

2003 MITSUBISHI LANCER EVOLUTION FASTENER TIGHTENING SPECIFICATIONS

ABS

ITEM	SPECIFICATION
Brake tube flare nut	15 ± 2 N·m (12 ± 1 ft-lb)
Hydraulic unit bracket bolt and nut	25 ± 6 N·m (19 ± 4 ft-lb)

Axle (Front)

ITEM	SPECIFICATION
Caliper assembly bolt	108 ± 10 N·m (80 ± 7 ft-lb)
Drive shaft nut	226 ± 29 N·m (167 ± 21 ft-lb)
Dust cover bolt	8.9 ± 1.9 N·m (79 ± 17 in-lb)
Front strut nut	167 ± 9 N·m (123 ± 7 ft-lb)
Front wheel hub bolt	88 ± 10 N·m (65 ± 7 ft-lb)
Lower arm ball joint nut	108 ± 10 N·m (80 ± 7 ft-lb)
Stabilizer bar connecting nut	39 ± 5 N·m (29 ± 3 ft-lb)
Stabilizer bracket bolt	39 ± 5 N·m (29 ± 3 ft-lb)
Tie rod end nut	25 ± 5 N·m (19 ± 3 ft-lb)

Axle (Rear)

ITEM	SPECIFICATION		
Rear wheel hub assembly, drive shaft assembly			
Drive shaft nut	225 ± 25 N·m (166 ± 18 ft-lb)		
Rear wheel hub assembly mounting bolt	81 ± 7 N·m (60 ± 4 ft-lb)		
Brake caliper mounting bolt	54 ± 5 N·m (40 ± 4 ft-lb)		
Backing plate mounting nut	118 ± 9 N·m (87 ± 4 ft-lb)		
Knuckle			
Self locking nut (Trailing arm connection)	81 ± 6 N·m (60 ± 4 ft-lb)		
Self locking nut (Lower arm connection)	88 ± 10 N·m (65 ± 7 ft-lb)		
Self locking nut (Toe control arm connection)	81 ± 6 N·m (60 ± 4 ft-lb)		
Self locking nut (Upper arm connection)	81 ± 6 N·m (60 ± 4 ft-lb)		
Differential carrier assembly			
Propeller shaft and differential companion flange connecting nut	32 ± 2 N·m (24 ±1 ft-lb)		
Differential mount bracket bolt	88 ± 10 N·m (65 ± 7 ft-lb)		
Differential mount bracket to differential support member connecting bolt	120 ± 10 N·m (89 ± 6 ft-lb)		
Differential support member mounting bolt	88 ± 10 N·m (65 ± 7 ft-lb)		
Differential support arm to differential carrier mounting bolt	73 ± 12 N·m (54 ± 9 ft-lb)		
Differential support arm mounting nut	73 ± 12 N·m (54 ± 9 ft-lb)		

Rear crossmember mounting bolt	88 ± 10 N·m (65 ± 7 ft-lb)
Toe control bar mounting bolt	69 ± 9 N·m (51 ± 7 ft-lb)
Differential cover bolt	36 ± 5 N·m (26 ± 4 ft-lb)
Drain plug	64 ± 4 N·m (47 ± 3 ft-lb)
Drive gear and limited slip differential case mounting bolt	84 ± 4 N·m (62 ± 3 ft-lb)
Companion flange self-locking nut	186 ± 29 N·m (137 ± 21 ft-lb)
Filler plug	49 ± 9 N·m (37 ± 6 ft-lb)
Bearing cap bolt	37 ± 2 N·m (27 ± 1 ft-lb)

Body

ITEM	SPECIFICATION	
Hood		
Hood hinge bolt (hood side)	11 ± 2 N·m (98 ± 17 in-lb)	
Hood hinge bolt (body side)	21 ± 4 N·m (16 ± 2 in-lb)	
Hood hinge nut (body side)	11 ± 2 N·m (98 ± 17 in-lb)	
Hood latch bolt	9.0 ± 2.0 N·m (80 ± 17 in-lb)	
Fuel filler lid		
Fuel filler lid bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Strut tower bar		
Strut tower bar bolt	44 ± 5 N·m (32 ± 4 in-lb)	
Door		
Door check bolt (body side)	11 ± 2 N·m (98 ± 17 in-lb)	
Door check bolt (door side)	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Door hinge bolt (body side)	27 ± 5 N·m (20 ± 4 in-lb)	
Door hinge bolt (door side)	21 ± 4 N·m (16 ± 2 in-lb)	
Door outside handle bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Door latch assembly screw	9.0 ± 2.0 N·m (80 ± 17 in-lb)	
Door switch screw	1.5 ± 0.5 N·m (14 ± 4 in-lb)	
Striker screw	11 ± 2 N·m (98 ± 17 in-lb)	
Trunk lid		
Trunk lid latch assembly bolt	8.8 ± 2.0 N·m (78 ± 17 in-lb)	
Striker bolt	8.8 ± 2.0 N·m (78 ± 17 in-lb)	

Clutch

ITEM		SPECIFICATION
Clutch control	Clutch release cylinder mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
	Clutch master cylinder mounting nut	12 ± 2 N·m (102 ± 22 in-lb)
	Clutch pipe flare nut	15 ± 1 N·m (11 ± 1 ft-lb)
	Eye bolt	30 ± 4 N·m (22 ± 3 ft-lb)
	Pushrod jam nut	13 ± 2 N·m (111 ± 22 in-lb)
	Retainer assembly nut	12 ± 2 N·m (102 ± 22 in-lb)
Clutch pedal	Clutch master cylinder mounting nut	12 ± 2 N·m (102 ± 22 in-lb)
	Clutch pedal assembly mounting bolt	12 ± 2 N·m (102 ± 22 in-lb)
	Clutch pedal position switch setting nut	12 ± 2 N·m (109 ± 21 in-lb)

Clutch Overhaul

ITEMS	SPECIFICATIONS
Clutch cover mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Clutch fluid line bracket bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Clutch release cylinder air bleeder	11 ± 1 N·m (97 ± 8 in-lb)
Clutch release cylinder mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Clutch release cylinder union bolt	22 ± 2 N·m (16 ± 1 ft-lb)
Clutch tube flare nut	15 ± 2 N·m (11 ± 1 ft-lb)
Release fork shaft locking bolt	9.8 ± 2.0 N·m (87 ± 17 in-lb)

Electrical

TEM		SPECIFICATION
Charging system		
Evaporative emission purge solenoid bolt		9.0 ± 1.0 N·m (80 ± 9 in-lb)
Fuel pressure solenoid bolt		
Fuel rail bolt		11 ± 1 N·m (98 ± 8 in-lb)
Generator bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Generator brace bolt (water pump bolt)		23 ± 3 N·m (17 ± 2 ft-lb)
Generator brace bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Generator brace stay bolt (intake manifold bolt)		20 ± 2 N·m (15 ± 1 ft-lb)
Generator brace stay nut (intake manifold nut)		36 ± 6 N·m (27 ± 4 ft-lb)
Generator nut		44 ± 10 N·m (33 ± 7 ft-lb)
Generator terminal nut		14 ± 3 N·m (124 ± 26 in-lb)
Ground cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Oil level gauge guide bolt		13 ± 1 N·m (115 ± 9 in-lb)
Water pump pulley bolt		8.8 ± 1.0 N·m (78 ± 9 in-lb)
Starting system		
Starter bolt		30 ± 3 N·m (23 ± 2 ft-lb)
Starter cover bolt		4.9 ± 1.0 N·m (44 ± 8 in-lb)
Starter cover nut	Starter cover nut	
Starter terminal nut		13 ± 2 N·m (111 ± 22 in-lb)
Ignition system		
Camshaft position sensor bolt		10.5 ± 0.5 N·m (93 ± 4 in-lb)
Crankshaft position sensor bolt		8.8 ± 1.0 N·m (78 ± 9 in-lb)
Ignition coil bolt		10 ± 2 N·m (89 ± 17 in-lb)
Knock sensor		23 ± 2 N·m (17 ± 1 ft-lb)
Power steering oil pressure hose bolt		12 ± 2 N·m (102 ± 2 in-lb)
Power steering oil pump bracket bolt (cylinder block side)		49 ± 9 N·m (36 ± 7 in-lb)
Power steering oil pump bracket bolt (power steering oil pump side)	M8	22 ± 4 N·m (16 ± 3 ft-lb)
	M10	40 ± 5 N·m (30 ± 3 ft-lb)
Power steering oil pump heat protector bolt		22 ± 4 N·m (16 ± 3 in-lb)
Power steering oil reservoir bolt		12 ± 2 N·m (102 ± 2 in-lb)
Spark plug		25 ± 4 N·m (18 ± 3 ft-lb)

Emission and Control

ITEM	SPECIFICATION			
Engine control system				
Accelerator cable attaching bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)			
Accelerator cable clump attaching bolt	11 ± 1 N·m (97 ± 9 in-lb)			
Accelerator cable clump attaching bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)			
Accelerator pedal bracket installation nut	12 ± 2 N·m (102 ± 22 in-lb)			
Emission control system				
EGR valve bolt	20 ± 2 N·m (14 ± 1.4 ft-lb)			
Charge air cooler air hose E clamp bolt	6.0 ± 1.0 N·m (53 ± 9 in-lb)			
Catalytic converter nut	59 ± 10 N·m (44 ± 7 ft-lb)			
Front exhaust pipe bolt (catalytic converter side)	49 ± 10 N·m (37 ± 7 ft-lb)			
Front exhaust pipe bolt (exhaust fitting side)	50 ± 5 N·m (37 ± 4 ft-lb)			
Hanger bolt	13 ± 2 N·m (111 ± 22 in-lb)			

Engine Coolant

EM		SPECIFICATION	
Cylinder block			
Cylinder block drain plug		44 ± 5 N·m (33 ± 3 ft-lb)	
Radiator			
Air Pipe B bolt		12 ± 2 N·m (102 ± 22 in-lb)	
Cooling fan motor bolt		4.5 ± 0.4 N·m (39 ± 4 in-lb)	
Cooling fan nut		3.5 ± 0.4 N·m (31 ± 4 in-lb)	
Cooling fan shroud bolt		4.0 ± 0.4 N·m (35 ± 4 in-lb)	
Reserve tank bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Reserve tank bracket bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Reserve tank hose bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Upper insulator bolt		12 ± 2 N·m (102 ± 22 in-lb)	
Thermostat			
Accelerator cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Control harness bolt		11 ± 1 N·m (98 ± 8 in-lb)	
Vacuum pipe bolt		11 ± 1 N·m (98 ± 8 in-lb)	
Water outlet fitting bolt		10 ± 1 N·m (84 ± 13 in-lb)	
Water hose and water pipe			
Accelerator cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Bracket bolt		36 ± 6 N·m (27 ± 4 ft-lb)	
Control harness bolt		11 ± 1 N·m (98 ± 8 in-lb)	
Engine hanger bolt		22 ± 4 N·m (16 ± 3 ft-lb)	
Turbocharger water feed pipe bolt (bolt, eye)		42 ± 7 N·m (31 ± 5 ft-lb)	
Turbocharger water feed pipe bolt (bolt, flange)		10 ± 1 N·m (84 ± 13 in-lb)	
Turbocharger water return pipe bolt (bolt, eye)		42 ± 7 N·m (31 ± 5 ft-lb)	
Turbocharger water return pipe bolt (bolt, flange)		10 ± 1 N·m (84 ± 13 in-lb)	
Vacuum pipe bolt		11 ± 1 N·m (98 ± 8 in-lb)	
/acuum pipe bracket bolt		11 ± 1 N·m (98 ± 8 in-lb)	
Water inlet pipe bolt	M6	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
	M8	13 ± 2 N·m (111 ± 22 in-lb)	

Water outlet fitting and thermostat case bolt	23 ± 4 N·m (17 ± 3 ft-lb)
Water pump	
Generator brace bolt	22 ± 4 N·m (16 ± 3 ft-lb)
Water pump and generator brace bolt	23 ± 3 N·m (17 ± 2 ft-lb)
Water pump bolt	14 ± 1 N·m (120 ± 13 in-lb)

Engine Lubrication

ITEM	SPECIFICATION
Engine oil cooler bolt	2 ± 2 N·m (102 ± 22 in-lb)
Engine oil cooler bracket bolt	2 ± 2 N·m (102 ± 22 in-lb)
Engine oil cooler line eye bolt	2 ± 2 N·m (31 ± 1 ft-lb)
Engine oil filter	4 ± 2 N·m (124 ± 18 in-lb)
Engine oil pan drain plug	9 ± 5 N·m (29 ± 3 ft-lb)
Control housing mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Shift cable bracket mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Speedometer gear mounting bolt	3.9 ± 1.0 N·m (34 ± 8 in-lb)
Stopper bracket mounting bolt	22.3 ± 0.3 N·m (16.1 ± 0.2 ft-lb)
Select lever mounting bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Select lever mounting nut	12 ± 1 N·m (104 ± 9 in-lb)
Differential drive gear mounting bolt	133 ± 4 N·m (98 ± 3 ft-lb)
Backup light switch	32 ± 2 N·m (23 ± 1 ft-lb)
Poppet spring	32 ± 2 N·m (23 ± 1 ft-lb)
Reverse idler gear shaft mounting bolt	48 ± 5 N·m (35 ± 3 ft-lb)
Roll stopper bracket mounting bolt	70 ± 10 N·m (51 ± 7 ft-lb)

Engine Mechanical

ITEM	SPECIFICATION	
Camshaft and valve stem seal		
Camshaft bearing cap bolt	20 ± 1 N·m (14 ± 0.5 ft-lb)	
Camshaft position sensing cylinder bolt	22 ± 4 N·m (16 ± 3 ft-lb)	
Camshaft position sensor support bolt	14 ± 1 N·m (120 ± 13 in-lb)	
Camshaft position sensor support cover bolt	10 ± 2 N·m (89 ± 17 in-lb)	
Camshaft sprocket bolt	89 ± 9 N·m (65 ± 7 ft-lb)	
Control wiring harness bracket bolt	11 ± 1 N·m (98 ± 8 in-lb)	
Ground terminal bolt (control wiring harness)	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Heated oxygen sensor (front) bolt	10.5 ± 0.5 N·m (93 ± 4 in-lb)	
Oil delivery body bolt	11 ± 1 N·m (98 ± 8 in-lb)	
Rocker cover bolt	3.5 ± 0.5 N·m (31 ± 4 in-lb)	
Rocker cover center cover bolt	3.0 ± 0.5 N·m (27 ± 4 in-lb)	
Spark plug	25 ± 4 N·m (18 ± 3 ft-lb)	
Vacuum pipe bolt	11 ± 1 N·m (98 ± 8 in-lb)	
Vacuum pipe bracket bolt	11 ± 1 N·m (98 ± 8 in-lb)	
Crankshaft oil seal		
Flywheel bolt	132 ± 5 N·m (98 ± 3 ft-lb)	
Crankshaft pulley		

Crankshaft damper pulley bolt		25 ± 4 N·m (18 ± 3 ft-lb)
Cylinder head gasket		
Cylinder head bolt <cold engine=""></cold>		78 ± 2 N·m \rightarrow 0 N·m \rightarrow 20 ± 2 N·m \rightarrow +90° \rightarrow +90° (58 ± 1 ft-lb \rightarrow 0 in-lb \rightarrow 15 ± 1 ft-lb \rightarrow +90° \rightarrow
		+90°)
EGR solenoid valve and bracket assembly bolt		9.0 ± 1.0 N·m (80 ± 9 in-lb)
Engine oil dipstick guide bolt		13 ± 1 N·m (115 ± 9 in-lb)
Fuel high-pressure hose bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Generator brace bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Ground cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Ground terminal bolt (control wiring harness)		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Inlet manifold stay bolt		31 ± 3 N·m (23 ± 2 ft-lb)
Oil return tube bolt (bolt, flange)		14 ± 1 N·m (120 ± 13 in-lb)
Oil return tube bolt (bolt, washer assembled)	M6	9.0 ± 1.0 N·m (80 ± 9 in-lb)
Turbocharger bracket bolt		35 ± 6 N·m (26 ± 4 ft-lb)
Engine assembly		
Engine front mounting bracket and cushion stopper nut (flange nut, self locking)		67 ± 7 N·m (50 ± 5 ft-lb)
Engine front mounting bracket and cushion stopper nut (nut, assembled)	M12	98 ± 10 N·m (73 ± 7 ft-lb)
Engine oil cooler line eye bolt		42 ± 2 N·m (31 ± 1 ft-lb)
Fuel high-pressure hose bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Generator terminal nut		14 ± 3 N·m (124 ± 26 in-lb)
Ground cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Ground terminal bolt (battery wiring harness)		26 ± 5 N·m (19 ± 4 ft-lb)
Ground terminal bolt (control wiring harness)		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Power steering oil pressure hose bolt		12 ± 2 N·m (102 ± 22 in-lb)
Power steering oil pump and bracket assembly bolt	M8	22 ± 4 N·m (16 ± 3 ft-lb)
	M10	40 ± 5 N·m (30 ± 3 ft-lb)
Power steering oil pump heat protector bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Power steering oil reservoir bolt		12 ± 2 N·m (102 ± 22 in-lb)
Turbocharger wastegate actuator bolt		11 ± 1 N·m (98 ± 8 in-lb)
Oil pan		
Cylinder block baffle bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Engine oil cooler line eye bolt		42 ± 2 N·m (31 ± 1 ft-lb)
Engine oil pan bolt		9.0 ± 3.0 N·m (80 ± 26 in-lb)
Engine oil pan drain plug		39 ± 5 N·m (29 ± 3 ft-lb)
Flywheel housing front lower cover bolt (bolt, flange)	M6	10 ± 2 N·m (89 ± 17 in-lb)
Flywheel housing front lower cover bolt (bolt, flange)	M10	26 ± 5 N·m (19 ± 4 ft-lb)
Flywheel housing front lower cover bolt (bolt, washer assembled)	M6	9.0 ± 1.0 N·m (80 ± 9 in-lb)
Oil return tube bolt (bolt, flange)	M6	14 ± 1 N·m (120 ± 13 in-lb)
Oil return tube bolt (bolt, washer assembled)	M6	9.0 ± 1.0 N·m (80 ± 9 in-lb)
Timing belt		
Auto-tensioner bolt (bolt, flange)	M8	24 ± 4 N·m (18 ± 3 ft-lb)
Auto-tensioner bolt (bolt, washer assembled)	M10	44 ± 10 N·m (33 ± 7 ft-lb)
Balancer timing belt tensioner bolt		19 ± 3 N·m (14 ± 2 ft-lb)
Crankshaft position sensor bolt		8.8 ± 1.0 N·m (78 ± 9 in-lb)
Crankshaft pulley center bolt		167 N·m (123 ft-lb)
Cylinder block plug		30 ± 3 N·m (23 ± 2 ft-lb)

Idler pulley bolt		79 ± 5 N·m (59 ± 3 ft-lb)
Power steering oil pressure hose bolt		12 ± 2 N·m (102 ± 22 in-lb)
Power steering oil pump and bracket assembly bolt	M8	22 ± 4 N·m (16 ± 3 ft-lb)
	M10	40 ± 5 N·m (30 ± 3 ft-lb)
Power steering oil pump bracket bolt		49 ± 9 N·m (36 ± 7 ft-lb)
Power steering oil pump heat protector bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Power steering oil reservoir bolt		12 ± 2 N·m (102 ± 22 in-lb)
Timing belt idler pulley bolt		35 ± 6 N·m (26 ± 4 ft-lb)
Timing belt lower cover bolt (bolt, flange)	M6	11 ± 1 N·m (98 ± 8 in-lb)
Timing belt lower cover bolt (bolt, washer assembled)	M6	9.0 ± 1.0 N·m (80 ± 9 in-lb)
Timing belt tensioner adjuster bolt		23 ± 3 N·m (17 ± 2 ft-lb)
Timing belt tensioner arm bolt		21 ± 4 N·m (16 ± 2 ft-lb)
Timing belt tensioner pulley bolt		48 ± 5 N·m (36 ± 3 ft-lb)
Timing belt upper cover bolt (bolt, flange)	M6	11 ± 1 N·m (98 ± 8 in-lb)
Water pump pulley bolt		8.8 ± 1.0 N·m (78 ± 9 in-lb)

Exterior

ITEM	SPECIFICATION	
Rear spoiler <type a="" and="" b="" type=""></type>		
Rear spoiler assembly bolt and nut	5.2 ± 0.2 N·m (46 ± 2 in-lb)	
Windshield wiper and washer		
Wiper arm and blade assembly nut	27 ± 3 N·m (20 ± 2 ft-lb)	
Wiper link assembly bolt	7.4 ± 1.4 N·m (65 ± 13 in-lb)	
Wiper motor bolt	8.9 ± 1.9 N·m (79 ± 17 in-lb)	
Washer tank assembly bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)	
Rear wiper and washer		
Nozzle and collar assembly nut	9.8 ± 2.0 N·m (87 ± 17 in-lb)	
Wiper arm and blade assembly nut	7.4 ± 1.4 N·m (65 ± 13 in-lb)	
Wiper motor bolt	7.4 ± 1.4 N·m (65 ± 13 in-lb)	

Fuel Supply

ITEMS	SPECIFICATIONS
Fuel high-pressure hose bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Fuel level sensor (sub) screw	1.2 ± 0.2 N·m (11 ± 1 in-lb)
Fuel pipe and gauge assembly nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)
Fuel pump module nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)
Fuel tank differential pressure sensor nut	3.2 ± 0.2 N·m (28 ± 2 in-lb)
Fuel tank levelling valve assembly nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)
Fuel tank nut	26 ± 4 N·m (19 ± 3 in-lb)
Fuel tank pipe assembly nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)
Fuel tank rollover valve assembly nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)
Fuel temperature sensor nut	2.5 ± 0.5 N·m (23 ± 4 in-lb)

Heater, Air Conditioning And Ventilation

ITEM	SPECIFICATION
Liquid pipe A mounting nut (condenser side)	4.9 ± 1.0 N·m (43 ± 8 in-lb)
Flexible discharge hose mounting nut (condenser side)	12 ± 2 N·m (107 ± 17 in-lb)
Flexible discharge hose mounting nut (compressor side)	12 ± 2 N·m (107 ± 17 in-lb)
Flexible suction hose mounting nut (suction pipe connection)	12 ± 2 N·m (107 ± 17 in-lb)
Suction pipe mounting bolt (heater unit side)	12 ± 2 N·m (107 ± 17 in-lb)
Liquid pipe A mounting nut (liquid pipe b connection)	4.9 ± 1.0 N·m (43 ± 8 in-lb)

Interior

ITEM	SPECIFICATION		
TRIMS			
Child restraint fitting bolt	22 ± 4 N·m (16 ± 3 ft-lb)		
FRONT SEAT ASSEMBLY			
Seatback assembly bolt	22 ± 3 N·m (16 ± 2 ft-lb)		
Front seat assembly bolt	45 ± 10 N·m (34 ± 7 ft-lb)		
Front seat assembly nut	30 ± 5 N·m (22 ± 4 ft-lb)		
Slide adjuster inner bolt	22 ± 3 N·m (16 ± 2 ft-lb)		
Slide adjuster outer bolt	22 ± 3 N·m (16 ± 2 ft-lb)		
REAR SEAT ASSEMBLY			
Rear seatback assembly bolt	22 ± 4 N·m (16 ± 3 ft-lb)		
FRONT SEAT BELT			
Adjustable seat belt anchor bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
Inner seat belt bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
Outer seat belt bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
REAR SEAT BELT			
Center seat blet, inner bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
Center seat belt, outer bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
Inner seat belt bolt	44 ± 10 N·m (33 ± 7 ft-lb)		
Outer seat belt bolt	44 ± 10 N·m (33 ± 7 ft-lb)		

Intake And Exhaust

ITEM	SPECIFICATION	
Air cleaner		
Air cleaner bolt	9.0 ± 1.0 N·m (80 ± 9 in-lb)	
Air cleaner bracket bolt	9.0 ± 1.0 N·m (80 ± 9 in-lb)	
Volume airflow sensor nut	9.0 ± 1.0 N·m (80 ± 9 in-lb)	
Air intake hose clamp bolt	4.0 ± 1.0 N·m (35 ± 8 in-lb)	
Charge air cooler		
Air hose and air by-pass hose clamp bolt	6.0 ± 1.0 N·m (53 ± 9 in-lb)	
Air pipe bolt	12 ± 1 N·m (102 ± 13 in-lb)	
Air pipe bracket bolt	12 ± 1 N·m (102 ± 13 in-lb)	
Charge air cooler bolt	12 ± 1 N·m (102 ± 13 in-lb)	
Charge air cooler nut	12 ± 1 N·m (102 ± 13 in-lb)	

Charge air cooler water spray		
Charge air cooler water spray tank bolt		11 ± 2 N·m (98 ± 17 in-lb)
Charge air cooler water spray tank bracket bolt		11 ± 2 N·m (98 ± 17 in-lb)
Exhaust manifold and turbocharger		· · · · · · · · · · · · · · · · · · ·
Air outlet fitting bolt		19 ± 1 N·m (14 ± 1 ft-lb)
Exhaust fitting bolt		59 ± 5 N·m (44 ± 3 ft-lb)
Exhaust fitting nut		59 ± 5 N·m (44 ± 3 ft-lb)
Exhaust fitting bracket bolt		35 ± 6 N·m (24 ± 4 ft-lb)
Exhaust manifold nut	M8	29 ± 3 N·m (22 ± 2 ft-lb)
Simulation national n	M10	49 ± 5 N·m (36 ± 4 ft-lb)
Exhaust manifold cover bolt	'	14 ± 1 N·m (120 ± 13 in-lb)
Heated oxygen sensor (front)		44 ± 5 N·m (33 ± 3 ft-lb)
Turbocharger bolt		64 ± 5 N·m (38 ± 3 ft-lb)
Turbocharger nut		64 ± 5 N·m (38 ± 3 ft-lb)
Turbocharger heat protector bolt		14 ± 1 N·m (120 ± 13 in-lb)
Turbocharger oil feed pipe eye bolt	M10	17 ± 2 N·m (12 ± 2 ft-lb)
5	M12	31 ± 2 N·m (23 ± 1 ft-lb)
Turbocharger oil feed pipe bolt	· · · · · · · · · · · · · · · · · · ·	11 ± 1 N·m (98 ± 8 in-lb)
Turbocharger oil return pipe bolt (oil pan side)		14 ± 1 N·m (120 ± 13 in-lb)
Turbocharger oil return pipe bolt (turbocharger side)		9.0 ± 1.0 N·m (80 ± 9 in-lb)
Turbocharger water feed pipe eye bolt		42 ± 7 N·m (31 ± 5 ft-lb)
Turbocharger water feed pipe bolt		10 ± 1 N·m (84 ± 13 in-lb)
Turbocharger water return pipe eye bolt		42 ± 7 N·m (31 ± 5 ft-lb)
Turbocharger water return pipe bolt		10 ± 1 N·m (84 ± 13 in-lb)
Exhaust pipe and main muffler		
Center exhaust pipe nut		59 ± 10 N·m (44 ± 7 ft-lb)
Exhaust main muffler bolt		45 ± 5 N·m (34 ± 3 ft-lb)
Exhaust muffler hanger bolt		13 ± 2 N·m (111 ± 22 in-lb)
Exhaust pipe hanger bolt		13 ± 2 N·m (111 ± 22 in-lb)
Front exhaust pipe bolt (catalytic converter side)		49 ± 10 N·m (37 ± 7 ft-lb)
Front exhaust pipe bolt (exhaust manifold side)		50 ± 5 N·m (37 ± 4 ft-lb)
Heated oxygen sensor (rear)		44 ± 5 N·m (33 ± 3 ft-lb)
Intake manifold		
Center cover bolt		3.0 ± 0.5 N·m (27 ± 4 in-lb)
EGR vacuum regulator solenoid bolt		11 ± 1 N·m (98 ± 8 in-lb)
EGR valve bolt		20 ± 2 N·m (15 ± 1 ft-lb)
Evaporative emission purge solenoid bolt		11 ± 1 N·m (98 ± 8 in-lb)
Fuel high-pressure hose bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Fuel pressure solenoid bolt		11 ± 1 N·m (98 ± 8 in-lb)
Fuel rail bolt		11 ± 1 N·m (98 ± 8 in-lb)
Generator brace bolt		22 ± 4 N·m (16 ± 3 ft-lb)
Ground cable bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Intake manifold bolt	M8	20 ± 2 N·m (15 ± 1 ft-lb)
	M10	36 ± 6 N·m (27 ± 4 ft-lb)
Intake manifold nut		36 ± 6 N·m (27 ± 4 ft-lb)
Intake manifold stay bolt		31 ± 3 N·m (23 ± 2 ft-lb)
Manifold differential pressure sensor bolt		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Oil level gauge guide bolt		13 ± 1 N·m (115 ± 9 in-lb)

Manual Transaxle

ITEM	SPECIFICATION
Transaxle control	
Gearshift cable and select cable assembly attaching bolt	12 ± 2 N·m (102 ± 22 in-lb)
Gearshift lever base bracket attaching bolt	12 ± 2 N·m (102 ± 22 in-lb)
Shift lever assembly	
Gearshift select lever retainer nut	10 ± 1 N·m (84 ± 13 in-lb)
Gearshift lever retainer nut	14 ± 2 N·m (120 ± 22 in-lb)
Transfer assembly	
Centermember attaching bolt	69 ± 9 N·m (51 ± 7 ft-lb)
Crossmember bar attaching bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Driveshaft connecting nut	226 ± 29 N·m (167 ± 21 ft-lb)
Front roll stopper bracket retainer nut	52 ± 7 N·m (39 ± 5 ft-lb)
Lower arm connecting nut	108 ± 10 N·m (80 ± 7 ft-lb)
Rear roll stopper bracket retainer nut	52 ± 7 N·m (39 ± 5 ft-lb)
Stabilizer link connecting nut	39 ± 5 N·m (29 ± 3 ft-lb)
Tie rod end connecting nut	25 ± 5 N·m (19 ± 3 ft-lb)
Transfer assembly part coupling bolt	69 ± 9 N·m (51 ± 7 ft-lb)
Transfer oil drain plug	32 ± 2 N·m (23 ± 2 ft-lb)
Transfer oil filler plug	32 ± 2 N·m (23 ± 2 ft-lb)
Transaxle assembly	
Bell housing cover attaching bolt (transaxle side)	9.0 ± 1.0 N·m (80 ± 9 in-lb)
Bell housing cover attaching bolt (engine side)	26 ± 5 N·m (19 ± 4 ft-lb)
Clutch release cylinder and clutch oil pipe attaching bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Rear roll mount bracket attaching bolt	70 ± 10 N·m (52 ± 7 ft-lb)
Shift cable and select cable assembly attaching bolt	18 ± 3 N·m (13 ± 2 ft-lb)
Transaxle assembly lower part coupling bolt	48 ± 5 N·m (36 ± 3 ft-lb)
Transaxle assembly upper part coupling bolt	48 ± 5 N·m (36 ± 3 ft-lb)
Transaxle mount bracket attaching nut	47 ± 7 N·m (35 ± 5 ft-lb)
Transaxle mount stopper attaching nut	82 ± 7 N·m (61 ± 5 ft-lb)
Transaxle oil drain plug	32 ± 2 N·m (23 ± 2 ft-lb)
Transaxle oil filler plug	32 ± 2 N·m (23 ± 2 ft-lb)

Manual Transaxle Overhaul

ITEMS	SPECIFICATIONS
Under cover mounting bolt	6.9 ± 0.9 N·m (61 ± 7 in-lb)
Interlock plate bolt	30 ± 3 N·m (22 ± 2 ft-lb)
Clutch housing-transaxle case mounting bolt	44 ± 5 N·m (32 ± 3 ft-lb)
Clutch release bearing retainer mounting bolt	9.8 ± 2.0 N·m (86 ± 17 in-lb)

MFI

ITEM	SPECIFICATION
Accelerator cable mounting bolts	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Bracket mounting bolts	5.0 ± 1.0 N·m (44 ± 9 in-lb)
ECM mounting bolts	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Fuel pressure regulator mounting bolts	8.9 ± 1.9 N·m (79 ± 17 in-lb)
Fuel pump relay mounting bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Fuel pump circuit resistor mounting bolts	2.5 ± 0.5 N·m (22 ± 4 in-lb)
Fuel rail mounting bolts	11 ± 1 N·m (98 ± 8 in-lb)
Fuel high-pressure hose mounting bolts	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Injector resistor mounting bolts	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Throttle body mounting bolt	19 ± 3 N·m (14 ± 2 ft-lb)

Power Plant Mount

ITEM	SPECIFICATION
Crossmember	
Engine rear roll stopper rod bracket bolt	45 ± 5 N·m (34 ± 3 ft-lb)
Engine rear roll stopper rod nut	52 ± 7 N·m (39 ± 5 ft-lb)
Front axle No.1 crossmember bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Front axle No.1 crossmember nut	167 ± 9 N·m (123 ± 7 ft-lb)
Lower arm and front axle No.1 crossmember connecting bolt front	186 ± 10 N·m (138 ± 7 ft-lb)
Lower arm and front axle No.1 crossmember connecting bolt rear	167 ± 9 N·m (123 ± 7 ft-lb)
Lower arm and knuckle connecting nut	108 ± 10 N·m (80 ± 7 ft-lb)
Pressure hose eye bolt	57 ± 7 N·m (42 ± 5 ft-lb)
Pressure hose bolt	12 ± 2 N·m (102 ± 22 in-lb)
Return hose and return pipe bolt	12 ± 2 N·m (102 ± 22 in-lb)
Return hose and return pipe nut	15 ± 3 N·m (11 ± 2 ft-lb)
Stabilizer bar bracket bolt	21 ± 4 N·m (16 ± 2 ft-lb)
Stabilizer link nut	39 ± 5 N·m (29 ± 3 ft-lb)
Steering gear and linkage bolt	70 ± 10 N·m (52 ± 7 ft-lb)
Steering shaft assembly and gear box connecting bolt	18 ± 2 N·m (13 ± 2 ft-lb)
Tie rod end and knuckle connecting nut	25 ± 4 N·m (19 ± 3 ft-lb)
Engine mounting	
Engine front mounting bracket nut	67 ± 7 N·m (50 ± 5 ft-lb)
Engine mounting nut	98 ± 10 N·m (73 ± 7 ft-lb)
Power steering oil pressure hose bolt	12 ± 2 N·m (102 ± 22 in-lb)
Engine roll stopper, centermember	
Engine front roll stopper bracket bolt	45 ± 5 N·m (34 ± 3 ft-lb)
Engine front roll stopper bracket nut	52 ± 7 N·m (39 ± 5 ft-lb)
Engine rear roll stopper rod bracket bolt	45 ± 5 N·m (34 ± 3 ft-lb)
Engine rear roll stopper rod nut	52 ± 7 N·m (39 ± 5 ft-lb)
Front axle crossmember bar bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Front suspension centermember bolt	69 ± 10 N·m (51 ± 7 ft-lb)
Transaxle case front roll stopper bracket bolt	70 ± 10 N·m (52 ± 7 ft-lb)
Transaxle case rear roll stopper bracket bolt	70 ± 10 N·m (52 ± 7 ft-lb)

Transaxle mounting	
Transaxle mounting body side bracket nut	47 ± 7 N·m (35 ± 5 ft-lb)
Transaxle mounting nut	82 ± 7 N·m (61 ± 5 ft-lb)

Power Steering

ITEM	SPECIFICATION
Power steering gear box and linkage	
Crossmember mounting bolt	167 ± 9 N·m (123 ± 7 ft-lb)
Crossmember mounting bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Crossmember mounting nut	167 ± 9 N·m (123 ± 7 ft-lb)
Engine rear roll stopper rod connecting nut	52 ± 7 N·m (39 ± 5 ft-lb)
Engine rear roll stopper rod bracket mounting bolt	45 ± 5 N·m (34 ± 3 in-lb)
Lower arm and crossmember connecting bolt	186 ± 10 N·m (138 ± 7 ft-lb)
Pressure hose connecting bolt	57 ± 7 N·m (42 ± 5 ft-lb)
Return tube flare nut	15 ± 3 N·m (11 ± 2 ft-lb)
Return tube mounting bolt	12 ± 2 N·m (102 ± 22 in-lb)
Stabilizer link connecting nut	39 ± 5 N·m (29 ± 3 ft-lb)
Steering gear mounting bolt	70 ± 10 N·m (52 ± 7 ft-lb)
Tie rod end jam nut	52 ± 2 N·m (38 ± 2 ft-lb)
End plug	59 ± 10 N·m (44 ± 7 ft-lb)
Jam nut	59 ± 10 N·m (44 ± 7 ft-lb)
Jam nut	25 ± 4 N·m (18 ± 4 ft-lb)
Rack support cover	23 ± 2 N·m (17 ± 1 ft-lb)
Tie rod end	88 ± 10 N·m (65 ± 7 ft-lb)
Valve housing bolt	22 ± 4 N·m (16 ± 3 ft-lb)
Power steering hose	
Cooler tube clamp bolt	12 ± 2 N·m (102 ± 22 in-lb)
Oil pump eye bolt	57 ± 7 N·m (42 ± 5 ft-lb)
Oil reservoir bolt	12 ± 2 N·m (102 ± 22 in-lb)
Pressure hose, return hose, return tube clamp bolt	12 ± 2 N·m (102 ± 22 in-lb)
Return tube flare nut	15 ± 3 N·m (11 ± 2 ft-lb)
Power steering oil pump	
Connector	39 ± 5 N·m (29 ± 3 ft-lb)
Heat protector mounting bolt	22 ± 4 N·m (16 ± 3 ft-lb)
Oil pump mounting bolt	22 ± 4 N·m (16 ± 3 ft-lb)
Power steering pump bracket mounting bolt	40 ± 5 N·m (30 ± 3 ft-lb)
Pressure hose connecting nut	18 ± 3 N·m (13 ± 2 ft-lb)
Suction connector mounting bolt	21 ± 3 N·m (16 ± 2 ft-lb)
Steering shaft	
Shaft cover mounting bolt	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Steering column shaft assembly and steering gear connecting bolt	18 ± 2 N·m (13 ± 2 ft-lb)
Steering column shaft assembly bolt	12 ± 2 N·m (102 ± 22 in-lb)
Steering wheel	
Steering wheel mounting bolt	50 ± 5 N·m (37 ± 4 ft-lb)

Propeller Shaft

ITEM	SPECIFICATION
Center bearing assembly nut	30 ± 4 N·m (22 ± 3 ft-lb)
Companion flange to front propeller shaft connecting nut	34 ± 5 N·m (25 ± 4 ft-lb)
Companion flange, LJ assembly, LJ boot and washer connecting nut	34 ± 5 N·m (25 ± 4 ft-lb)
Propeller shaft and differential companion flange connecting nut	32 ± 2 N·m (24 ± 1 ft-lb)
Self locking nut (companion flange to front and center propeller shaft connection)	187 ± 29 N·m (138 ± 21 ft-lb)

Service Brakes

ITEMS	SPECIFICATIONS
Brake line	
Brake tube flare nut	15 ± 2 N·m (12 ± 1 ft-lb)
Brake pedal	
Brake pedal assembly bolt	12 ± 2 N·m (107 ± 17 in-lb)
Brake pedal assembly nut	14 ± 3 N·m (124 ± 26 in-lb)
Front disc brake	
Brake hose connector bolt	30 ± 5 N·m (22 ± 4 ft-lb)
Caliper bleeder	14 ± 2 N·m (124 ± 18 in-lb)
Front brake assembly mounting bolt	108 ± 10 N·m (80 ± 7 ft-lb)
Master cylinder assembly and brake booster	
Brake booster mounting nut	14 ± 3 N·m (124 ± 26 in-lb)
Fitting	16 ± 1 N·m (12 ± 1 ft-lb)
Master cylinder mounting nut	10 ± 2 N·m (89 ± 17 in-lb)
Operating rod jam nut	22 ± 3 N·m (16 ± 2 ft-lb)
Rear disc brake	
Brake hose connector bolt	15 ± 2 N·m (12 ± 1 ft-lb)
Caliper bleeder	14 ± 2 N·m (124 ± 18 in-lb)
Rear brake assembly mounting bolt	54 ± 5 N·m (40 ± 4 ft-lb)

SRS

ITEM	SPECIFICATION
Air bag module(s) and clock spring	
Clock spring screw	0.69 ± 0.15 N·m (6 ± 1 in-lb)
Hexagon socket head bolt	50 ± 5 N·m (37 ± 4 ft-lb)
Front impact sensor	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Seat belts with pre-tensioner	
Seat belt lower anchor bolt	44 ± 10 N·m (33 ± 7 ft-lb)
Seat belt shoulder anchor bolt	44 ± 10 N·m (33 ± 7 ft-lb)
Seat belt with pre-tensioner mounting bolt	44 ± 10 N·m (33 ± 7 ft-lb)
SRS control unit (SRS-ECU)	
SRS-ECU bracket bolt	5.0 ± 1.0 N·m (43 ± 7 in-lb)
SRS-ECU mounting nut	5.0 ± 1.0 N·m (44 ± 7 in-lb)

Suspension (Front)

ITEM	SPECIFICATION
Front axle crossmember bar	
Front axle crossmember bar bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Lower arm assembly	
Lower arm to crossmember connection bolt (Rear)	167 ± 9 N·m (123 ± 7 ft-lb)
Lower arm to crossmember connection bolt (Front)	186 ± 10 N·m (138 ± 7 ft-lb)
Lower arm to knuckle connection nut	108 ± 10 N·m (80 ± 7 ft-lb)
Stabilizer bar	
Crossmember to body connection bolt and nut	167 ± 9 N·m (123 ± 7 ft-lb)
Crossmember bolt	49 ± 10 N·m (37 ± 7 ft-lb)
Rear roll stopper connection nut	52 ± 7 N·m (39 ± 5 ft-lb)
Stabilizer bar bracket bolt	39 ± 5 N·m (29 ± 3 ft-lb)
Stabilizer bracket bolt	21 ± 4 N·m (16 ± 2 ft-lb)
Steering gear and joint connecting bolt	18 ± 2 N·m (13 ± 2 ft-lb)
Lower arm to knuckle connection nut	108 ± 10 N·m (80 ± 7 ft-lb)
Tie rod end to knuckle connection nut	25 ± 5 N·m (19 ± 3 ft-lb)
Strut assembly	
Strut nut (self-locking nut)	60 ± 10 N·m (48 ± 4 ft-lb)
Strut assembly to body connection nut	44 ± 5 N·m (33 ± 3 ft-lb)
Strut assembly to knuckle connection nut	167 ± 9 N·m (123 ± 7 ft-lb)

Suspension (Rear)

ITEM	SPECIFICATION
Assist link	
Assist link mounting nut	93 ± 15 N·m (69 ± 11 ft-lb)
Assist link to knuckle nut	81 ± 6 N·m (60 ± 4 ft-lb)
Lower arm assembly	
Lower arm assembly to crossmember nut	93 ± 15 N·m (69 ± 11 ft-lb)
Lower arm assembly to knuckle nut	88 ± 10 N·m (65 ± 7 ft-lb)
Lower arm assembly to shock absorber nut	88 ± 10 N·m (65 ± 7 ft-lb)
Rear suspension assembly	
Crossmember mounting bolt	88 ± 5 N·m (65 ± 3 ft-lb)
Differential support assembly mounting nut	120 ± 10 N·m (89 ± 6 ft-lb)
Propeller shaft mounting nut	32 ± 2 N·m (24 ± 1 ft-lb)
Rear brake caliper mounting bolt	54 ± 5 N·m (40 ± 4 ft-lb)
Shock absorber assembly	
Shock absorber assembly to body nut	44 ± 5 N·m (33 ± 3 ft-lb)
Shock absorber self-locking nut (Coil spring nut)	25 ± 5 N·m (19 ± 3 ft-lb)
Stabilizer bar	
Stabilizer bar link mounting nut	39 ± 5 N·m (29 ± 3 ft-lb)
Stabilizer bracket bolt	24 ± 4 N·m (18 ± 3 ft-lb)
Stabilizer bracket to crossmember bolt	39 ± 5 N·m (29 ± 3 ft-lb)
Trailing arm assembly	
Trailing arm assembly to knuckle nut	81 ± 6 N·m (60 ± 4 ft-lb)
Trailing arm assembly to body bolt	147 ± 9 N·m (109 ± 6 ft-lb)

Upper arm assembly	
Upper arm assembly mounting bolt (front)	49 ± 5 N·m (36 ± 4 ft-lb)
Upper arm assembly mounting bolt (rear)	64 ± 4 N·m (47 ± 3 ft-lb)
Upper arm assembly to knuckle nut	81 ± 6 N·m (60 ± 4 ft-lb)

Wheel And Tire

ITEM	SPECIFICATION
Wheel nut	98 ± 10 N·m (73 ± 7 ft-lb)