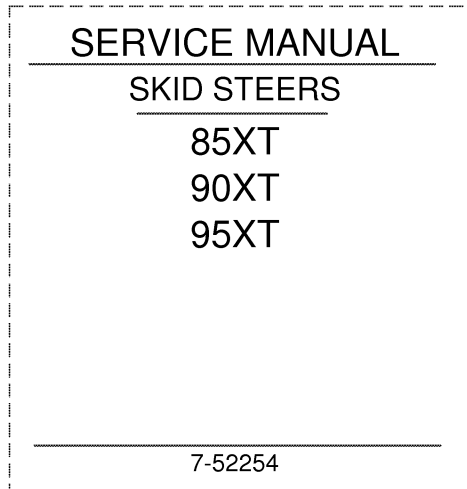


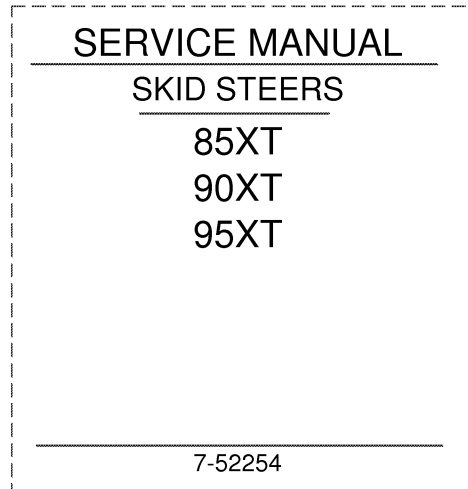
Case 85xt 90xt 95xt Complete Service Manual

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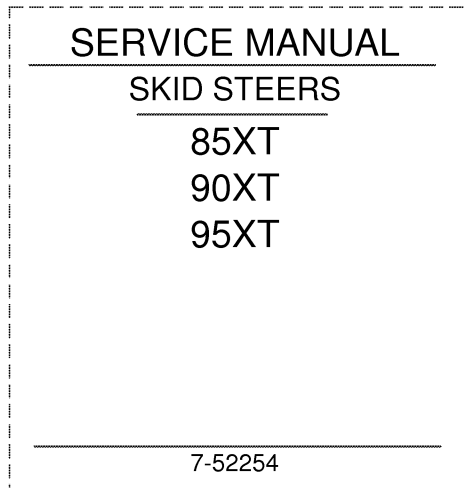
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



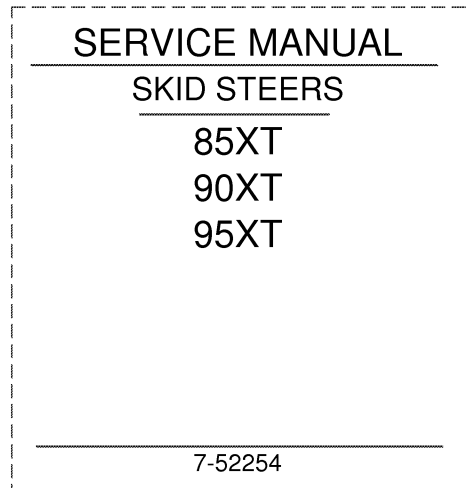
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4

85XT/90XT/95XT Skid Steers

Service Manual

7-52254

Table of Contents

Description	Section No.	Form No.
General		
		Tab 1
Section Index - General		7-52922
Standard Torque Specifications	1001	7-52930
Fluids and Lubricants	1002	7-52943
Metric Conversion Chart	1003	7-52950
Loctite Product Chart		8-98902
Engines		
		Tab 2
Section Index - Engines		7-52982
Engine and Radiator Removal and Installation	2000	7-53000
Aftercooler	2411	7-43512
Cylinder Head and Valve Train	2415	8-24175
Cylinder Block	2425	8-24185
Lubrication System	2445	8-24195
Cooling System	2455	8-24205
Turbocharger	2465	8-25552
Turbocharger Failure Analysis	2565	9-78235
Fuel System		
		Tab 3
Section Index - Fuel System		7-53020
Fuel System and Filters	3410	8-24213
Fuel Injectors	3413	8-24235
Bosch Model VE Fuel Injection Pump	3415	7-37143
Electrical		
		Tab 4
Section Index - Electrical		7-53032
Electrical "How It Works"	4000	7-53043
Electrical "How It Works" (85XT Machines With P.I.N. JAF0352234 And After) (90XT Machines With P.I.N. JAF0320050 And After) (95XT Machines With P.I.N. JAF0311357 And After)	4000	6-75150
Removal and Installation of Electrical Components	4001	7-53050
Electrical Specifications and Troubleshooting	4002	7-53562
Electrical Specifications, Troubleshooting, and Schematics	4002	6-75160

Reprinted

85XT/90XT/95XT Skid Steers
Service Manual
7-52254
Table of Contents

Description	Section No.	Form No.
Battery	4005	7-51310
Starter and Starter Solenoid	4006	7-53090
Alternator	4007	7-53100
Power Train		
	Tab 6	
Section Index - Power Train		7-53113
Hydrostatic How It Works	6000	7-53123
Removal and Installation of Power Train Components	6001	7-53131
Removal and Installation of Power Train Components (85XT Machines With P.I.N. JAF0352234 And After) (90XT Machines With P.I.N. JAF0320050 And After) (95XT Machines With P.I.N. JAF0311357 And After)	6001	6-75230
Hydrostatic Troubleshooting	6002	7-53582
Drive Coupling	6003	7-53141
Piston Pumps - Tandem Pump (M51)	6004	7-53151
Drive Motors - 90XT and 95XT	6005	7-53160
Drive Motors - 85XT	6005	7-53171
Gear Box	6006	7-52890
Sprockets, Chains, and Axle Assemblies	6007	7-52732
Solenoid Valve for Two Speed Drive Motor	6008	7-52900
Accumulator for Charge Circuit	6009	7-53331
Accumulator for Charge Circuit (90XT Machines With P.I.N. JAF0298607 And After) (95XT Machines With P.I.N. JAF0299000 And After)	6009	6-75220
Wheels and Tires	6011	7-53181
Brakes		
	Tab 7	
Section Index - Brakes		7-53192
How It Works	7000	7-54861
Brake - 85XT (Machines Before PIN JAF0273132)	7003	7-54771
Brake - 85XT (Machines With PIN JAF0273132 And After)	7003	6-41380
Brake - 90XT and 95XT	7003	7-52882
Brake Pump	7004	7-54710
Hydraulics		
	Tab 8	
Section Index - Hydraulics		7-53213
"How It Works"	8000	7-53222

**85XT/90XT/95XT Skid Steers
Service Manual
7-52254
Table of Contents**

Description	Section No.	Form No.
ROPS Canopy, Seat, Seat Belts, and Operators Compartment	9004	7-53380
Heater	9006	7-53401
Backhoe (D125 Backhoe)	9007	7-54660
Trencher	9008	7-54870
Steel Track	9009	7-54880
Rubber Track	9010	7-54890
Air Conditioning Troubleshooting - For Systems With R134A Refrigerant	9011	6-41330
Air Conditioner System Gauges and Testing - For Systems With R134A Refrigerant	9012	6-41340
Air Conditioner System Service - For Systems With R134A Refrigerant Refrigerant Recovery, Compressor Removal and System Evacuation and Recharging	9013	6-41350
Air Conditioner Component Service - For Systems With R134A Refrigerant	9014	6-41360
Hydraulic and Electrical Schematic Foldout	In Rear Pocket	7-53623

NOTE: Case, LLC. 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

Fluids and Lubricants 1002

Metric Conversion Chart..... 1003

Loctite Product Chart

CASE CORPORATION
700 State Street
Racine, WI 53404 U.S.A.

CASE CANADA CORPORATION
3350 SOUTH SERVICE ROAD
BURLINGTON, ON L7N 3M6 CANADA

Bur 7-52922

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February, 1999

Section

1001

STANDARD TORQUE SPECIFICATIONS

85XT - 90XT - 95XT

CASE CORPORATION
700 State Street
Racine, WI 53404 U.S.A.

CASE CANADA CORPORATION
450 Sherman Avenue
Hamilton, ON L8N 4C4 CANADA

Bur 7-52930


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September, 1997


TABLE OF CONTENTS

TORQUE SPECIFICATIONS - DECIMAL HARDWARE	3
Grade 5 Bolts, Nuts, and Studs	3
Grade 8 Bolts, Nuts, and Studs	3
TORQUE SPECIFICATIONS - METRIC HARDWARE	4
Grade 8.8 Bolts, Nuts, and Studs	4
Grade 12.9 Bolts, Nuts, and Studs	4
Grade 10.9 Bolts, Nuts, and Studs	4
TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS	5
37 Degree Flare Fitting	5
Straight Threads with O-ring	5
Split Flange Mounting Bolts	6
O-Ring Face Seal End	6
O-Ring Boss End	6
Fitting or Lock Nut	6
Pipe fittings	7

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	Newton metres	Pound-Inches
1/4 inch	10 to 12	91 to 103
5/16 inch	21 to 24	188 to 212
3/8 inch	38 to 43	336 to 378
		Pound-Feet
7/16 inch	61 to 69	45 to 51
1/2 inch	94 to 104	68 to 76
9/16 inch	132 to 149	98 to 110
5/8 inch	183 to 210	138 to 155
3/4 inch	325 to 370	242 to 270
7/8 inch	530 to 595	390 to 435
1.0 inch	790 to 890	585 to 655
1-1/8 inch	980 to 1100	725 to 805
1-1/4 inch	1385 to 1555	1020 to 1145
1-3/8 inch	1810 to 2030	1335 to 1495
1-1/2 inch	2400 to 2700	1770 to 1990


Grade 8 Bolts, Nuts, and Studs		
		
Size	Newton metres	Pound-Inches
1/4 inch	15 to 16	130 to 145
5/16 inch	30 to 34	268 to 301
3/8 inch	54 to 60	474 to 534
		Pound-Feet
7/16 inch	86 to 97	63 to 71
1/2 inch	132 to 149	96 to 110
9/16 inch	191 to 213	140 to 155
5/8 inch	260 to 293	190 to 215
3/4 inch	480 to 515	340 to 380
7/8 inch	745 to 835	550 to 615
1.0 inch	1120 to 1280	825 to 925
1-1/8 inch	1585 to 1785	1170 to 1315
1-1/4 inch	2215 to 2235	1650 to 1855
1-3/8 inch	2930 to 3295	2160 to 2430
1-1/2 inch	3895 to 4375	2870 to 3225


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 both coarse and fine 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. Use of a click type torque wrench, or better is required.

Grade 8.8 Bolts, Nuts, and Studs		
		
Size	Newton metres	Pound-Inches
M4	3 to 4	31 to 35
M5	5 to 6	49 to 55
M6	10 to 11	84 to 94
M8	23 to 26	229 to 277
M10	46 to 51	408 to 460
		Pound-Feet
M12	80 to 90	59 to 66
M14	128 to 145	94 to 106
M16	200 to 220	149 to 161
M20	400 to 450	293 to 330
M24	690 to 780	510 to 575
M30	1375 to 1545	1010 to 1140
M36	2400 to 2700	1770 to 1990

Grade 10.9 Bolts, Nuts, and Studs		
		
Size	Newton metres	Pound-Inches
M4	5 to 6	44 to 49
M5	8 to 9	71 to 79
M6	14 to 15	120 to 136
M8	33 to 37	293 to 329
		Pound-Feet
M10	65 to 74	48 to 54
M12	114 to 128	85 to 94
M14	183 to 205	136 to 153
M16	285 to 320	208 to 235
M20	555 to 620	406 to 460
M24	955 to 1075	705 to 790
M30	1900 to 2140	1400 to 1580
M36	3315 to 3730	2445 to 2750

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				
Nom. SAE Dash Size	Tube OD/Hose ID	Thread Size	Newton metres	Pound-Inches
-2		5/16 - 24	8 to 9	72 to 84
-3		3/8 - 24	11 to 12	96 to 108
-4	6.4 mm (1/4 inch)	7/16 - 20	14 to 16	120 to 144
-5	7.9 mm (5/16 inch)	1/2 - 20	18 to 21	156 to 192
-6	9.5 mm (3/8 inch)	9/16 - 18	27 to 33	240 to 300
-8	12.7 mm (1/2 inch)	3/4 - 16	46 to 56	408 to 504
-10	15.9 mm (5/8 inch)	7/8 - 14	77 to 85	684 to 756
				Pound-Feet
-12	19.0 mm (3/4 inch)	1-1/16 - 12	107 to 119	79 to 88
-14	22.2 mm (7/8 inch)	1-3/16 - 12	127 to 140	94 to 103
-16	25.4 mm (1.0 inch)	1-5/16 - 12	131 to 156	97 to 117
-20	31.8 mm (1-1/4 inch)	1-5/8 - 12	197 to 223	145 to 165
-24	38.1 mm (1-1/2 inch)	1-7/8 - 12	312 to 338	230 to 250

Straight Threads with O-ring				
Nom. SAE Dash Size	Tube OD/Hose ID	Thread Size	Newton metres	Pound-Inches
-2		5/16 - 24	8 to 9	72 to 84
-3		3/8 - 24	11 to 12	96 to 108
-4	6.4 mm (1/4 inch)	7/16-20	20 to 25	180 to 228
-5	7.9 mm (5/16 inch)	1/2-20	27 to 33	240 to 300
-6	9.5 mm (3/8 inch)	9/16-18	43 to 54	384 to 480
-8	12.7 mm (1/2 inch)	3/4-16	73 to 90	648 to 804
				Pound-Feet
-10	15.9 mm (5/8 inch)	7/8-14	100 to 124	74 to 92
-12	19.0 mm (3/4 inch)	1-1/16-12	138 to 173	102 to 128
-14	22.2 mm (7/8 inch)	1-3/16-12	173 to 216	128 to 160
-16	25.4 mm (1.0 inch)	1-5/16-12	203 to 253	150 to 187
-20	31.8 mm (1-1/4 inch)	1-5/8-12	308 to 357	227 to 264
-24	38.1 mm (1-1/2 inch)	1-7/8-12	492 to 542	363 to 400

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

O-Ring Face Seal End					O-Ring Boss End Fitting or Lock Nut		
Nom. SAE Dash Size	Tube OD	Thread Size	Newton metres	Pound-Inches	Thread Size	Newton metres	Pound-Inches
-4	6.4 mm (1/4 inch)	9/16-18	23 to 26	204 to 228			
-6	9.5 mm (3/8 inch)	11/16-16	34 to 40	300 to 348	9/16-18	48 to 54	432 to 480
-8	12.7 mm (1/2 inch)	13/16-16	52 to 57	456 to 504	3/4-16	70 to 78	612 to 684
							Pound-Feet
-10	15.9 mm (5/8 inch)	1-14	81 to 90	720 to 792	7/8-14	102 to 114	75 to 84
				Pound-Feet			
-12	19.0 mm (3/4 inch)	1-3/16-12	117 to 128	86 to 94	1-1/16-12	142 to 160	105 to 117
-16	25.4 mm (1.0 inch)	1-7/16-12	152 to 174	112 to 128	1-5/16-12	237 to 254	175 to 187
-20	31.8 mm (1-1/4 inch)	1-11/16-12	179 to 201	132 to 148			
-24	38.1 mm (1-1/2 inch)	2-12	213 to 235	157 to 173			

Pipe fittings		
Nom. SAE Dash Size	Thread Size	TFFT (Turns For Finger Tight)
-2	1/8 - 27	2.0 - 3.0
-3	1/8 - 27	2.0 - 3.0
-4	1/8 - 27	2.0 - 3.0
-5	1/8 - 27	2.0 - 3.0
-6	1/4 - 18	1.5 - 3.0
-8	3/8 - 18	2.0 - 3.0
-10	1/2 - 14	2.0 - 3.0
-12	3/4 - 14	2.0 - 3.0
-14	3/4 - 14	2.0 - 3.0
-16	1 - 11 1/2	1.5 - 2.5
-20	1 1/4 - 11 1/2	1.5 - 2.5
-24	1 1/2 - 11 1/2	1.5 - 2.5
-32	2 - 11 1/2	1.5 - 2.5

NOTE: Apply sealant/lubricant to male pipe threads. The first two threads should be left uncovered to avoid system contamination. Screw pipe fitting into female pipe port to the finger tight position. Wrench tighten fitting to the appropriate turns from finger tight (TFFT) shown in table above, making sure the tube end of an elbow or tee fitting is aligned to receive incoming tube or hose fitting.

Section 1002

1002

FLUIDS AND LUBRICANTS

TABLE OF CONTENTS

CAPACITIES AND LUBRICANTS	3
ENVIRONMENT	3
ENGINE LUBRICATION	4
Engine Oil Selection	4
Oil Viscosity/Temperature Ranges	4
DIESEL FUEL SYSTEM	5
Fuel Storage	5
Specifications for Acceptable No. 2 Diesel Fuel	5

CAPACITIES AND LUBRICANTS

FUEL TANK

Capacity (95XT)	76.4 litres (20.2 U.S. gallons)
Capacity (90XT)	78.3 litres (20.7 U.S. gallons)
Capacity (85XT)	65.5 litres (17.3 U.S. gallons)
Specifications	See diesel fuel specifications on page 5

COOLING SYSTEM

Capacity	16.5 litres (17.5 quarts)
Recovery bottle capacity	2 litres (2.1 quarts)
Specifications	50% water and 50% ethylene glycol(w/ a supplemental coolant additive for cavitation protection.)

HYDRAULIC SYSTEM

Capacity - System (95XT)	66.2 litres (17.5 gallons)
Capacity - System (90XT)	64.4 litres (17.0 gallons)
Capacity - System (85XT)	62.4 litres (16.5 gallons)
Specifications (95XT and 90XT only)	Case AKCELA Hy Tran Ultra
Specifications (85XT only)	Case AKCELA No. 1 Engine Oil SAE 10W-30 with HTO additive

CHAIN COMPARTMENTS

Capacity - Each Side	7.6 litres (8.0 quarts)
Specifications (95XT and 90XT only)	Case AKCELA Hy Tran Plus
Specifications (85XT only)	Case AKCELA No. 1 Engine Oil, SAE 10W30

BATTERY

Quantity	As required
Specifications	Distilled water

GREASE FITTINGS

Quantity	As required
Attachments (If equipped)	Quantity as required
Specifications	Case AKCELA molydisulfide grease

ENGINE CRANKCASE OIL

Capacity - with filter change	10.4 litres (11.0 quarts)
Capacity - without filter change	9.5 litres (10.0 quarts)
Specifications	Case AKCELA No. 1 Engine Oil SAE 15W-40 (API service CH-4)(See Oil Viscosity/Temperature Ranges Chart on page 4)

ENVIRONMENT

Before you service this machine and dispose of oil, fluids and lubricants, always remember the environment. Do not put oil or fluids into the ground or into containers that can leak. Check with your local environmental, recycling center or your Case dealer for correct disposal information.

ENGINE LUBRICATION

Engine Oil Selection

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.



RH99K130

Case AKCELA Multi-Viscosity No. 1 Engine Oil meets API engine oil service category CH-4.

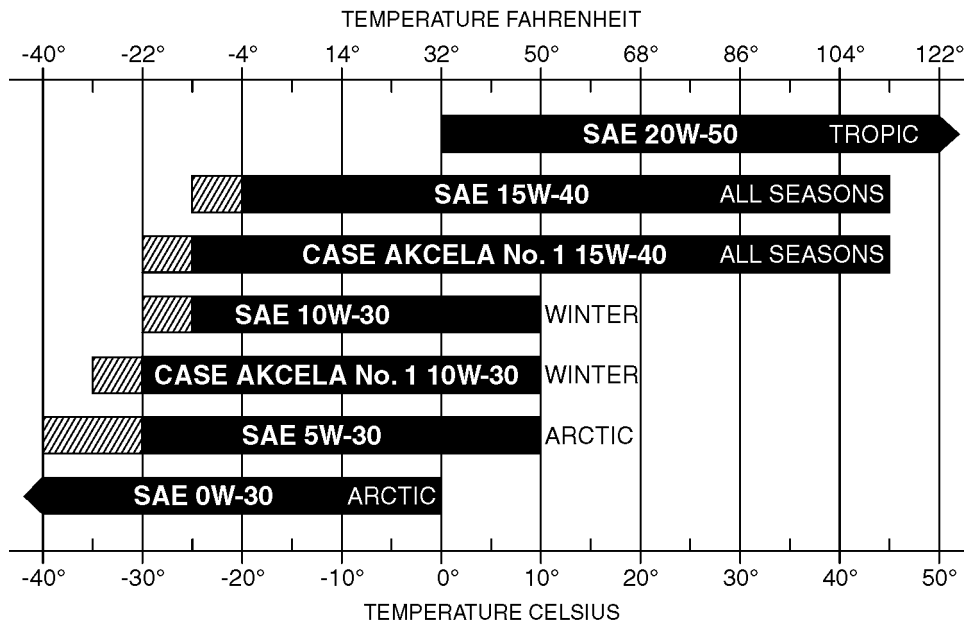
See the chart below for recommended viscosity at ambient temperature ranges.

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



BD03E011

Oil Viscosity/Temperature Ranges



Indicates the use of an Engine Oil Heater or a Jacket Water Heater is required.

BC02N250

DIESEL FUEL SYSTEM

Use No. 2 diesel fuel in the engine of this machine. The use of other fuels can cause the loss of engine power and high fuel consumption.

In very cold temperatures, a mixture of No. 1 and No. 2 diesel fuels is temporarily permitted. See the following:

NOTE: *NOTE: See your fuel dealer for winter fuel requirements in your area. If the temperature of the fuel lowers below the cloud point (wax appearance point), wax crystals in the fuel will restrict the fuel filter and cause the engine to loose power or not start.*

The diesel fuel used in this machine must meet the specifications below, "Specifications for Acceptable No. 2 Diesel Fuel" or Specification D975-81 of the American Society for Testing and Materials.

Fuel Storage

If you keep fuel in storage for a period of time, you can get foreign material or water in the fuel storage tank. Many engine problems are caused by water in the fuel.

Keep the fuel storage tank outside and keep the fuel as cool as possible. Remove water from the storage container at regular periods of time.

Fill the fuel tank at the end of the daily operating period to prevent condensation in the fuel tank.

Specifications for Acceptable No. 2 Diesel Fuel

API Gravity, Minimum	34
Flash Point, Minimum	60×°C (140×°F)
Cloud Point (wax appearance point), Maximum	-20×°C (-5×°F)
Pour Point, Maximum	-26×°C (-15×°F)
Distillation Temperature, 90% Point	282 to 338×°C (540 to 640×°F)
Viscosity, at 38×C (100×F)	
Centistokes	2.0 to 4.3
Saybolt Seconds Universal	32 to 40
Cetane Number, Minimum	43 (45 to 55 for winter or high altitudes)
Water and Sediment, by Volume, Maximum	0.5 of 1%
Sulphur, by Weight, Maximum	0.5 of 1%
Copper Strip Corrosion, Maximum	No. 2
Ash, by Weight, Maximum	0.1 of 1%

Case 85xt 90xt 95xt Complete Service Manual

Full download: <http://manualplace.com/download/case-85xt-90xt-95xt-complete-service-manual/1002-6>

NOTES