

NCV3 Misc Torque Requirements

FASTENER TORQUE

Description	N·m	Ft. Lbs.	In. Lbs.
All Screws NOT Listed Below	2	—	17
A/C Compressor to Engine Bolts	20	15	—
A/C Pressure Transducer	10	—	88
A/C Receiver/drier to Condenser Bolt	6	—	53
Auxiliary Heat Exchanger to Underbody Bolts	4	—	35
Front A/C Expansion Valve Bolts	6	—	53
Heater Booster to Underbody Nuts	6	—	53
Front HVAC Housing to IP Bolts	3	—	26
Front HVAC Housing to IP Nuts	5	—	44
Rear A/C Blower Motor Screws	5	—	44
Rear A/C Evaporator Housing to Roof Screws	5	—	44
Rear A/C Evaporator Retaining Bracket Screws	3	—	26
Rear A/C Expansion Valve Bolts	6	—	53
Rear A/C Roof Duct Screws	3	—	26
Rear Transmission Crossmember Bolt and Nut	172	127	—
Refrigerant Lines to A/C Compressor Bolts	22	16	—
Refrigerant Lines to A/C Condenser Nuts	6	—	53
Refrigerant Lines to B-Pillar Screws	3	—	26
Refrigerant Lines to Dash Panel Nuts	4	—	35
Refrigerant Lines to Front Expansion Valve Nut	6	—	53
Refrigerant Lines to Rear Expansion Valve Nuts	6	—	53
Refrigerant Lines to Refrigerant Lines Nuts and Bolts	8	—	70
Refrigerant Lines Mounting Bracket to Roof Brace Screws	3	—	26

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
ALUMINUM WHEELS	180 +10	130 +10	-
STEEL WHEELS	240 +10	177 +10	-

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
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FUEL TANK MOUNTING NUTS	15 - 17	11 - 13	-
FUEL TANK MODULE LOCKRING (LOCKNUT)	60	44	-
PRESSURE CONTROL VALVE NUT TO FUEL RAIL (2 STAGES)	60, loosen 90°, retighten to 80	44, loosen 90°, retighten to 59	-

DESCRIPTION	N-m	Ft. Lbs.	In. Lbs.
B+ Terminal Nut	15	11	-
Generator-to-engine bolts	20	15	-
Generator Decoupler	110	81	-

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.	ADDITIONAL INSTRUCTIONS
Door latch bolts	10	7	90	
Engine cradle crossmember bolts - center	120	89	—	Then turn an additional 270 degrees
Engine cradle crossmember bolts - front and rear	172	127	—	
Engine mount to crossmember bolts	58	43	—	
Front bumper step plate to crossmember, bolt	20	15	—	
Front bumper to body, collar screw	25	18	—	
Front door check a-pillar bolt	23	17	—	
Front door check door bolts	9	7	80	
Front door motor screws	7	5	62	
Front door regulator bolts	7	5	62	
Front door regulator nuts	7	5	62	
Front door to hinge bolts	23	17	—	
Front driver seat mounting bolts	37	27	—	
Front passenger seat armrest nuts	20	15	—	
Front passenger seat mounting bolts	37	27	—	
Front seat back bolts	32	24	—	
Front seat belt buckle bolts	37	27	—	
Front seat belt to seat mounting bolts	37	27	—	
Front seat frame/riser bolts	37	27	—	
Hand brake lever bolts	62	46	—	
Hood hinges to cowl bolts	23	17	—	
Hood hinges to hood nuts	20	15	—	

Hood prop bolt	8	6	70	
Instrument panel support bolts	20	15	—	
Outside mirror bolts	8	6	71	
Power steering gear lines	18	13	—	
Rear bumper to body, collar screw	9	7	80	
Rear door - left, locking eye bolts	20	15	—	
Rear door check bolts	9	7	80	
Rear door hinge bolts	23	17	—	
Rear door inner latch bolts	8	6	71	
Rear door lower latch bolts	10	7	90	
Rear door lower latch locking eye bolts	20	15	—	
Rear door upper latch bolts	10	7	90	
Rear engine/trans mount to crossmember bolt - m10	58	43	—	
Rear engine/trans mount to crossmember bolt - m8	30	22	—	
Trailer hitch frame bolts	110	81	—	
Upper shock absorber mounting bolts	28	21	—	Then turn an additional 60 degrees

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Brake Lines	14	10	124
Master Cylinder To Brake Booster Nut	20	15	—
Brake Caliper Adapter BoltsFrontPlus an additional 40° turn	80	59	—
Brake Caliper Adapter BoltsRearPlus an additional 40° turn	80	59	—
Disc Brake Rotor Locking BoltFront or Rear	22	16	194
Wheel flange Ring to Rotor	2000	148	—
Wear Indicator To Caliper BoltFront or Rear	8	—	71
Pedal Bracket to Firewall	23	—	204
Booster To Pedal Bracket	25	—	221
Brake Caliper Guide PinsM8 Bolt	34	25	283
Brake Caliper Guide PinsM10 Bolt	65	48	—
ALB Operating Linkage Lever To The Rear Axle	34	25	300
Pressure Transformer Unit For Brake Cables To Frame Crossmember	25	—	221
Hand Brake Lever To Seat Frame	62	46	—

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Brake Lines To Hydraulic unit	14	10	124
Dynamics Sensor	6	—	53
Hydraulic Control Unit (HCU)Initial torque	2	—	18
Hydraulic Control Unit (HCU)Final torque	3	—	26
Wheel Speed SensorFront	8	—	71
Wheel Speed SensorRear	8	—	71

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
U-Joint To Steering Gear	28	21	—
High Pressure Hose To Steering Gear	18	13	—
Return Line To Steering Gear	18	13	—
Steering Gear To FrameInitial Torque	25	18	221
Steering Gear To FrameSecond TorqueThen additional 90° turn	80	59	—
Steering Wheel to Steering Shaft	80	59	—
Steering Column Tube of Steering Shaft To the Instrument Panel Support	21	15	—
Outer Tie Rod End NutThen additional 60° turn	50	37	—
Outer Tie Rod End Locking Nut	50	37	—
Inner Tie Rod to the Steering Gear	115	85	—
Steering Gear Boot Clamp	7	—	62
Power Steering Pump To Timing Case Cover/Support	21	15	185
High Pressure Flexible Hose To Power Steering Pump	38	28	336
Power Steering Pulley To Pump	25	18	—

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Lower Ball Joint To Steering Knuckle	170	125	—
Strut To Steering KnuckleThen turn an additional 120°	140	103	—
Strut To BodyM8 BoltThen turn an additional 60°	28	21	—
Lower Spring Clamp Plate To Front AxleM12 X 1.5 BoltThen turn an additional 90°	106	78	—
Lower Spring Clamp Plate To Front AxleM8 Bolt	29	21	—
Stabilizer Bar Clamp To The Front Axle	58	43	—
Stabilizer Bar Link to Stabilizer Bar	106	78	—

Stabilizer Bar Link to Frame	58	43	—
Lower Control Arm To Front AxleM14 X 1.5 boltThen turn an additional 90°	172	127	—
Upper Stop Plate For Lower Control ArmM10 bolt	58	43	—
Upper Stop Plate For Lower Control ArmM12 X 1.5 boltThen turn an additional 90°	106	78	—
Outer Tie Rod End NutThen turn an additional 60°	50	37	—
Outer Tie Rod End NutJam Nut	50	37	—

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Stabilizer Bar Link to Stabilizer Bar	106	78	—
Stabilizer Bar Link to Frame	106	78	—
Stabilizer Bar Clamp to Frame(SRW)	60	44	—
Stabilizer Bar Clamp to Frame(DRW)	70	52	—
Stabilizer Bar Clamp To The Rear Axle TubeM10 Bolt	60	44	—
Stabilizer Bar Clamp To The Rear Axle TubeM12 X 1.5 Bolt	120	88	—
Rear Spring To Front Spring Bracket(SRW)	95	70	—
Rear Spring To Front Spring Bracket(DRW)	185	136	—
Rear Spring To Rear Spring Bracket (SRW)	85	63	—
Rear Spring To Rear Spring Bracket(DRW)	185	136	—
Spring Shackle To Rear Spring Bracket(SRW)	90	66	—
Spring Shackle To Rear Spring Bracket(DRW)	185	136	—
U-Bolt To Spring Plate & Axle(SRW&DRW)	170	125	—
Lower Shock Mounting To Rear AxleM12 X 1.5 Bolt	106	78	—
Lower Shock Mounting To Rear AxleM14 X 1.5 Bolt(SRW&DRW)	135	100	—
Upper Shock Mounting To Frame	135	100	—

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Tire Pressure Sensor/Transmitter Mounting Nut	6	—	53
Front Transponder	3	—	25
Rear Transponder	3	—	25

Individual Torque Charts appear within many of the Groups. Refer to the Standard Torque Specifications Chart for torque references not listed in the individual torque charts .

SPECIFIED TORQUE FOR STANDARD BOLTS

Class	Diameter mm	Pitch mm	Specified torque					
			Hexagon head bolt			Hexagon flange bolt		
			N•m	kgf-cm	ft-lbf	N•m	kgf-cm	ft-lbf
4T	6	1	5	55	48 in.-lbf	6	60	52 in.-lbf
	8	1.25	12.5	130	9	14	145	10
	10	1.25	26	260	19	29	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	74	760	55	84	850	61
	16	1.5	115	1,150	83	—	—	—
5T	6	1	6.5	65	56 in.-lbf	7.5	75	65 in.-lbf
	8	1.25	15.5	160	12	17.5	175	13
	10	1.25	32	330	24	36	360	26
	12	1.25	59	600	43	65	670	48
	14	1.5	91	930	67	100	1,050	76
	16	1.5	140	1,400	101	—	—	—
6T	6	1	8	80	69 in.-lbf	9	90	78 in.-lbf
	8	1.25	19	195	14	21	210	15
	10	1.25	39	400	29	44	440	32
	12	1.25	71	730	53	80	810	59
	14	1.5	110	1,100	80	125	1,250	90
	16	1.5	170	1,750	127	—	—	—
7T	6	1	10.5	110	8	12	120	9
	8	1.25	25	260	19	28	290	21
	10	1.25	52	530	38	58	590	43
	12	1.25	95	970	70	105	1,050	76
	14	1.5	145	1,500	108	165	1,700	123
	16	1.5	230	2,300	166	—	—	—
8T	8	1.25	29	300	22	33	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	110	1,100	80	120	1,250	90
9T	8	1.25	34	340	25	37	380	27
	10	1.25	70	710	51	78	790	57
	12	1.25	125	1,300	94	140	1,450	105
10T	8	1.25	38	390	28	42	430	31
	10	1.25	78	800	58	88	890	64
	12	1.25	140	1,450	105	155	1,600	116
11T	8	1.25	42	430	31	47	480	35
	10	1.25	87	890	64	97	990	72
	12	1.25	155	1,600	116	175	1,800	130