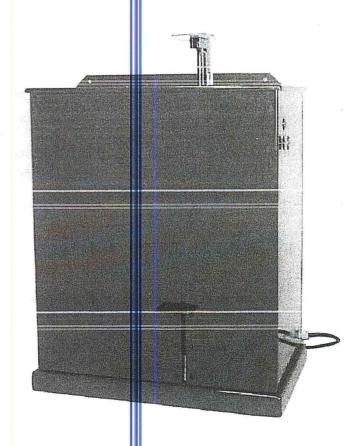
USER'S MANUAL

CM 70 F2, CM 100 F CUTTING MACHINE



D-Hydro Oy Wahlforssinkatu 10 80100 Joensuu, Finland

Tel: +358 13 120 490 Fax: +358 13 120 491 http://www.dhydro.com info@dhydro.com

OPERATION DEVICES

- Hose controller
- Hose guide
- Hose adjustors
- Start button
- Stop button
- Food pedal



TECHNICAL DETAILS

Dimension	S	CM 70 F2	CM 100 F
Width (mm)		730	730
Depth (mm)		470	470
Heigth (mm)		900	900
Weigth (Kg)	e e	90	112
Blade diameter (mr	n)	250	300
Max. hose diamete	(mm)	70	100
Blade speed (r/min)	3000	3000
Motor (kW)		2.2	4
Voltage (V)		380	380

INSTALLATION AND INTRODUCTION

1. FLOOR INSTALLATION

- ⇒ Leave at least 0,5 metres of free space behind the machine for service purposes.
- ⇒ Attach the rubber feet (4pcs) to the screw holes on the bottom in order to get the machine stand firmly in an upright position.
- ⇒ Install the hose guides (2pcs) on top of the machine. You can attach them either to the left or right side of the cutting blade.
- ⇒ Attach the adjustors (2pcs) on top of the machine, the way that both adjustors are as far from the cutting blade as possible.

2. ROTATION DIRECTION

⇒ Start the engine by pushing the start button (4), make sure that the blade rotates clockwise, if not, switch the cables L1 and L2.

HOSE ADJUSTMENT

Adjust the wanted cutting angle of the hose with the help of the adjustors; the thicker the hose

is, the further from the blade should be the adjustors.

NOTE! BOTH ADJUSTORS ALWAYS MUST BE KEPT AT THE SAME DISTANCE TO THE BLADE.



HOSE CUTTING

- ⇒ Start the engine; be aware of the rotating blade.
- ⇒ Set the hose against the hose guide and check that the hose is vertical to the blade.
- ⇒ Carry out the cutting by holding the hose with both hands from outside the adjustors and by pushing the foot pedal.
- ⇒ Don't cut the hose too fast in order to avoid stressing the engine and the blade too much.

You get the best cutting results by steady, strong enough cutting speed and by doing so, your CM 70 F2 CUTTING MACHINE will last longer without unnecessary repairing.

SERVICE

- ⇒ Cutting the hose causes an easily flammable mixture of waste rubber and oil. That's why it is important to clean the machine from the inside regularly.
- ⇒ Open the back cover and do the cleaning.
- ⇒ Check the condition of the blade and if it has been damaged replace it immediately.

Electrical Diagram



CM 70 F2

Varaosaluettelo - Spare parts - Pieces détachées - Ersatzteile

Viite	Til no.		_	V-1		
Ref.	Order number			Kpl Pieces	NT:	
Ref.	Ref. Commande	No	ш	rieces bre d'unitée	Nimitys	Description
Ref.	Bestell Nr.	1401		Anzahl	Description	Name
	Desten IVI.		Щ	Mizaili	T	
1	05000022		Ш	1	Terä	Lame
			Н		Blade	Blatt
2	03408025		Ш	2	Ruuvi	Vis
			Н		Screw	Schraube
3	04308000			2	Aluslevy	Rondelle
			Н		Washer	Scheibe
4	03408030		Ш	1	Ruuvi	Vis
			Н		Screw	Schraube
5	04308000		Ш	1	Aluslevy	Rondelle
			Н		Washer	Scheibe
6	09000030		Ш	1	Laippa	Bride
			Щ		Flange	Flansch
7	09000031		II	1	Laippa	Bride
			Щ		Flange	Flansch
8	03408055		II	4	Ruuvi	Vis
					Screw	Schraube
9	04308000		II	4	Aluslevy	Rondelle
			Ц		Washer	Scheibe
10	06000044		II	1	Sähkökotelo	Equipement elec.
			Н		El.Equipment	El. Ausrhstung
11	04105000		II	4	Mutteri	Ecrou
			Н		Nut	Mutter
12	03705012		Ш	4 1	Ruuvi	Vis
			Н	-	Screw	Schraube
13	10000021			1	Kotelo	Boite
+					Box	Gehäuse
14	10000022			1	Kansi	Plaque
						Platte
15	03408025			4	Ruuvi	Vis
						Schraube
16	04308000			4	-	Rondelle
						Scheibe
17	08000005			1 1		Moteur
						Motor
18	09000032			/		Douille
			Щ		Distance bushing	Distanzbuchse

19	09000033	2	Väliholkki Douille Distance bushing Distanzbuchse	e
20	10000023	1	Säätölatta Plaque de fixa Fitting plate Passblech	
21	04108000	2	Mutteri Ecrou Nut Mutter	Name of the second
22	10000024	1	Säätölatta Plaque de fixa Fitting plate Passblech	ation
23	03300003	2	Ruuvi Vis Screw Schraube	
24	04310000	2	Aluslevy Rondelle Washer Scheibe	
25	03410025	2	Ruuvi Vis Screw Schraube	
26	10000025	2	Latta Plaque Plate Blech	
27	10000026	1	Kotelo Boite Box Gehäuse	
28	03806020	7	Ruuvi Vis Screw Schraube	
29	05000023	4	Säätöruuvi Vis ajustable Fitting screw Passschraube	
30	04106000	7	Mutteri Ecrou Nut Mutter	
32	11000006	1	Liukupala Plaque fendue Bearing plate Lagerblech	;
33	04104000	2	Mutteri Ecrou Nut Mutter	



CM 100 F

Varaosaluettelo - Spare parts - Pieces détachées - Ersatzteile

Viite Ref. Ref. Ref.	Til no. Order number Ref. Commande Bestell Nr.	Nomb	Kpl Pieces re d'unitée anzahl	Nimitys Description	Description Name
1	05000028		1	Terä Blade	Lame Blatt
2	03408030		2	Ruuvi Screw	Vis Schraube
3	04310000		2	Aluslevy Washer	Rondelle Scheibe
4	03410060		1	Ruuvi Screw	Vis Schraube
5	04310000		***************************************	Aluslevy Washer	Rondelle Scheibe
6	09000034		1	Laippa Flange	Bride Flansch
7	09000036		1	Laippa Flange	Bride Flansch
8	03412030		4	Ruuvi Screw	Vis Schraube
9	04312000		4	Aluslevy Washer	Rondelle Scheibe
10	06000045		1	Sähkökotelo El.Equipment	Equipement élec. El. Ausrüstung
11	04105000		4	Mutteri Nut	Ecrou Mutter
12	03705012		4	Ruuvi Screw	Vis Schraube
13	10000021		1	Kotelo Box	Boite Gehäuse
14	10000022		1	Kansi Plate	Plaque Platte
15	03408025		4	Ruuvi Screw	Vis Schraube
16	04308000		4	Aluslevy Washer	Rondelle Scheibe
17	08000006		1	Moottori Motor	Moteur Motor
18	-		-	-	-

- 1	-	-
-	-	
04108000	2	Mutteri Ecrou Nut Mutter
10000024	1	Säätölatta Plaque de fixation Fitting plate Passblech
03408060	2	Ruuvi Vis Screw Schraube
04310000	2	Aluslevy Rondelle Washer Scheibe
03410025	2	Ruuvi Vis Screw Schraube
10000025	2	Latta Plaque Plate Blech
10000026	1	Kotelo Boite Box Gehäuse
03806020	7	Ruuvi Vis Screw Schraube
05000023	4	Säätöruuvi Vis réglable Fitting screw Passschraube
04106000	7	Mutteri Ecrou Nut Mutter
11000006	1	Liukupala Plaque fendue Bearing plate Lagerblech
04104000	2	Mutteri Ecrou Nut Mutter
	10000024 03408060 04310000 03410025 10000025 10000026 03806020 05000023 04106000	10000024 1 03408060 2 04310000 2 03410025 2 10000025 2 10000026 1 03806020 7 05000023 4 04106000 7 11000006 1



CM 70 F 2/CM 100 F Varaosaluettelo - Spare parts - Pieces détachées - Ersatzteile

	E-des		Щ		
Viite Ref. Ref. Ref.	Til no. Order number Ref. Commande Bestell Nr.	Kpl Pieces Nombre d'unit Anzahl	Еe	Nimitys Description	Description Name
I	3506020	4		Ruuvi Screw	Vis Schraube
2	10000027	I		Kansi Plate	Plaque Platte
3	11000007	3		Suoja Cover	Capot Schutz
4	10000028	1		Painin Boom	Sonneur Arm
5	04208000	1		Mutteri Nut	Ecrou Mutter
6	04208000	1		Mutteri Nut	Ecrou Mutter
7	03506020	2		Ruuvi Screw	Vis Schraube
8	04105000	2		Mutteri Nut	Ecrou Mutter
9	03205020	2		Ruuvi Screw	Vis Schraube
10	03408025	2	ı	Ruuvi Screw	Vis Schraube
11	04108000	2	I	Mutteri Nut	Ecrou Mutter
12	10000029	1	I	Poljin Pedal	Pédale Pedal
13	03408040	1		Ruuvi Screw	Vis Schraube
14	09000034	1		Holkki Bushing	Douille Büchse
15	09000034	1		Holkki Bushing	Douille Büchse
16	03408040	1		Ruuvi Screw	Vis Schraube
17	10000030	1		Kannatin Console	Console Träger
18	05000024	2		Jousi Spring	Ressort Feder



DECLARATION OF CONFORMITY VAATIMUSTENMUKAISUUSVAKUUTUS ÜBEREINSTIMMUNGSERKLÄRUNG DICHIARAZIONE DI CONFORMITA DECLARACIÓN DE CONFORMIDAD

Manufacturer / Valmistaja / Hersteller / Construttore:

D-Hydro Oy Wahlforssinkatu 10 FIN-80100 JOENSUU, Finland

Declares, that the machine indicated below conforms to all its parts to: Vakuuttaa, että alla esitetty laite kaikkine osineen täyttää: Erklärt, dass untergenannte Maschine in allen Einzelheiten übereinstimmt: Si dichiara che la maccina sottoindicata è conforme, in tutte ler sue parti: Declara que la máquina que abajo se indica es conforme en todas sus partes a:

Model / Malli / Modell / Modello: Serial nr / Sarjanro / Fabr.n / No Serie:

CM 100 F 92673317

Year of construction / Valmistusvuosi Baujahr / Anno di costrui / Año de fabricación

2017

The directives issued by the Council of the European Communities Euroopan Yhteisön direktiivit nach den Richtlinien des Europäischen Gemeinschafsrates alle directive del Consiglio delle Comunità europee Las directivas estipuladas por el Consejo de las Comunidades Europeas

2006/42/EC

And furthermore declares, that the following harmonized standards have been applied: ja lisäksi vakuuttaa, että seuraavia yhdenmukaistettuja standardeja on sovellettu:
-und den in Einklang stehenden Europäischen Normen

-alle Norme europee armonizzate

Y adicionalmente declara que se han aplicado los siguientes estándares armonizados:

SFS-EN-ISO 12100-1

SFS-EN-ISO 12100-2

Joensuu, Finland,

27/09/2017

D-Hydro Oy

Pentti Pehkonen

Managing director / toimitusjohtaja / Exekutivdirektor / direttore esecutivo / Director Ejecutivo



1. SCOPE OF WARRANTY

The Supplier grants a warranty for defects in materials and workmanship for new machinery and equipment in accordance with these General Warranty Terms and Conditions. The Warranty does not, however, apply to defects and items specifically listed in section 8 hereof.

2. COMMENCEMENT OF THE WARRANTY

The Warranty starts on the date when the delivery of the equipment is accepted. The equipment is deemed to be duly delivered when the installation has been carried out to the satisfaction of the Customer or the Customer has placed said piece of equipment in production use. A piece of equipment is deemed to have been placed in production use when said equipment has been duly delivered to the Customer by the Supplier in accordance with the Contract of Sale.

In the absence of any agreement on a specific acceptance test, the Customer is required to carry out an acceptance inspection on the piece of equipment within seven (7) days of the delivery of the equipment by the Supplier in accordance with the Contract of Sale Any defects or flaws detected in the delivery shall be promptly communicated by the Customer to the Supplier in writing.

3. DURATION OF THE WARRANTY

The Warranty Period shall be the period of time defined by the Supplier unless specifically otherwise indicated. No exceptional warranty periods and terms shall be valid unless duly specified in the Contract of Sale.

If necessary, the Supplier and Customer may agree on a specific warranty applicable to a repair or the spare parts used in such a repair. Unless otherwise agreed, the Supplier will give the repair or the spare parts used in such a repair a warranty of starting on the date when the repaired piece of equipment is hande over to the Customer.

4. WORK COVERED BY THE WARRANTY

Under the Warranty, defects covered by the Warranty and detected uring the Warranty Period will be repaired free of charge during normal working hours by the Supplier's repair shop, a repair shop authorized by the Supplier, or at some other location indicated by the Supplier.

5. TERMS OF DELIVERY FOR WARRANTY REPAIRS

The Supplier and Customer will specifically agree on the terms of delivery for the warranty repair. If no such agreement has been mad the delivery term is free ex works at the Supplier's repair shop or an authorized repair shop without packaging.

If the Parties have agreed that he repair will be carried at a location other than the Supplier's repair shop or an authorized repair shop, a the cost of the repair not covered by the Warranty, such as travel ar waiting time, daily allowance, cost of travel and the costs incurred a result of the de-installation and re-installation of the equipment, sho be charged to the Customer at the rates applied by the Supplier in accordance with the then-current price list for maintenance and repairs.

Any original parts replaced under the Warranty shall be the property of the Supplier.

6. PREREQUISITES FOR WARRANTY REPAIRS

Repairs are carried out under the Warranty, provided that :

- a) the defect has appeared in what can be regarded as normal operating conditions;
- b) the installation, operating and maintenance instructions issued by the manufacturer or Supplier have been complied with;
- c) any repairs or servicing carried out on the piece of equipment have been made using original spare parts and supplies:
- d) the warranty repair claim is made by the party ordering the piece of equipment or its representative;
- e) the party ordering the piece of equipment or its representative delivers it to the repair shop promptly as soon as the defect is detected and assumes responsibility for the condition of the piece of equipment until it is handed over for repairs. When the piece of equipment is handed over for repairs, the repair shop must be provided with information indicating the date of delivery, ordering information, identification of the defect and a description of the conditions in which the piece of equipment has been used.

If it is established that the defect or flaw reported by the Customer is not covered by the Warranty, the Supplier shall have the right to charge the cost of troubleshooting to the Customer in accordance with the then-current price list.

7. WARRANTY FOR THE REPAIRED PRODUCT

The warranty for the repaired piece of equipment will be valid until the expiry of the original Warranty Period.

8. LIMITATIONS OF WARRANTY

The Warranty shall not cover:

- a) repair of defects due to normal wear and tear, operating errors, defective or sub-standard servicing carried out by parties other than the Supplier or its authorized representative, operating conditions in violation of the design bases, or defects due to the fact that the Customer has selected a piece of equipment unsuitable or incorrectly sized for the intended use or application;
- b) compensation for direct or indirect loss or damage due to a defective piece of equipment;
- c) repair of defects if repairs or modifications have been made to the piece of equipment by a party other than the Supplier's repair shop or a repair shop authorized by the Supplier;
- d) repair of consumable components of the equipment, such as sensors, indicator lights, connectors, batteries, fuses, conductors, printer heads, hoses, and power transmission belts for which no warranty is granted by the manufacturers.

With regard to software, the license and operating conditions determined by the manufacturer shall apply.

9. SETTLEMENT OF DISPUTES

Any disputes arising out of the Contract of Sale between the Seller and the Customer shall primarily be settled by negotiations between the parties. Unless otherwise agreed, any disputes arising out of this Contract shall be settled finally by one arbiter in accordance with the rules of the Arbitration Committee of the Central Chamber of Commerce.