

The CASE logo is displayed in white, bold, italicized capital letters. It is positioned on a black trapezoidal background that tapers to the right. A horizontal orange bar is located directly beneath the letters.

REPAIR MANUAL
LOADER LANDSCAPER

570MXT
SERIES 3
TIER 3

87728463 NA

Issued 01 April 08

570MXT SERIES 3 TIER 3 LOADER LANDSCAPER

Repair Manual

Bur 87728463

Table of Contents

Description	Section Number	Publication Form Number
General		Tab 1
Section Index - General		5-13230
Standard Torque Specifications	1001	8-71603
Fluids and Lubricants	1002	5-13240
Metric Conversion Chart	1003	7-52950
Engine		Tab 2
Section Index - Engine		5-13250
Engine and Radiator Removal and Installation	2000	5-13260
Stall Test	2002	5-13270
Diagnosing Engine Oil Consumption	2445	5-13620
Counter Balance Removal and Installation	2447	5-13280
Turbocharger Diagnosis Procedure Family 3 Engines	2465	5-13630
<i>NOTE: For Engine Repair See Engine Repair Manual 87630273.</i>		
Fuel System		Tab 3
Section Index - Fuel System		5-13290
In Vehicle Injector Pump Removal, Installation and Static Timing	3416	5-13300
<i>NOTE: For Fuel System Repair See Engine Repair Manual 87630273.</i>		
Electrical		Tab 4
Section Index - Electrical		5-13310
Removal and Installation of Electrical Components	4000	5-13320
Electrical Specifications and Troubleshooting	4001	5-13330
Batteries	4003	6-42331
Starter and Starter Solenoid	4004	6-74560
Instrument Cluster	4005	6-74570
Steering		Tab 5
Section Index - Steering		5-13340
Removal and Installation of Steering Components	5000	5-13350
Steering Specification, Pressure Checks and Troubleshooting	5001	5-13360
Steering Control Valve	5002	6-74621
Steering Cylinders	5003	5-13610
Front Axle - Two Wheel Drive	5005	6-74640
Front Axle - Four Wheel Drive	5006	5-13370

570MXT SERIES 3 TIER 3 LOADER LANDSCAPER Repair Manual Bur 87728463

Table of Contents (Continued)

Description	Section Number	Publication Form Number
Power Train		Tab 6
Section Index - Power Train		5-13380
Removal and Installation of Power Train Components	6000	5-13390
Standard Transmission Specifications, Pressure Checks, and Troubleshooting	6002	5-13640
Wheels and Tires	6003	5-13400
Rear Axle and Planetaries	6004	5-13410
Standard Transmission	6007	6-74782
Brakes		Tab 7
Section Index - Brakes		5-13420
Removal and Installation of Brake Components	7000	5-13600
Hydraulic Brake Troubleshooting	7002	5-13080
Master Cylinder	7003	6-74830
Hydraulics		Tab 8
Section Index - Hydraulics		5-13430
Removal and Installation of Hydraulic Components	8001	5-13440
Hydraulic System Specifications and Troubleshooting	8002	5-13450
Cleaning the Hydraulic System and Hydrostatic System	8003	7-49641
Hydraulic Pump	8004	5-13460
Loader Control Valve	8005	5-13470
Cylinders	8006	5-13480
Three Point Hitch Control Valve	8007	5-13490
Accumulator for Machines With Ride Control and Pilot Control Accumulator	8009	6-74960
Solenoid Valve for Machines with Optional Ride Control	8010	6-74970
Flow Control Valve	8011	5-13500
Lock Valve	8012	5-13510
Mounted Equipment		Tab 9
Section Index - Mounted Equipment		5-13520
Pedals and Levers	9001	5-13530
Air Conditioning Troubleshooting	9002	5-13580
Air Conditioning System Service	9004	6-75051
Air Conditioning Components Service	9005	5-13590
Loader	9006	5-12350
ROPS Cab and Canopy	9007	5-13540
Standard and Mechanical Suspension Seat	9009	5-13550
Plug-in Weight	9010	5-13560

570MXT SERIES 3 TIER 3 LOADER LANDSCAPER
Repair Manual
Bur 87728463

Table of Contents (Continued)

Description	Section Number	Publication Form Number
Schematic Set		
Hydraulic and Electrical Schematics	In Rear Pocket	5-13570

NOTE: CNH Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

SECTION INDEX

GENERAL

Section Title	Section Number
Standard Torque Specifications.....	1001
Fluid and Lubricants	1002
Metric Conversion Chart	1003

Section 1001


GENERAL TORQUE SPECIFICATIONS


TABLE OF CONTENTS

TORQUE SPECIFICATIONS - DECIMAL HARDWARE	3
TORQUE SPECIFICATIONS - METRIC HARDWARE	4
TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS	5
TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS	6

TORQUE SPECIFICATIONS - DECIMAL HARDWARE

Use the torques in this chart when special torques are not given. These torques apply to fasteners with both UNC and UNF threads as received from suppliers dry, or when lubricated with engine oil. Not applicable if special graphities, Molydisulfide greases, or other extreme pressure lubricants are used.

Grade 5 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
1/4 inch	108 to 132	12 to 15
5/16 inch	204 to 252	23 to 28
3/8 inch	420 to 504	48 to 57
Size	Pound-Feet	Newton metres
7/16 inch	54 to 64	73 to 87
1/2 inch	80 to 96	109 to 130
9/16 inch	110 to 132	149 to 179
5/8 inch	150 to 180	203 to 244
3/4 inch	270 to 324	366 to 439
7/8 inch	400 to 480	542 to 651
1.0 inch	580 to 696	787 to 944
1-1/8 inch	800 to 880	1085 to 1193
1-1/4 inch	1120 to 1240	1519 to 1681
1-3/8 inch	1460 to 1680	1980 to 2278
1-1/2 inch	1940 to 2200	2631 to 2983


Grade 8 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
1/4 inch	144 to 180	16 to 20
5/16 inch	288 to 348	33 to 39
3/8 inch	540 to 648	61 to 73
Size	Pound-Feet	Newton metres
7/16 inch	70 to 84	95 to 114
1/2 inch	110 to 132	149 to 179
9/16 inch	160 to 192	217 to 260
5/8 inch	220 to 264	298 to 358
3/4 inch	380 to 456	515 to 618
7/8 inch	600 to 720	814 to 976
1.0 inch	900 to 1080	1220 to 1465
1-1/8 inch	1280 to 1440	1736 to 1953
1-1/4 inch	1820 to 2000	2468 to 2712
1-3/8 inch	2380 to 2720	3227 to 3688
1-1/2 inch	3160 to 3560	4285 to 4827


NOTE: Use thick nuts with Grade 8 bolts.

TORQUE SPECIFICATIONS - METRIC HARDWARE

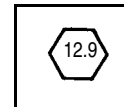
Use the following torques when specifications are not given.

These values apply to fasteners with coarse threads as received from supplier, plated or unplated, or when lubricated with engine oil. These values do not apply if graphite or Molydisulfide grease or oil is used.

Grade 8.8 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
M4	24 to 36	3 to 4
M5	60 to 72	7 to 8
M6	96 to 108	11 to 12
M8	228 to 276	26 to 31
M10	456 to 540	52 to 61
Size	Pound-Feet	Newton metres
M12	66 to 79	90 to 107
M14	106 to 127	144 to 172
M16	160 to 200	217 to 271
M20	320 to 380	434 to 515
M24	500 to 600	675 to 815
M30	920 to 1100	1250 to 1500
M36	1600 to 1950	2175 to 2600

Grade 10.9 Bolts, Nuts, and Studs		
		
Size	Pound-Inches	Newton metres
M4	36 to 48	4 to 5
M5	84 to 96	9 to 11
M6	132 to 156	15 to 18
M8	324 to 384	37 to 43
Size	Pound-Feet	Newton metres
M10	54 to 64	73 to 87
M12	93 to 112	125 to 150
M14	149 to 179	200 to 245
M16	230 to 280	310 to 380
M20	450 to 540	610 to 730
M24	780 to 940	1050 to 1275
M30	1470 to 1770	2000 to 2400
M36	2580 to 3090	3500 to 4200

Grade 12.9 Bolts, Nuts, and Studs



Usually the torque values specified for grade 10.9 fasteners can be used satisfactorily on grade 12.9 fasteners.

TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS

37 Degree Flare Fitting			
Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
1/4 inch 6.4 mm	7/16-20	72 to 144	8 to 16
5/16 inch 7.9 mm	1/2-20	96 to 192	11 to 22
3/8 inch 9.5 mm	9/16-18	120 to 300	14 to 34
1/2 inch 12.7 mm	3/4-16	180 to 504	20 to 57
5/8 inch 15.9 mm	7/8-14	300 to 696	34 to 79
Tube OD Hose ID	Thread Size	Pound- Feet	Newton metres
3/4 inch 19.0 mm	1-1/16-12	40 to 80	54 to 108
7/8 inch 22.2 mm	1-3/16-12	60 to 100	81 to 135
1.0 inch 25.4 mm	1-5/16-12	75 to 117	102 to 158
1-1/4 inch 31.8 mm	1-5/8-12	125 to 165	169 to 223
1-1/2 inch 38.1 mm	1-7/8-12	210 to 250	285 to 338

Straight Threads with O-ring			
Tube OD Hose ID	Thread Size	Pound- Inches	Newton metres
1/4 inch 6.4 mm	7/16-20	144 to 228	16 to 26
5/16 inch 7.9 mm	1/2-20	192 to 300	22 to 34
3/8 inch 9.5 mm	9/16-18	300 to 480	34 to 54
1/2 inch 12.7 mm	3/4-16	540 to 804	57 to 91
Tube OD Hose ID	Thread Size	Pound- Feet	Newton metres
5/8 inch 15.9 mm	7/8-14	58 to 92	79 to 124
3/4 inch 19.0 mm	1-1/16-12	80 to 128	108 to 174
7/8 inch 22.2 mm	1-3/16-12	100 to 160	136 to 216
1.0 inch 25.4 mm	1-5/16-12	117 to 187	159 to 253
1-1/4 inch 31.8 mm	1-5/8-12	165 to 264	224 to 357
1-1/2 inch 38.1 mm	1-7/8-12	250 to 400	339 to 542

Split Flange Mounting Bolts		
Size	Pound- Inches	Newton metres
5/16-18	180 to 240	20 to 27
3/8-16	240 to 300	27 to 34
7/16-14	420 to 540	47 to 61
Size	Pound- Feet	Newton metres
1/2-13	55 to 65	74 to 88
5/8-11	140 to 150	190 to 203

TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS

O-ring Face Seal End					O-ring Boss End Fitting or Lock Nut		
Nom. SAE Dash Size	Tube OD	Thread Size	Pound-Inches	Newton metres	Thread Size	Pound-Inches	Newton metres
-4	1/4 inch 6.4 mm	9/16-18	120 to 144	14 to 16	7/16-20	204 to 240	23 to 27
-6	3/8 inch 9.5 mm	11/16-16	216 to 240	24 to 27	9/16-18	300 to 360	34 to 41
-8	1/2 inch 12.7 mm	13/16-16	384 to 480	43 to 54	3/4-16	540 to 600	61 to 68
					Thread Size	Pound-Feet	Newton metres
-10	5/8 inch 15.9 mm	1-14	552 to 672	62 to 76	7/8-14	60 to 65	81 to 88
Nom. SAE Dash Size	Tube OD	Thread Size	Pound-Feet	Newton metres	1-1/16-12	85 to 90	115 to 122
					1-3/16-12	95 to 100	129 to 136
-12	3/4 inch 19.0 mm	1-3/16-12	65 to 80	90 to 110	1-5/16-12	115 to 125	156 to 169
-14	7/8 inch 22.2 mm	1-3/16-12	65 to 80	90 to 110	1-5/8-12	150 to 160	203 to 217
-16	1.0 inch 25.4 mm	1-7/16-12	92 to 105	125 to 140	1-7/8-12	190 to 200	258 to 271
-20	1-1/4 inch 31.8 mm	1-11/16-12	125 to 140	170 to 190			
-24	1-1/2 inch 38.1 mm	2-12	150 to 180	200 to 254			

Section 1002

1002

FLUIDS AND LUBRICANTS

TABLE OF CONTENTS

CAPACITIES AND LUBRICANTS	3
ENGINE OIL RECOMMENDATIONS	4
DIESEL FUEL	5
Fuel Storage	5
Specifications for Acceptable No. 2 Diesel Fuel	5

CAPACITIES AND LUBRICANTS

Engine Crankcase	
Capacity with filter change	11 litres (11.6 U.S. quarts)
Specifications	Case AKCELA No. 1 15W-40 API CG-4 or CF-4
Fuel Tank	
Capacity, usable	117 litres (31U.S. gallons)
Optional tank	151 litres (40 U.S. gallons) usable
Specifications	See page 5
Cooling System	
Capacity with heater	17.4 litres (18.4 U.S. quarts)
Capacity without heater	16.8 litres (17.7 U.S. quarts)
Specifications	50% water and 50% ethylene glycol
Hydraulic System	
Capacity with filter change	54.5 litres (14.4 U.S. gallons)
Capacity without filter change	52.6 litres (13.9 U.S. gallons)
Specifications	Case AKCELA Hy-Tran [®] Ultra
Transmission	
2 Wheel Drive	
Total system capacity	18.5 litres (19.5 U.S. quarts)
Refill capacity with or without filter change	16 litres (16.9 U.S. quarts)
Type of Fluid.....	MS-1209, Hy-Tran [®] Ultra
4 Wheel Drive	
Total system capacity	21.0 litres (22 U.S. quarts)
Refill capacity with or without filter change	18.5 litres (19.5 U.S. quarts)
Type of Fluid.....	Case AKCELA Hy-Tran [®] Ultra
Front Drive Axle - 4 Wheel Drive	
Capacity - center bowl	5.5 litres (5.8 U.S. quarts)
Capacity - each wheel end	0.7 litres (0.75 U.S. quarts)
NOTE: Check the part number on the axle serial number plate to determine correct oil type for the front axle.	
Axle P/N 87417387 Type of Fluid	Case AKCELA Hy-Tran [®] Ultra
Axle P/N 87395365 Type of Fluid	Case Transaxle Fluid (MS1317) MAT3510
Rear Axle	
Capacity - center bowl	14 litres (15 U.S. quarts)
Capacity - each wheel end	1.5 litres (1.6 U.S. quarts)
Type of Fluid.....	MS-1209, Hy-Tran [®] Ultra
Center Bowl Oil Additive.....	Case AKCELA Axle Oil Additive
Brake Master Cylinder	(Brake fluid supplied by hydraulic reservoir, see Hydraulic System.)

ENGINE OIL RECOMMENDATIONS

Case AKCELA No.1 Engine Oil is recommended for use in your Case Engine. Case AKCELA No.1 Engine Oil will lubricate your engine correctly under all operating conditions. If Case AKCELA No. 1 Multi-Viscosity Engine Oil is not available, Case AKCELA No. 1 Single Grade Engine Oil can be used.



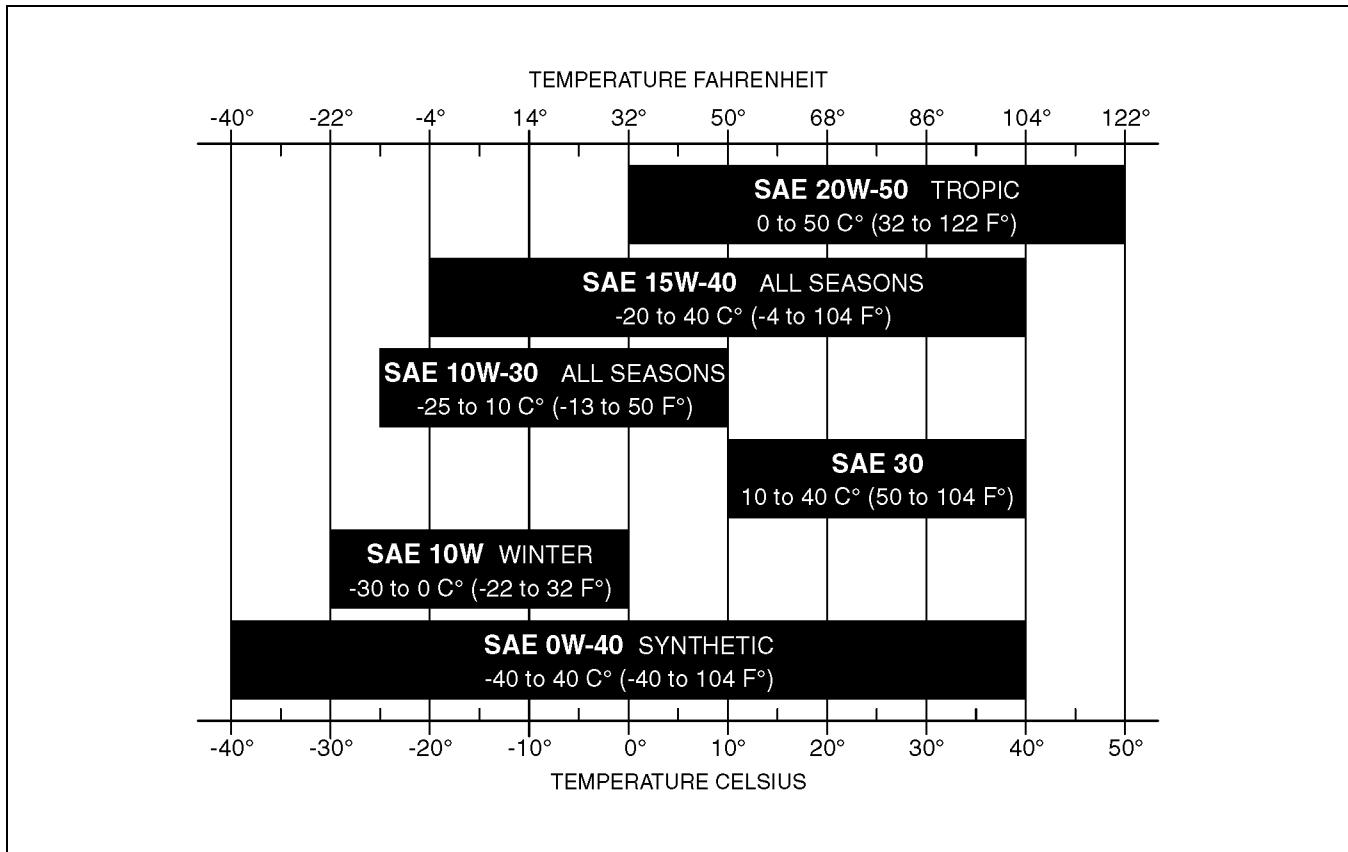
If Case AKCELA No.1 Multi-Viscosity or Single Grade Engine Oil is not available, use only oil meeting API engine oil service category CH-4.

See the chart for recommended viscosity at ambient air temperature ranges.



BD03A102

NOTE: Do not put Performance Additives or other oil additive products in the engine crankcase. The oil intervals given in the operators manual and service chart are according to tests with Case AKCELA lubricants.



BC07N452

Thanks for your reading.

Please click here to download complete manual instantly.

And can also choose other manuals.

Feel free --->write to me with any questions.

Our service email:

manuals007@hotmail.com