



TD183

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HYDRAULIC CHAIN CUTTER CCS1125



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INDEX

1. SAFETY REQUIREMENTS	2
2. TECHNICAL DATA	3
3. OPERATION	4
4. MAINTENANCE	4
5. ADDITIONAL INFORMATION	4
6. ASSEMBLY DIAGRAMS AND PARTS LISTS	5

1. SAFETY REQUIREMENTS

GENERAL CONSIDERATIONS

The SIMPLEX hydraulic cutters have been designed in accordance with our quality standards and ISO 9001 rules.



The cutter must be used in accordance with the relevant instructions described in the manual. The user must be aware of the inherent risks when handling high pressure hydraulic devices and ensure that a safe working environment and safe systems of work are in place before operating the equipment.

The tool is designed only for the operations described in this manual. The manufacturer is not responsible for any damage caused by incorrect operation of the tool.

SAFETY PRINCIPLES

1. This manual must be always available to the operator and all safety and operational instructions must be followed.
2. The operator should be trained about the machine operation and the corresponding safety rules regarding prevention of accidents and protection of the environment.
3. The operator must wear personal protective equipment like helmet, glasses, gloves, boots, protective clothing, etc.



Helmet



Glasses



Gloves



Boots



Protective Clothing

4. The operator must be trained in the use and safe operation of the pump being used with the cutter. If a powered pump (electric, air, engine driven, etc.) is being used, all personnel must be aware that the blade will advance immediately when the system is pressurized and hydraulic flow is directed to the cutter.
5. All personnel must keep fingers, hands and other body parts away from the cutter blade to prevent serious personal injury.
6. Do not modify the tool in any way.
7. Follow suggested maintenance operations periodically as recommended in this manual.
8. All repairs should be performed by a qualified technician with genuine SIMPLEX parts. For further information, contact your nearest SIMPLEX authorized service center.
9. After operation, the tool should be cleaned and stored in a clean, dry and secure location.

GENERAL SAFETY INSTRUCTIONS



Before use, visually inspect the tool and accessories for any damage. If any damage is found, do not use the tool until repaired. Ensure that all the components of the hydraulic system can support the maximum pressure.

Before operation, make sure the operator is on solid footing in a well-lit area.



Manufacturer’s rating is the maximum allowable limit. Good practice encourages using the tool below the manufacturer’s rating.



Keep the tool away from flames and heat, such as during welding.

- Perform maintenance operations with all pressure relieved (0 psi/bar).
- Do not exceed equipment ratings. Use gauges or appropriate indicator devices to be aware of the working pressure.
- After operation, clean the tool and store it in a clean, dry and secure location.
- When using a powered pump, make sure that the valve is set to the neutral position before connecting the tool.
- Ensure that the pump reservoir is full. Always check oil level with cutter blade fully retracted.
- Ensure that heavy or sharp objects are positioned away from the hoses.

2. TECHNICAL DATA

GENERAL SPECIFICATIONS

Specification	Model CCS1125	
	Imperial	Metric
Push capacity (@10150 psi or 700 bar)	43.8 Ton	390 kN
Length*	14.2 in	360 mm
Height*	7.2 in	183 mm
Width*	4.4 in	113 mm
Maximum Jaw Opening*	1.3 in	33 mm
Weight	37.0 lb	16.8 kg

* Due to rounding, the dimensions listed in this chart may be slightly different than the dimensions shown in the diagrams in Section 6.

CUTTING CAPACITIES

Bar			
Diameter*		Tensile Strength	
in	mm	ksi	MPa
1.18	30	102	700
0.98	25	145	1000
0.79	19	203	1400
0.67	17	232	1600

*Maximum diameter bar that can be cut at the different tensile strengths.

Chain		
Diameter*		Grades
in	mm	
1.18	30	28-43
0.79	20	60-80

*Maximum diameter chain that can be cut at the different chain grades.

3. OPERATION

1. Assemble the complete system, and make sure the connection between pump, hose, coupler and tool is leak free and correct.
2. On vented pumps, be sure that vent/fill cap (if equipped) is in the “VENT” position to allow proper pump functioning.
3. Close the pump release valve.
4. Remove the air trapped in the hydraulic circuit by operating the pump and fully advancing and retracting the cutter blade several times. Open the pump release valve to retract the blade.
5. Insert the chain to be cut in the gap between the fixed and movable blades (max. 1-3/16 inch or 30 mm).
6. Close the pump release valve. Operate the pump until the blade moves forward and the chain is cut.
7. After cutting is completed, retract the blade back by opening the pump release valve.
8. Remove any traces of chain material before making another cut.

4. MAINTENANCE

REPLACEMENT OF BLADES

Note: Refer to Section 6 of this manual for parts list and item numbers. To help prevent damage to the tool, always perform blade replacement procedures in a clean and dry work area.



To prevent possible serious injury, always relieve hydraulic pressure (0 psi/bar) and disconnect hydraulic hose from tool before beginning blade replacement procedures.

A. FIXED BLADE:

1. Loosen and remove the stud (20).
2. Push the old blade (15) out using a nail inserted through the hole in the cutting head. Remove the old blade.
3. Apply Loctite 242 to the threads of the stud (20).
4. Insert a new blade (15). Reinstall and tighten the stud (20) to secure the blade.

B. MOVABLE BLADE:

1. Loosen and remove the *outer* studs (17), on both sides of the piston (3).
2. Unscrew the *inner* studs (17) about one turn but do not remove them.
3. Firmly grasp the cutting head (1). Unscrew the cutter body (2) from the cutting head.
4. Loosen and remove the screw (22). Remove the old blade (16).
5. Mount a new blade (16).
6. Apply Loctite 242 thread sealant to the threads of the screw (22). Then, reinstall and tighten the screw (22) to secure the blade.
7. Thread the cutter body (2) fully into the cutting head (1).
8. Adjust the clearance between the *inner* studs (7) and the piston (3).
Note: The *inner* studs (17) act as a piston guide. Turn each *inner* stud in or out as needed to adjust the clearance. There must be sufficient clearance to allow the piston (3) to slide freely, but with a minimal amount of lateral movement. Clearance should be even on both sides of the piston.
9. Apply Loctite 242 thread sealant to the threads of the *outer* studs (17). Then, reinstall and tighten the *outer* studs on both sides of the piston (3).

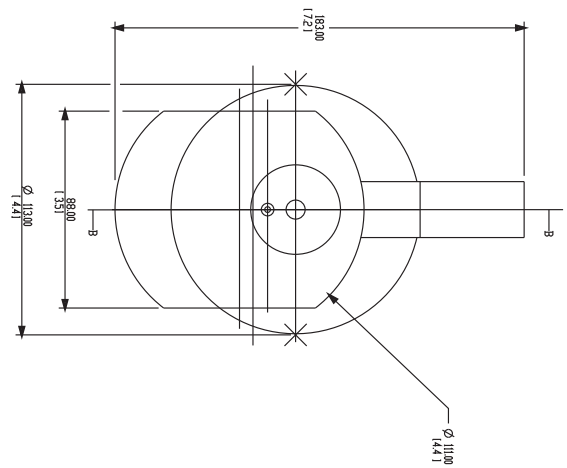
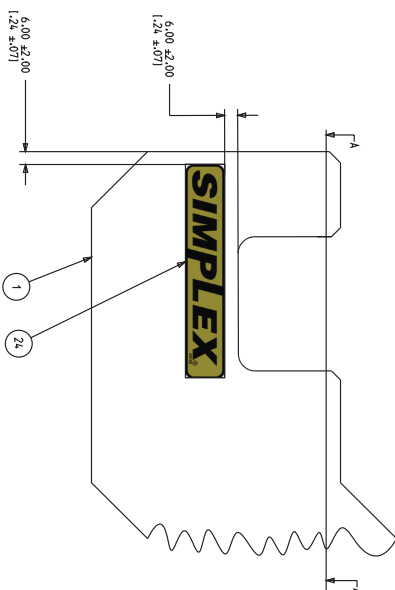
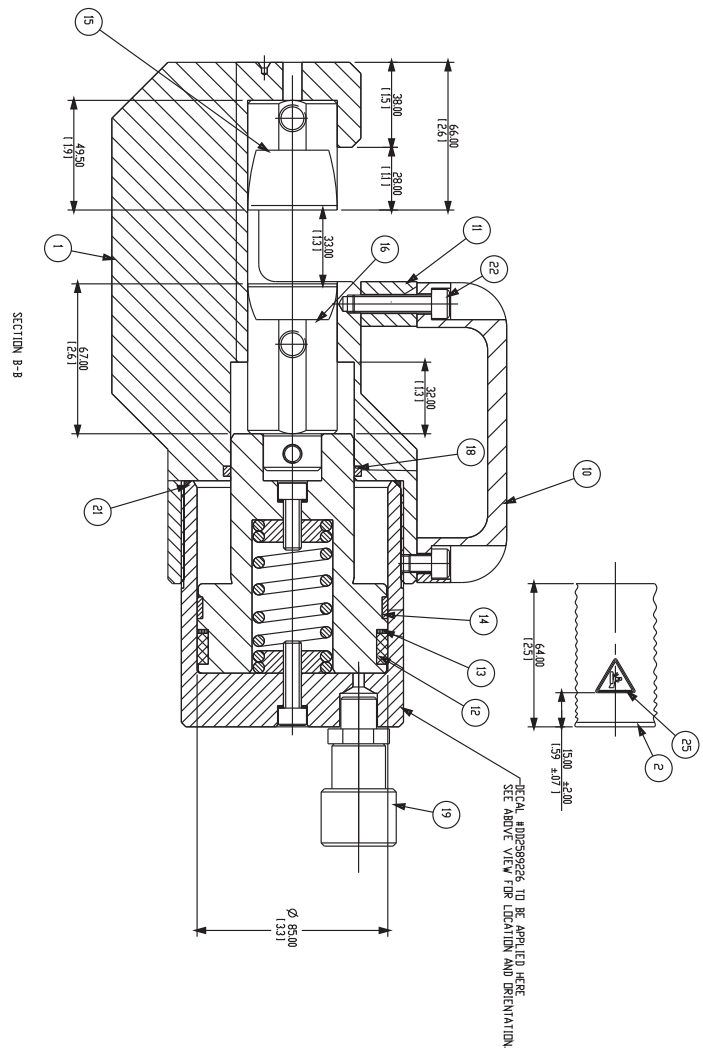
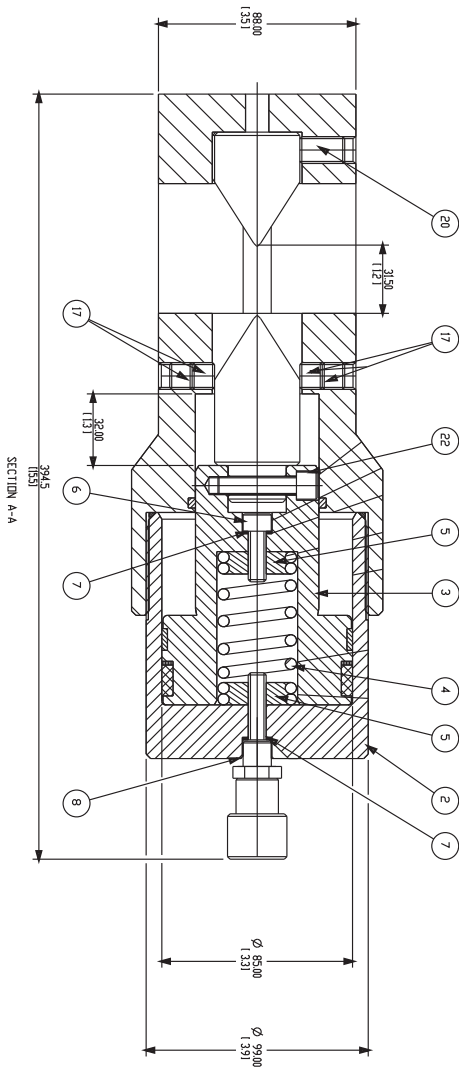
5. ADDITIONAL INFORMATION

All information, illustrations and specifications in this operation manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Equipment operators and installers shall be responsible for ensuring that a safe working environment and safe systems of work are in place before operating the equipment.

Simplex declares that this product has been tested and conforms to applicable standards and complies with all CE requirements.

6. ASSEMBLY DIAGRAMS AND PARTS LISTS



ITEM NUMBER	DESCRIPTION	QTY
1	CUTTING HEAD	1
2	BODY	1
3	PISTON	1
4	SPRING	1
5	SPRING TIE	2
6	ALLEN SCREW M8 x 25	1
*7	COPPER WASHER	2
8	ALLEN SCREW M8 x 35	1
9	ALLEN SCREW M8 x 10	1
10	REF.TECNODIN HANDLE 1157 13 200	1
11	FLANGE TILE COLLAR	1
*12	COLLAR Ø75 x Ø85 x 13	1
*13	SEGMENT	1
*14	GUIDE RING Ø85 x Ø80 x 9.7	1
**15	FIXED BLADE	1
**16	MOVABLE BLADE	1
17	ALLEN STUD M14 x 12 DIN-913	4
*18	O-RING Ø55.56 x 3.53	1
19	FEMALE BALL QUICK COUPLER 3/8 NPT	1
20	ALLEN STUD M14 x 20 DIN-913	1
*21	O-RING Ø90 x 25	1
22	ALLEN SCREW M8 x 40	2
24	SIMPLEX DECAL #88186	2
25	SIMPLEX DECAL #DD2589226	1

* Included in service kit CCS1125K.

** Included in blade kit CC1125BK.

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