85 ft. lbs.	103-115 Nm
Intake manifold retaining bolts		
Lower intake	23-25 ft. lbs.	31-34 Nm
Upper Intake	12-18 ft. lbs.	16-25 Nm
Oil pan retaining bolts	7-10 ft. lbs.	9-14 Nm
Oil pump pickup tube and screen retaining bolts	12-18 ft. lbs.	16-25 Nm
Oil pump retaining bolts	22-32 ft. lbs.	30-43 Nm
Rocker arm retaining bolts	18-25 ft. lbs.	25-34 Nm
Thermostat housing retaining bolts	12-18 ft. lbs.	16-24 Nm
Timing cover retaining bolts		
Oil pan-to-timing cover retaining bolts	9-11 ft. lbs.	12-15 Nm
Timing cover-to-engine block retaining bolts	15-18 ft. lbs.	20-24 Nm
Torque converter retaining nuts	30 ft. lbs.	41 Nm
Valve cover retaining bolts	10-13 ft. lbs.	14-18 Nm
Water pump bolts	18 ft. lbs.	25 Nm
Water pump pulley-to-water pump bolts	12-18 ft. lbs.	16-25 Nm

VCT: Variable Cam Timing

① Refer to the procedure for the tightening sequence

② Step 1: Tighten the bolts in sequence to 26-44 inch lbs. (3-5 Nm)

Step 2: Push the crankshaft rearward and seat the thrust washer

Step 3: Tighten fasteners 1-8 to 16-21 ft. lbs. (22-28 Nm)

Step 4: Tighten fasteners 9-16 to 27-32 ft. lbs. (37-43 Nm)

Step 5: Rotate fasteners 1-16 an additional 85-95 degrees

Step 6: Tighten fasteners 17-22 to 15-22 ft. lbs. (20-30 Nm)