

GRAND CHEROKEE WK/WH Drivetrain Torque Reference

DESCRIPTION - FRONT SUSPENSION	N·m	Ft. Lbs.	In. Lbs.
Shock Absorber Upper Nuts	95	70	—
Shock Absorber Clevis Bracket	81	60	—
Clevis Bracket to Lower Control Arm	169	125	—
Upper Control Arm Bolt/Nut to Body	122	90	—
Lower Control Arm Bolt	142	105	—
Lower Control Arm Bolt/Nut Front Pivot	169	125	—
Upper Ball Joint Nut	75	55	—
Lower Ball Joint Nut	95	70	—
Stabilizer Bar Retainer Bolts	142	105	—
Stabilizer Bar Link Upper Nut	135	100	—
Stabilizer Bar Link Lower Bolt	115	85	—
Hub Bearing Knuckle Bolts	136	100	—
Wheel Lug Nut	136	100 ± 20	—
Spare Tire Winch	39	28	250

DESCRIPTION - FRAME	N·m	Ft. Lbs.	In. Lbs.
Engine cradle bolts - front	203	150	—
Engine cradle bolts - rear	122	90	—
Engine mount bolts	111	82	—
Front differential - front support bolts	54	40	—
Front differential - rear support bolt	102	75	—
Front differential - right support bolt	102	75	—
Front skid plate bolt	28	21	—
Fuel filler tube support bolt	14	10	—
Halfshaft nuts	251	185	—
Lower ball joint nut	81	60	—
Lower clevis bolts	169	125	—
Outer tie rod end nut	75	55	—
Rear body cradle rail bolts	108	80	—
Rear body cradle rail bracket bolts/nuts	102	75	—
Rear fascia to quarter panel nuts	9	—	80
Rear track bar bolts/nuts	190	140	—

DESCRIPTION - SHAFTS	N·m	Ft. Lbs.	In. Lbs.
Front Shaft - Pinion Flange Bolts	108	80	-
Front Shaft - Transfer Case Flange Bolts	32	24	-
Rear Shaft - Pinion Flange Bolts	108	80	-
Rear Shaft - Transfer Case Flange Bolts	108	80	-
Rear Shaft - Transmission Flange Bolts	108	80	-
Half Shaft Hub/Bearing Nut	135	100	-

DESCRIPTION - STEERING	N·m	Ft. Lbs.	In. Lbs.
Pitman Arm Shaft Nut	251	185	—
Drag Link Pitman Arm Nut	88	65	—
Drag Link Knuckle Nut	47	35	—
Drag Link Clamp Nuts	41	30	—
Tie Rod Knuckle Nut	47	35	—
Tie Rod Clamp Nuts	41	30	—
Steering Damper Axle Bolt	88	65	—
Steering Damper Tie Rod Nut	41	30	—
Steering Column Steering Wheel Nut	61	45	—
Steering Column Column Bracket Nuts	12	—	105
Steering Column Shaft Coupler Bolts	49	36	—
Rack and Pinion Steering Gear Gear to Frame Bolts	217	160	—
Rack and Pinion Steering Gear Intermediate Shaft Bolt	49	36	—
Tie Rod End Knuckle Nut	95	70	—
Tie Rod End Jam Nut	81	60	—
Power Steering Lines ALL	28	21	275

DESCRIPTION - FRONT AXLE - C200F - C200FE	N·m	Ft. Lbs.	In. Lbs.
Pinion Nose Bushing Nut	95	70	-
Axle Tube Bushing Nut	95	70	-
Differential Cover Bracket Bushing Bolts	47	35	-
Bracket to Differential Cover Nuts	117	86	-
Ring Gear Bolts	102	75	-
Differential Cover Bolts	56	41	-
Differential Bearing Cap Bolts	135	100	-
Drain/Fill Plug	60	44	-
Axle Tube to Differential Bolts	56	41	-
Axle Dampener Nuts	56	41	-

DESCRIPTION - REAR SUSPENSION	N·m	Ft. Lbs.	In. Lbs.
Shock Absorber Upper Bolt	95	70	—
Shock Absorber Lower Bolt	115	85	—
Suspension Arms Lower Axle Bracket Nut	210	155	—
Suspension Arms Lower Frame Bracket Nut	176	130	—
Suspension Arms Upper Axle Bracket Nut	136	100	—
Suspension Arms Upper Frame Bracket Nut	129	95	—
Track Bar to Axle	190	140	—
Track Bar to Rear Structure	190	140	—
Stabilizer Bar Retainer Bolts	46	34	—
Stabilizer Link Nut to Stabilizer Bar	88	65	—
Stabilizer Link to Body Bolt	102	75	—
Jounce Bumper Bolt to Body	54	40	—

DESCRIPTION - REAR AXLE - C213R - C213RE	N·m	Ft. Lbs.	In. Lbs.
Differential Cover Bolts	41	30	-
Bearing Cap Bolts	136	100	-
Ring Gear Bolts	102	75	-
Pinion Nut Minimum	285	210	-
Adjuster Lock Screw	11	8	-
Pinion Shaft Lock Screw	26	19	-
Axle Flange Nuts	119	88	-

DESCRIPTION - BRAKES	N·m	Ft. Lbs.	In. Lbs.
Brake Pedal Support Bolt	24	17	—
Brake Pedal Pivot Nut	31	23	—
Brake Pedal Bracket Adjustable pedals	28	21	250
Brake Pedal Bracket To Dash	28	—	250
Brake Booster Mounting Nuts	39	29	—
Master Cylinder Mounting Nuts	25	18	—
Master Cylinder Primary Brake Line	23	—	200
Master Cylinder Secondary Brake Line	23	—	200
Front Caliper Slide Pins	25	18	221
Front Caliper Anchor Bolts	169	125	—
Front Caliper Brake Hose Banjo Bolt	31	23	275
Front Caliper Bleed Screw	10	—	88
Rear Caliper Slide Pins	25	18	221
Rear Caliper Brake Hose Banjo Bolt	31	23	275
Rear Caliper Bleed Screw	16	—	144
G-Sensor Bolt	56	—	50
Hydraulic Control Unit/Controller Antilock Brakes Mounting Bolts	12	9	125
Hydraulic Control Unit/Controller Antilock Brakes Brake Lines	16	—	144
Hydraulic Control Unit/Controller Antilock Brakes CAB Screws	18	—	16
Wheel Speed Sensors Front Sensor Bolt	12-14	—	106-124
Wheel Speed Sensors Rear Sensor Bolt	12-14	—	106-124

NOTE: All torques should be done with vehicle on the ground with full vehicle weight.

COMMANDER XK/XH Drivetrain Torque Reference

DESCRIPTION - FRONT SUSPENSION	N-m	Ft. Lbs.	In. Lbs.
Shock Absorber Upper Nuts	95	70	—
Shock Absorber Clevis Bracket	122	90	—
Shock upper Mounting Nut	39	25	—
Clevis Bracket to Lower Control Arm	169	125	—
Upper Control Arm Bolt/Nut to Body	108	80	—
Lower Control Arm Bolt Rear Pivot	88	65	—
Lower Control Arm Bolt/Nut Front Pivot	169	125	—
Upper Ball Joint Nut	95	70	—
Lower Ball Joint Nut	95	70	—
Stabilizer Bar Retainer Bolts	129	95	—
Stabilizer Bar Link Upper Nut	108	80	—
Stabilizer Bar Link Lower Bolt	115	85	—
Hub Bearing Knuckle Bolts	115	85	—
Wheel Lug Nut	136	100 ±	—
	± 20	15	
Spare Tire Winch	39	28	250

DESCRIPTION - FRAME	N-m	Ft. Lbs.	In. Lbs.
Engine cradle bolts - front	203	150	—
Engine cradle bolts - rear	122	90	—
Engine mount bolts	111	82	—
Front differential - front support bolts	54	40	—
Front differential - rear support bolt	102	75	—
Front differential - right support bolt	102	75	—
Front skid plate bolt	28	21	—
Fuel filler tube support bolt	14	10	—
Halfshaft nuts	251	185	—
Lower ball joint nut	81	60	—
Lower clevis bolts	169	125	—
Outer tie rod end ball stud nut	75	55	—
Rear body cradle rail bolts	108	80	—
Rear body cradle rail bracket bolts/nuts	102	75	—
Rear fascia to quarter panel nuts	9	—	80
Rear track bar bolts/nuts	190	140	—
Tow eye nuts - rear	88	65	—
Tow hook nuts - front	68	50	—
Tow hook bolt/nut - rear brace	88	65	—
Tow hook nuts - rear mounting	88	65	—
Trailer hitch bolts	156	115	—
Transfer case skid plate bolts	47	35	—
Transfer case skid plate nuts	81	60	—
Transmission crossmember bolts	54	40	—
Transmission mount bolts	54	40	—
Upper ball joint nut	81	60	—
Vapor canister nuts	24	17	—

DESCRIPTION - SHAFTS	N-m	Ft. Lbs.	In. Lbs.
Front Shaft - Pinion Flange Bolts	108	80	-
Front Shaft - Pinion Flange Bolts with C/V Joint	32	24	-
Front Shaft - Transfer Case Flange Bolts	32	24	-
Rear Shaft - Pinion Flange Bolts	108	80	-
Rear Shaft - Transfer Case Flange Bolts	108	80	-
Rear Shaft - Transmission Flange Bolts	108	80	-
Half Shaft Hub/Bearing Nut	135	100	-

DESCRIPTION - STEERING	N-m	Ft. Lbs.	In. Lbs.
Steering Column Steering Wheel Bolt	61	45	—
Steering Column Column Bracket Nuts	12	—	105
Steering Column Cross bolt	12	—	105
Steering Column Shaft Coupler Bolts	49	36	—
Rack and Pinion Steering Gear to Frame Bolts/Nuts	244	180	—
Rack and Pinion Steering Gear Intermediate Shaft Bolt	49	36	—
Tie Rod End Knuckle Nut	95	70	—
Tie Rod End Jam Nut	75	55	—
Power Steering Lines 3/8 Tube Nuts	28	21	275
Power Steering Lines 1/2 Tube Nuts Pressure line from pump to HEC 5.7L & 3.0L Diesel	47	35	—

DESCRIPTION - FRONT AXLE - C200F - C200FE	N-m	Ft. Lbs.	In. Lbs.
Pinion Nose Bushing Nut	95	70	-
Axle Tube Bushing Nut	95	70	-
Differential Cover Bracket Bushing Bolts	47	35	-
Bracket to Differential Cover Nuts	117	86	-
Ring Gear Bolts	102	75	-
Differential Cover Bolts	56	41	-
Differential Bearing Cap Bolts	135	100	-
Drain/Fill Plug	60	44	-
Axle Tube to Differential Bolts	56	41	-
Axle Dampener Nuts	56	41	-
ELSD Connector Bolt	9	-	80

DESCRIPTION - REAR SUSPENSION	N-m	Ft. Lbs.	In. Lbs.
Shock Absorber Upper Bolt/Nut	95	70	—
Shock Absorber Lower Bolt/Nut	115	85	—
Suspension Arms Lower Axle Bracket Nut	210	155	—
Suspension Arms Lower Frame Bracket Nut	176	130	—
Suspension Arms Upper Axle Bracket Nut	136	100	—
Suspension Arms Upper Frame Bracket Nut	129	95	—
Track Bar to Axle	190	140	—
Track Bar to Rear Structure	190	140	—
Stabilizer Bar Retainer Bolts	42	31	—
Stabilizer Link Nut to Stabilizer Bar	122	90	—
Stabilizer Link to Body Bolt	102	75	—
Jounce Bumper Bolt to Body	54	40	—

DESCRIPTION - REAR AXLE - C213R - C213RE	N-m	Ft. Lbs.	In. Lbs.
Differential Cover Bolts	41	30	-
Bearing Cap Bolts	136	100	-
Ring Gear Bolts	102	75	-
Pinion Nut Minimum	285	210	-
Adjuster Lock Screw	11	8	-
Pinion Shaft Lock Screw	26	19	-
Axle Flange Nuts	119	88	-

DESCRIPTION - BRAKES	N-m	Ft. Lbs.	In. Lbs.
Brake Pedal Support Bolt	24	17	—
Brake Pedal Pivot Nut	31	23	—
Brake Pedal Bracket Adjustable pedals	28	21	250
Brake Pedal Bracket To Dash	28	—	250
Brake Booster Mounting Nuts	39	29	—
Master Cylinder Mounting Nuts	25	18	—
Master Cylinder Primary Brake Line	23	—	200
Master Cylinder Secondary Brake Line	23	—	200
Front Caliper Slide Bolts	44	32	389
Front Caliper Adapter Bolts to Knuckle	169	125	—
Front Caliper Brake Hose Banjo Bolt	31	23	275
Front Caliper Bleed Screw	26	—	230
Rear Caliper Slide Bolts	44	32	221
Rear Caliper Brake Hose Banjo Bolt	31	23	275
Rear Caliper Bleed Screw	26	—	230
G-Sensor Bolt	5.6	—	50
Dynamics Sensor Nuts	9	—	80
Hydraulic Control Unit/Controller Antilock Brakes Mounting Bolts	12	9	125
Hydraulic Control Unit/Controller Antilock Brakes Brake Lines	16	—	144
Hydraulic Control Unit/Controller Antilock Brakes CAB Screws	18	—	16
Wheel Speed Sensors Front Sensor Bolt	12-14	—	106-124
Wheel Speed Sensors Rear Sensor Bolt	12-14	—	106-124

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