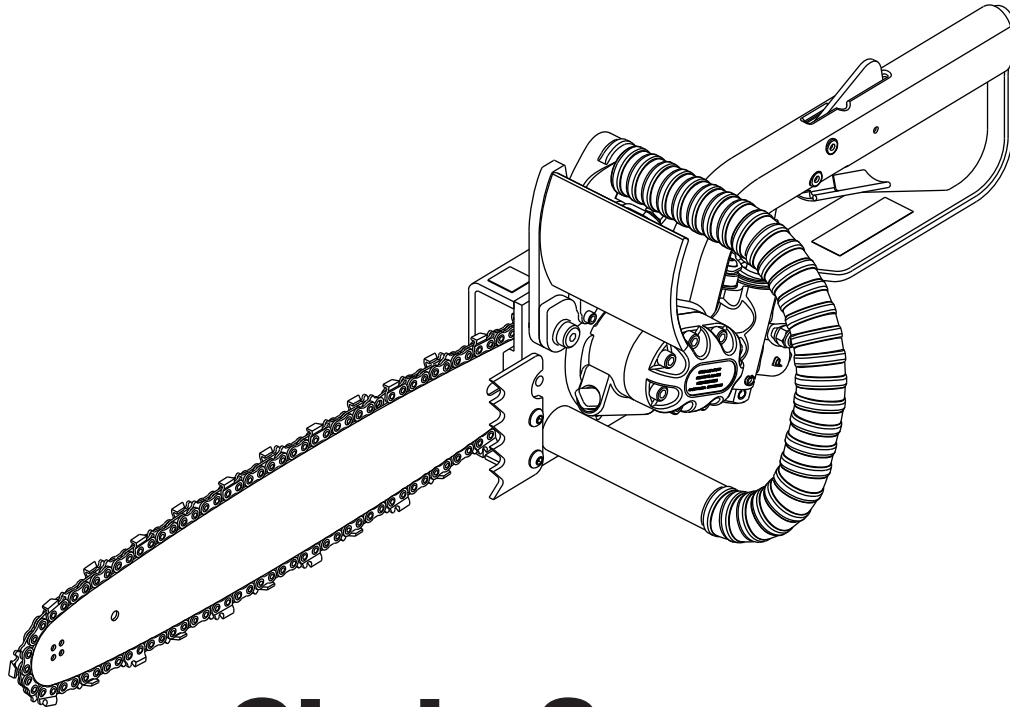


SPECIFICATIONS AND PARTS



Chain Saws with Chain Brake HPS513CB (45826) and HCS8160CB (45653)

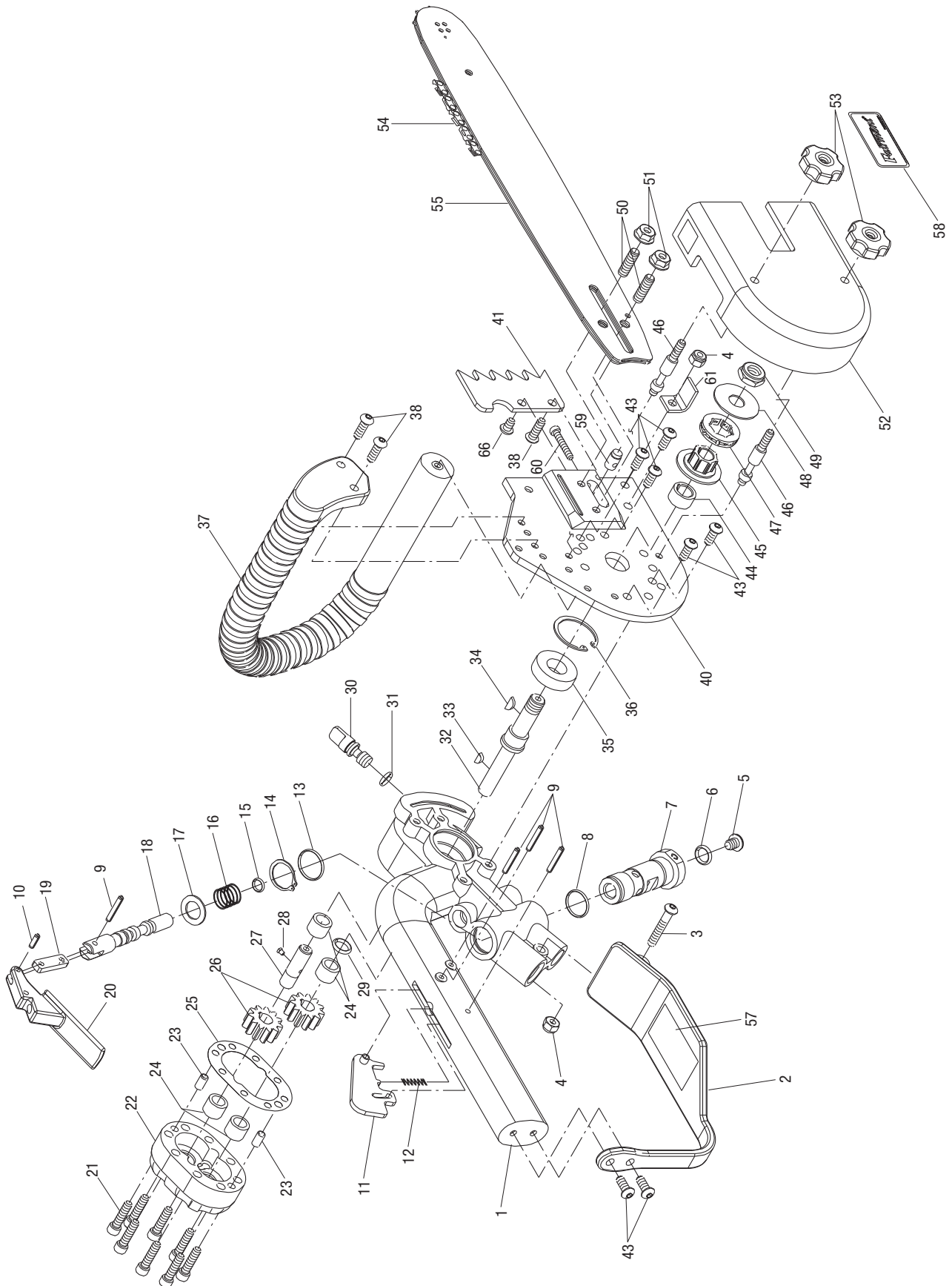
Serial Codes GDV and GDL



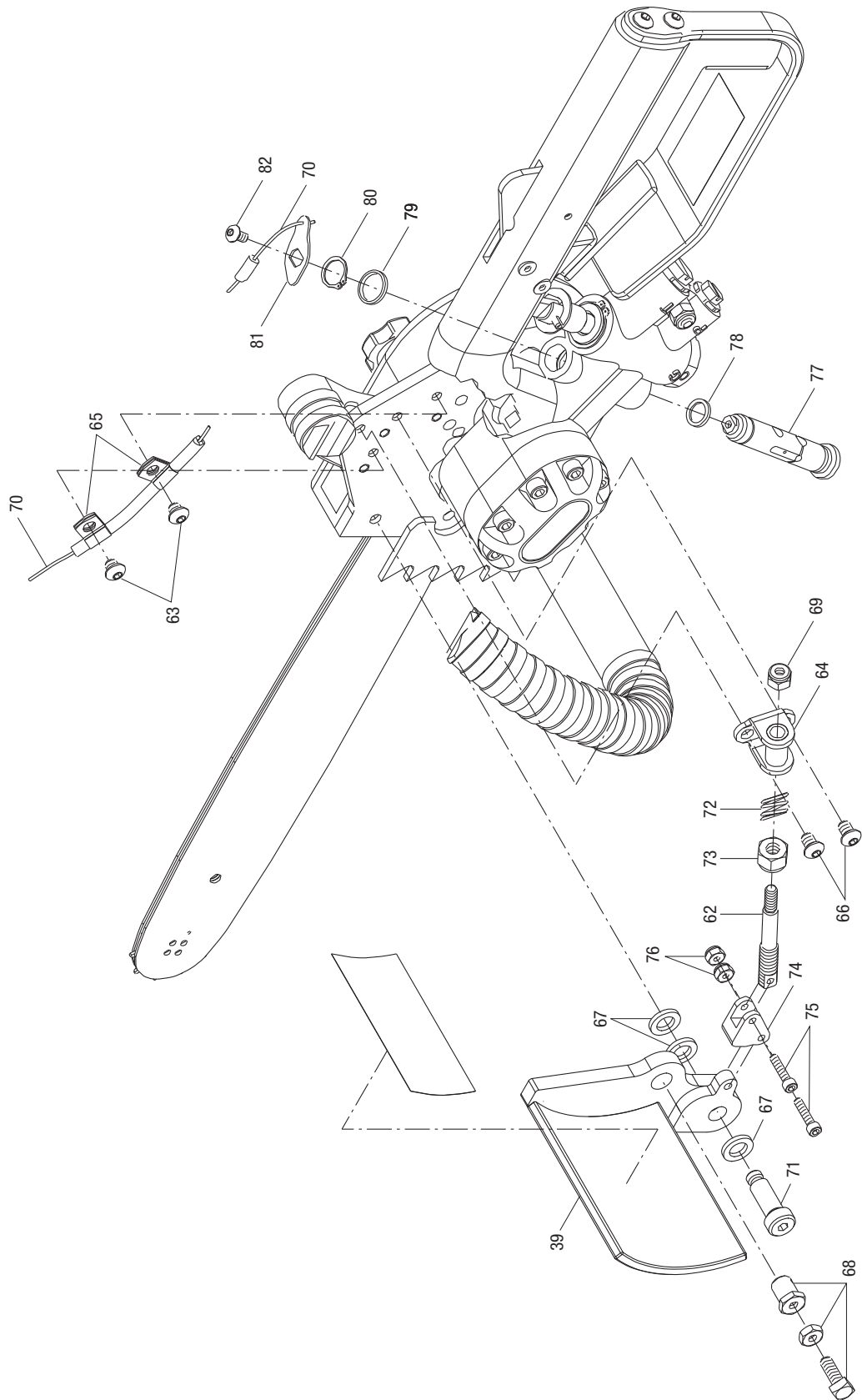
Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

Register this product at www.greenlee.com

Illustration—Main



Chain Brake Assembly



Parts List

Key	UPC No. 78-3310-	Part No.	Description	Qty	Key	UPC No. 78-3310-	Part No.	Description	Qty
1	49926	50499262	Head, saw.....	1	45	55102	90551028	Adapter, sprocket.....	1
2	49757	50497570	Handle, lower, with decal.....	1	46	55137	90551370	Standoff.....	2
3			Screw, cap, 1/4-20 x 1.50, button head socket.....	1	47	55101	90551010	Rim sprocket, .325 pitch (HPS513CB).....	1
4	43997	50439979	Nut, hex, 1/4-20 lock, stainless steel.....	2		55103	90551036	Rim sprocket, 3/8 pitch (HCS8160CB).....	1
5			Screw, cap, 5/16-18 x .375 button head socket.....	1	48	43309	50433091	Washer, flat, .530 x 1.50 x .050.....	1
6*			O-ring, .437 x .625 x .093-90.....	1	49			Nut, hex, 1/2-20, Lock.....	1
7	49415	50494155	Sleeve.....	1	50	55104	90551044	Stud, threaded, 5/16-18 x 1.00.....	2
8*			O-ring, .750 x .875 x .062-90.....	1	51			Nut, hex, 5/16-18, flange.....	2
9			Pin, roll, .156 x 1.00.....	4	52	49405	50494058	Cover.....	1
10			Pin, roll, .156 x .500.....	1	53	55099	90550994	Knob, knurled, 1/4-20 x 1.00.....	2
11	49408	50494082	Actuator, trigger.....	1	54	43370	50433709	Chain, 13 x .058 Ga., .325 pitch (HPS513CB).....	1
12	54144	90541448	Spring, compression, .248 x .300 x .690.....	1	41960	50419600	Chain, 16 x .050 Ga., 3/8 pitch (HCS8160CB).....	1	
13*			O-ring, .875 x 1.00 x .062-70.....	1	55	43369	50433695	Bar, guide, 13 x .058 Ga (HPS513CB).....	1
14	54819	90548191	Ring, retaining, .875, external.....	1		55141	90551419	Bar, guide, 16 x .050 Ga (HCS8160CB).....	1
15*			O-ring, .312 x .437 x .062-70.....	1	59	49461	50494619	Dog, adjustment.....	1
16	41760	50417601	Spring, compression, .675 x .845 x 1.25.....	1	60	55139	90551397	Screw, #10-24 x 2.00, fillister head.....	1
17	40462	50409622	Washer, flat, .580 x .937 x .050, stainless steel.....	1	61	49414	50494147	Catcher, chain.....	1
18	49416	50494163	Spool.....	1	62	49885	50498851	Rod.....	1
19	49409	50494090	Link.....	1	63			Screw, cap, 1/4-20 x .25 button head.....	2
20	49407	50494074	Trigger.....	1	64	49925	50499254	Bracket.....	1
21			Screw, cap, 1/4-20 x 1.00, socket head.....	8	65	49886	50498860	Clamp, conduit.....	2
22	40412	50404124	Cap, motor (includes 2 of Item 24).....	1	66			Screw, cap, 1/4-20 x .38 button head.....	3
23			Pin, dowel, .250 x .500.....	2	67†			Washer, flat.....	3
24	41591	50415911	Bearing, needle, .439 x .625 x .500.....	4	68	49883	50498835	Pin, bowden.....	1
25*			Gasket, 2.09 x 3.09 x .0015.....	1	69			Nut, 1/4-20 hex jam.....	1
26	41630	50416302	Gear, 11-tooth.....	2	70	49762	50497626	Cable, push-pull.....	1
27	40168	50401682	Shaft, idler.....	1	71†	45425	50454250	Screw, 3/8 dia. x 7/8 socket head shoulder.....	1
28	41593	50415930	Pin, drive, .123 x .209 w/ square head.....	1	72	55136	90551362	Spring, compression.....	1
29*			O-ring, .500 x .687 x .093-80.....	1	73			Nut, 3/8-16 hex lock.....	1
30	49419	50494198	Bleed screw.....	1	74	49884	50498843	Toggle.....	1
	40189	50401891	Bleed screw (HPS513CB).....	1	75			Screw, cap, #8-32 x .75 socket head.....	2
31*			O-ring, .375 x .500 x .062-70.....	1	76			Nut, #8-32 hex lock.....	2
32	49417	50494171	Shaft, drive.....	1	77	49844	50498444	Spool.....	1
33	41592	50415921	Key, Woodruff #213.....	1	78	45439	50454390	Quad ring, spool.....	1
34	41813	50418131	Key, Woodruff #2.....	1	79	41402	50414023	O-ring, 9/16 x 11/16 x 1/16-70D.....	1
35	41598	50415981	Bearing, ball.....	1	80	12659	52001375	Ring, retaining.....	1
36	41482	50414821	Ring, retaining.....	1	81	49846	50498460	Lever.....	1
37	49404	50494040	Handle, front.....	1	82			Screw, cap, #10-32 x .38 button head.....	1
38			Screw, cap, 1/4-20 x .750, button head.....	3	83			Screw, cap, 1/4-20 x .88, button head.....	1
39†			Shroud.....	1	Decals				
40	49429	50454323	Plate, mount.....	1	56*	49567	50495674	Decal, warning.....	1
41	49403	50494031	Rack, spike.....	1	57*	49568	50495682	Decal, pressure, flow.....	1
43			Screw, cap, 1/4-20 x .625, button head.....	10	58	41547	50415471	Decal, Greenlee Utility.....	1
44	49418	50494180	Spacer, drive shaft.....	1	Repair Kit				
					*	40789	50407891	Packing kit (includes items marked with an asterisk).....	1
					†	40790	52057244	Shroud kit, chain brake (includes items marked with †).....	1

Accessories

These chain saws will accept any of the following combinations of bar, chain and rim sprocket.

Description			Part Number		
Bar Length	Bar and Chain Gauge	Chain and Sprocket Pitch	Bar	Chain	Sprocket
13"	.058"	.325"	50433695	50433709	90551010
16"	.050"	3/8"	90551419	50419600	90551036
20"	.050"	3/8"	90551850	90551915	90551036

Other Publications

Tool Owners/Users

Operation Manual: Publication 99937387

SAE Standard J1273 (Hose and Hose Assemblies): Publication 99930323

Greenlee Utility Authorized Service Centers

Service Manual: Publication 99937409

Purpose

This manual is intended to familiarize all personnel with the specifications and parts for the following chain saws:

HPS513CB (45826) Serial Code GDV
HCS8160CB (45653) Serial Code GDL

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge at www.greenlee.com.

Specifications

Application Information

See Accessories in this manual.

Chain Saw

Type of Hydraulic System Open-Center or Closed-Center

Hydraulic Ports

Pressure 9/16–18 SAE O-ring

Tank 3/4–16 SAE O-ring

Chain Speed

@ 15.1 l/min (4 gpm) 552 meters/minute (1814 fpm)

@ 30.3 l/min (8 gpm) 1075 meters/minute (3527 fpm)

Mass/Weight

HPS513CB 4.2 kg (9.2 lb)

HCS8160CB 4.6 kg (10.2 lb)

Length

HPS513CB 652 mm (25.68")

HCS8160CB 806 mm (31.75")

Width 254 mm (10")

Height 224 mm (8.5")

Hydraulic Power Source

⚠ WARNING

Do not exceed the following hydraulic power source maximums:

- Hydraulic flow: 30.3 l/min (8 gpm)
- Pressure relief setting: 138 bar (2000 psi)
- Back pressure: 13.8 bar (200 psi)

Failure to observe this warning could result in severe injury or death.

Hydraulic Power Source (cont'd)

Type of Hydraulic System Open-center or closed-center
Flow

Minimum 15.1 l/min (4 gpm)

Recommended 22.7 l/min (6 gpm)

Maximum 30.3 l/min (8 gpm)

Filtration 10 Micron (nominal)

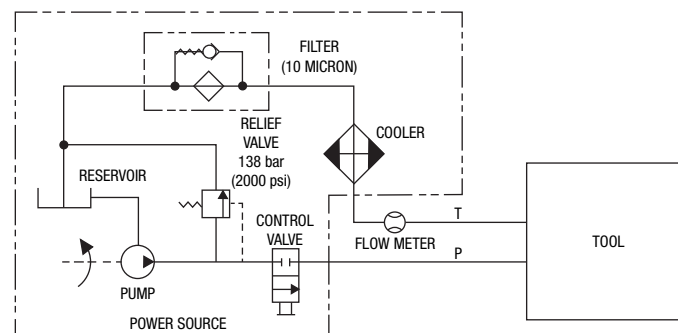
Pressure Relief Setting 138 bar (2000 psi)

Back Pressure (maximum)* 13.8 bar (200 psi)

* 13.8 bar (200 psi) is the maximum agreed standard back pressure for the HTMA (Hydraulic Tool Manufacturers Association). Greenlee Utility tool will operate satisfactorily at this standard.

1. Maximum hydraulic fluid temperature must not exceed 60 °C (140 °F). A sufficient oil cooling capacity is needed to limit the hydraulic fluid temperature.
2. Hydraulic flow must not exceed 30.3 l/min (8 gpm). Install a flow meter in the return line to measure the rate of hydraulic flow before using the tool.
3. Pressure relief valve setting must not exceed 138 bar (2000 psi) at your tool's maximum flow. Locate the pressure relief valve in the supply circuit to limit excessive hydraulic pressure to the tool.

Hydraulic Schematic



Recommended Hydraulic Fluids

Use any non-detergent, petroleum-based hydraulic fluid which meets the following specifications or HTMA specifications.

S.U.S. @:

38 °C (100 °F) 140 to 225

99 °C (210 °F) 40 minimum

Flash Point 170 °C (340 °F) minimum

Pour Point -34 °C (-30 °F) minimum

KEEP THIS MANUAL