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# HYDRAULIC CABLE CUTTER HCCD2375



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# 1. <u>SAFETY REQUIREMENTS</u>

#### **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.











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 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.



# Instruction Manual Hydraulic Cable Cutter – HCCD2375



Manufacturer's rating is the maximum allowable limit. Good practice encourages using only 80% of the manufacturer 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.
- When working with wire rope, fraying may occur during the cutting operation. To help prevent this, bind the wire rope on both sides of the cutting blade with tape or wire.

MODEL	НСС	HCCD2375	
CUTTING TOOL	Imperial	Metric	
Capacity	43.8 Ton	390 kN	
Pressure	10,150 psi	700 bar	
Weight	54.1 lb	24.6 kg	
Length+	18.9 in	480 mm	
Width <del>+</del>	5.9 in	150 mm	
Height <del>+</del>	5.5 in	140 mm	
Max Jaw Opening+	2.5 in	64 mm	
<b>CUTTING CAPACITIES*</b>			
Wire Rope			
Steel **	2.36 in	60 mm	
Aluminum	2.36 in	60 mm	
Cable			
Telephone	2.36 in	60 mm	
Lead	2.36 in	60 mm	
Underground	2.36 in	60 mm	

# 2. <u>TECHNICAL DATA</u>

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

\*Maximum diameter material that can be cut.

\*\*Individual steel wire not to exceed 0.079 in (2 mm).



# **OPERATION**

- 1. Assemble the complete system, and make sure the fitting of pump, hoses, couplers and tool is leak free and correct. This is a double acting tool, so ensure that both couplers are connected.
- 2. On vented pumps, be sure that vent/fill cap (if equipped) is in the "VENT" position to allow proper pump functioning.
- 3. Before use, test the circuit by operating the pump with the control valve in the advance position and check that the piston advances. Then, move the control valve to the retract position and check that the piston retracts. Fully advance and retract the piston several more times to remove any trapped air. Be sure that cylinder movement is smooth in both directions.
- 4. Remove the retaining pin (attached to chain) and open the cutting head.
- 5. Place the material to be cut inside the cutting head. Then, close the cutting head and secure it with the retaining pin. Make sure the retaining pin is fully installed.
- 6. Move the control valve to the advance position.
- 7. Operate the pump and advance the blade. Continue advancing the blade until the material is fully cut.
- 8. After cutting is completed, retract the blade by moving the control valve to the retract position. Open the head and remove all traces of material before making another cut.

# 3. <u>MAINTENANCE</u>

- 1. After use, the tool should be cleaned. Lubricate the area where the blade comes into contact with the head.
- 2. Ensure all fasteners are securely fastened.
- 3. In the event of oil leaks or improper functioning contact your nearest SIMPLEX authorized service center for inspection and repair.

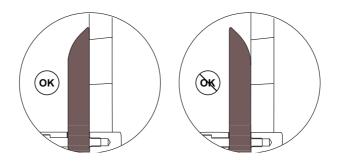
## **CHANGING THE BLADE**

**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 hoses from tool before beginning blade replacement procedures.

The blade retaining screw (20) can be accessed with the blade in its standby position. Remove the screw (20) and remove the old blade. Mount a new blade and check that the orientation is correct (see diagram, below). Apply Loctite 242 thread sealant to threads of screw (20). Reinstall the screw (20) and tighten it to a torque of 531-620 in-lb [720-841 Nm].



## 4. ADDITIONAL INFORMATION

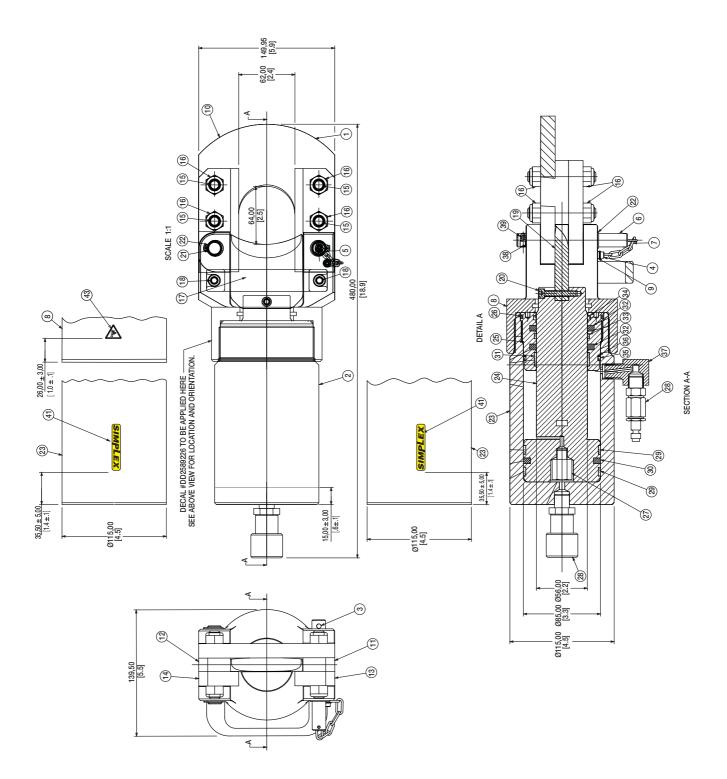
All information, illustrations and specifications in this operation manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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.



# 5. ASSEMBLY DIAGRAMS AND PARTS LISTS





ITEM NUMBER		DESCRIPTION	QTY
1		SADDLE ASSEMBLY (complete, assembled)	1
2		CYLINDER (complete, assembled)	1
3	+	BALL Ø 5.5	1
4	+	ALLEN SCREW M4 x 6 DIN-912 8.8	1
5	+	ELASTIC PIN DIN 1481 Ø3 x 14	1
6	+	RETAINING PIN	1
7	+	11 LINK CHAIN Ø2 A=8 L=18	6
8	+	SADDLE	1
9	+	STANDARD WASHER FOR M4	1
10	+	COUNTERBLADE	1
11	+	RIGHT GUIDE INTERMEDIATE BASE	1
12	+	LEFT GUIDE INTERMEDIATE BASE	1
13	+	RIGHT GUIDE BASE	1
14	+	LEFT GUIDE BASE	1
15	+	SHAFT	4
16	+	SELF-LOCKING NUT M12 DIN 985	6
17	+	REF. TECNODIN HANDLE 1157 13 200	1
18	+	ALLEN SCREW M8 x15 DIN-912 12.9	2
**19	+	BLADE	1
20	+	ALLEN SCREW M6x35 DIN-912 12.9	1
21	+	SHAFT	1
22	+	ELASTIC RING FOR Ø15 DIN-471	1
23	++	BODY	1
24	++	PISTON	1
25	++	GUIDE	1
*26	++	O-RING Ø85.32 x 3.53	1
27	++	SECURITY VALVE 7.350kg/cm2	1
28	++	FEMALE BALL QUICK COUPLER 3/8NPT	2
*29	++	GUIDE RING Ø85 x Ø80 x 9.7	2
*30	++	PISTON JOINT Ø85 x Ø69.5 x 6.3	1
*31	++	GUIDING BAND A=15 E=2.5 L=0.191	1
*32	++	PISTON JOINT Ø56 x Ø71.1 x 6.3	1
*33	++	GUIDE RING Ø56 x Ø61 x 5.6	1
*34	++	SCRAPER Ø56 x Ø52.6 x 5	1
*35	++	O-RING Ø78.97 x 3.53	1
*36	++	SEGMENT	1
37	++	CONNECTOR	1
38	++	ALLEN STUD M8 x 6 DIN-913	1
39	++	SPRING	1
41	++	SIMPLEX DECAL #88186	2
43	+	SAFETY DECAL #DD2589226	1

Notes:

\* Included in service kit HCCD2375K.

\*\* Included in blade kit HCC2375B.

† Included with ítem 1

++ Included with item 2

