

Fastener Type		First Pass	Second Pass	Final Pass
Main Caps	Inner Bolts	15 ft.-lbs.	-	80 degrees
	Outer Studs			51 degrees
	Side Bolts	-		18 ft.-lbs.
Connecting Rod Bolts	First Design	15 ft.-lbs.	-	60 degrees
	Second Design			85 degrees
Cylinder Head Bolts	M11 x 2.0 x 155.5	22 ft.-lbs.	90 degrees	90 degrees
	M11 x 2.0 x 101.0			50 degrees
	M8 x 1.25 x 46.0	-	-	22 ft.-lbs.
Rocker Arm Bolts		-	-	22 ft.-lbs.
Intake Manifold Bolts		44 in.-lbs.	-	89 in.-lbs.
Oil Pump Bolts		-	-	18 ft.-lbs.
Camshaft Retainer Plate Bolts		-	-	18 ft.-lbs.
Camshaft Sprocket Bolts		-	-	26 ft.-lbs.
Harmonic Balancer	with an old bolt, to seat the balancer	-	-	240 ft.-lbs.
	With a new bolt, for final assembly	37 ft.-lbs.	-	140 degrees
Flywheel / Flexplate Bolts		15 ft.-lbs.	37 ft.-lbs.	74 ft.-lbs.
Transmission Bolts		-	-	37 ft.-lbs.
Exhaust Manifold / Header Bolts		11 ft.-lbs.	-	18 ft.-lbs.
Camshaft Sensor Bolt		-	-	18 ft.-lbs.
Crankshaft Position Sensor Bolt		-	-	18 ft.-lbs.
Front Cover Bolts		-	-	18 ft.-lbs.
Rear Cover Bolts		-	-	18 ft.-lbs.
Oil Pan Bolts	Pan to Block	-	-	18 ft.-lbs.
	Pan to Front Cover			18 ft.-lbs.
	Pan to Rear Cover			106 in.-lbs.
Water Pump Bolts		11 ft.-lbs.	-	22 ft.-lbs.