



ULTIMATE WATER JETTING SOLUTION

C-110E C-170E C-200E

Electric Powered Heavy Duty
Cold Water High Pressure Cleaner

USER GUIDE & SPARE PARTS MANUAL



4. Available accessories

4. Available accessories

Accessories

Accessories	part no.:
Chemical injector.	700550021
Rotary brush.	700550462
Foam injector	700550156
Foam lance.	700550464
Foam sprayer.	700550463
Extension hose with quick couplings. from 10 - 50 m	Please inquire
Industrial drain cleaner (1 front, 3 rear jets).	700550508
Container for sandblasting grid. including regulator.	Please inquire
Floor cleaner	700550465
Sludge pump.	700550198-700550201
Filter for suction from vat or tank with 3/4" hose nipple	700520049
Retractable hose reel.	700550208

Accessories	C110E	C110E	C170E	C170E	C200E
	50HZ	60HZ	50HZ	60HZ	50/60HZ
**Double Barrel Lance	700550457	700550456	700550455	700550458	700550456
*Single Barrel Lance	700550450	700550449	700550448	700550451	700550449
**Short Double Barrel Lance	700550490	700550488	700550489	700550491	700550488
Single Barrel Lance with Rotating Nozzle	700551287	700550169	700550170	700551288	700550171
**Double Barrel Contractor Lance with side Regulator Handle	700550193	700551286	700550192	700550194	700551286
Single Barrel Lance with Multi-speed Nozzle	700551289	700550890	700550566	700551290	700550890
Industrial Sandblaster Kit with boron Carbide Nozzle	700550480	700550479	700550478	700550481	700550479

* With Straight Jet Nozzle **With Fan Jet Nozzle

Notice: Always state type of High Pressure Cleaner along with the part no.: when ordering accessories or spare-parts.

ID-plate

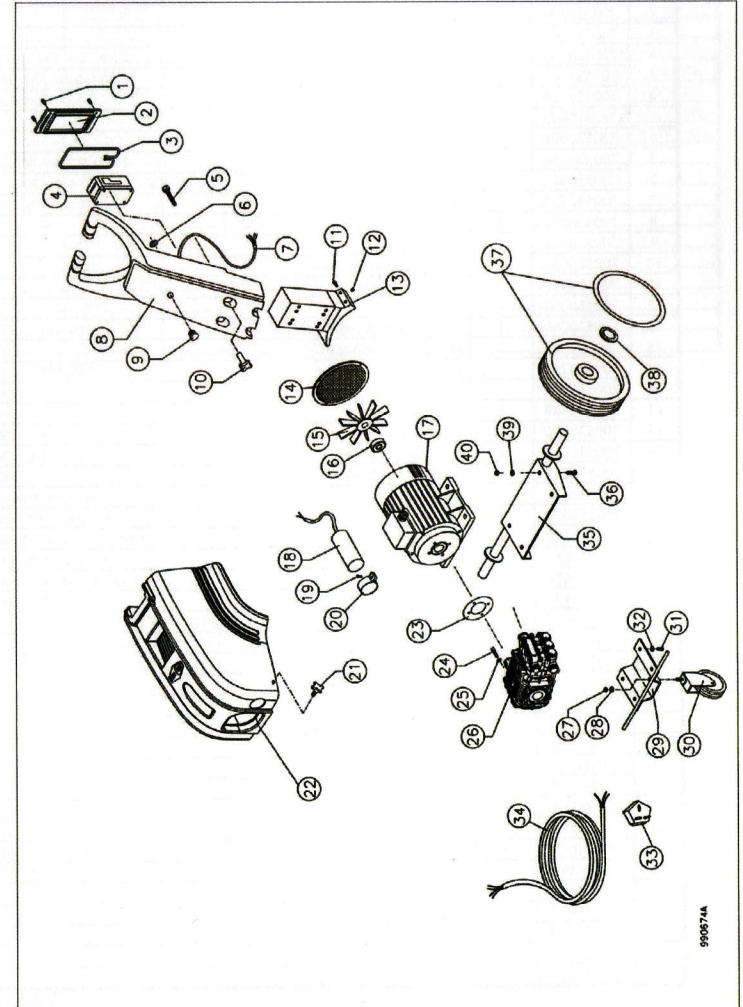
Refer to the identification plate on the machine:

		NO. 17 LINK ROAD SINGAPORE 619034 TEL: (65)62681006 FAX: (65)62684916			
		MODEL	S/N		
V	A	HP/KW	PHASE		
RPM	Hz	IC/CL	IP	L/MIN	
BAR/PSI	MAX BAR/PSI				
A DANISH DESIGNED PRODUCT					

5. Spare parts lists

5. Spare parts lists

Chassis assembly



950574

5. Spare parts lists

Chassis assembly spare-parts list

Pos:	Part no.:	Qty.:	Description:
1	700510040	4	Screw
2	700530109	1	Cover For El-Box
3	700530107	1	Gasket for El-Box
4	700530005	1	Overload Relay 16A C-110E 230V 50/60Hz C-170/200E 400/440V 50/60Hz
4	700530096	1	Overload Relay 22A C-170/200E 220V 60Hz
4	700530115	1	Overload Relay 27A C-110E 110V 60Hz
5	700510043	4	Bolt M6 x 35
6	700520026	1	Steel lock Ø14
7	700530130	1	Motor Cable C-110E 230V 50/60Hz
7	700530417	1	Motor Cable C-170/200E 230/400/440V 50/60Hz
7	700530371	1	Motor Cable C-110E 110V 60Hz
8	700520057	1	Handle
9	700530108	1	Switch Knob
10	700510050	4	Knob Screw Handle
11	700510051	4	Bolt M6 x 18
12	700510007	4	Locknut
13	700520060	1	Bracket For Handle C-110E C-170E
13	700520061	1	Bracket For Handle C-200E
14	700530239	1	Fan Cover For Motor C-110E C-170E
14	700530240	1	Fan Cover For Motor C-200E
15	700530389	1	Fan plastic C-110E
15	700530390	1	Fan plastic C-170E C-200E
16	700530002	1	Bearing For Motor C-110E C-170E
16	700530238	1	Bearing For Motor C-200E
17	700530530	1	Motor C-110E 230V 50/60Hz
17	700530532	1	Motor C-110E 110V 60Hz
17	700530588	1	Motor C-170E 220~440V 50/60Hz
17	700530685	1	Motor C-200E 400/440V 50Hz
17	700530686	1	Motor C-200E 400/440V 60Hz
17	700530137	1	Motor C-200E 220V 60Hz
18	700530012	1 / 4	Capacitor (1) C-110E 230V (4) C-110E 110V
19	700510002	1 / 4	Screw (1) C-110E 230V (4) C-110E 110V
20	700530011	1 / 4	Holder For Capacitor (1) C-110E 230V (4) C-110E 110V
21	700510010	2	Knob Screw Cabinet
22	700520510	1	Cabinet
23	700530693	1	Gasket for Motor-Pump
24	700510030	4	Bolt M8 x 25
25	700510034	4	Spring washer M8
25A	700510005	4	Flat washer M8
26	700560000	1	Pump complete C-110E 110/220V 60Hz
26	700560001	1	Pump complete C-110E 230V 50Hz
26	700560002	1	Pump complete C-170E 50/60Hz & C-200E 60Hz
26	700560003	1	Pump complete C-200E 50Hz
27	700510068	1	Locknut M12
28	700510067	1	Washer flat M12
29	700520504	1	Bracket For Castor Wheel
30	700520456	1	Castor Wheel With Brake
31	700510009	4	Bolt M8 x 16

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5. Spare parts lists

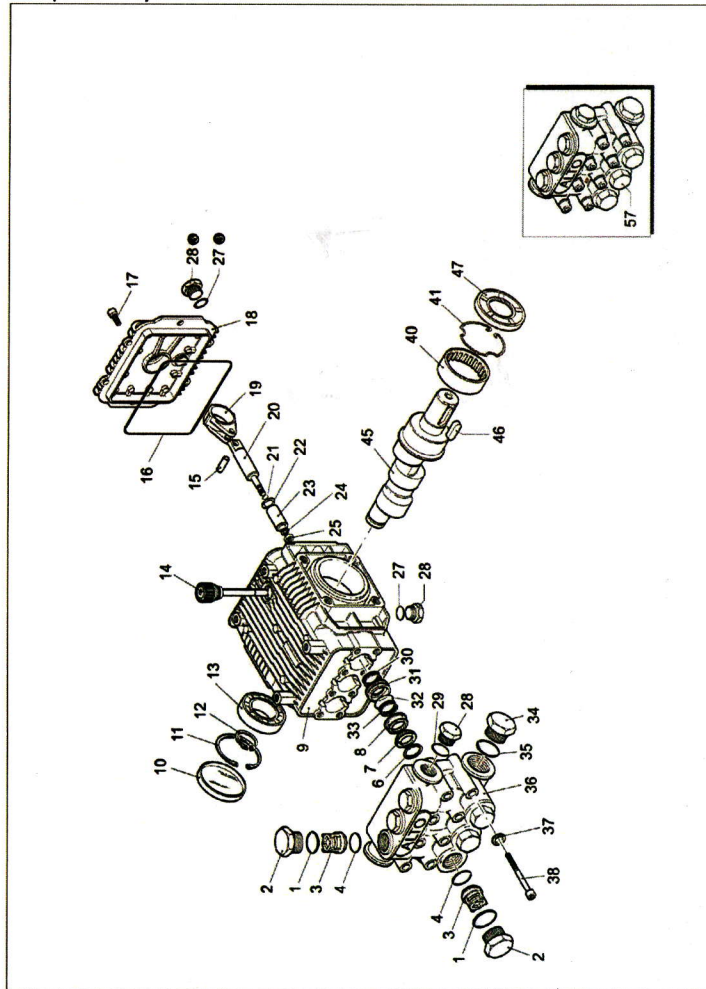
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Pos:	Part no.:	Qty.:	Description:
32	700510034	4	Spring washer M8
32A	700510005	4	Washer M8
33	700530097	1	3 Pin Plug 13 Amp 1Ph (Optional) C-110E
34	700530007	1	Main Cable C-110E 230V 50/60Hz
34	700530261	1	Main Cable C-110E 110V 60Hz
34	700530015	1	Main Cable C-170E C-200E 415V 50Hz
34	700530370	1	Main Cable C-170E C-200E 230/440V 60Hz
35	700520519	1	Rear Wheel Bracket
36	700510011	4	Bolt M8 x 30
37	700520511	2	Wheel Cover
37A	700520511	2	Wheel
38	700520007	2	Star Lock
39	700510005	8	Washer M8
40	700510004	4	Locknut M8
*	700510178	4	Screw (for fan cover)
*	700530112	1	Closed End Wire Connector
*	700530122	3	Ring Terminal 2.5mm ²

*Not shown

5. Spare parts lists

Pump assembly



5. Spare parts lists

Pump assembly spare-parts list

Pos	Part no.:	Qty.:	Description:
1	700560012	6	O-ring
2	700560013	6	Plug
3	700560014	6	Complete valve
4	700560015	6	O-ring
6	700560016	3	Support ring Ø15 C-110E 50/60Hz C-110E 110V 60Hz
6	700560017	3	Support ring Ø18 C-170/C-200E 50/60Hz
7	700560018	3	Gasket Ø15 C-110E 50/60Hz C-110E 110V 60Hz
7	700560019	3	Gasket Ø18 C-170/C-200E 50/60Hz
8	700560020	3	Piston guide Ø15 C-110E 50/60Hz C-110E 110V 60Hz
8	700560021	3	Piston guide Ø18 C-170/C-200E 50/60Hz
9	700560022	1	Pump body
10	700560023	1	Cap
11	700560024	1	Circlip Ø52
12	700560025	1	Snap ring
13	700560026	1	Bearing
14	700560027	1	Oil Cap
15	700560028	3	Piston pin
16	700560029	1	O-ring
17	700560030	6	Screw M6x16
18	700560031	1	Complete cover
19	700560032	3	Connecting rod
20	700560033	3	Guiding piston
21	700560034	3	O-ring
22	700560035	3	Spacer disc
23	700560036	3	Piston Ø15 C-110E 50/60Hz C-110E 110V 60Hz
23	700560037	3	Piston Ø18 C-170/C-200E 50/60Hz
24	700560038	3	Piston washer
25	700560039	3	Nut M8
27	700560040	2	O-ring
28	700560041	3	G plug 3/8"
29	700560042	1	Washer
30	700560043	3	Seal
31	700560044	3	Rear piston guide Ø15 C-110E 50/60Hz C-110E 110V 60Hz
31	700560045	3	Rear piston guide Ø18 C-170/C-200E 50/60Hz
32	700560046	3	O-ring
33	700560047	3	Gasket Ø15 C-110E 50/60Hz C-110E 110V 60Hz
33	700560048	3	Gasket Ø18 C-170/C-200E 50/60Hz
34	700560049	1	G plug 1/2"
35	700560050	1	Washer
36	700560051	1	Head
37	700560052	8	Washer
38	700560053	8	Screw M6x60
40	700560054	1	Bearing
41	700560055	1	Snap ring
45	700560056	1	Crank shaft C-110E 110V/220V 60Hz, C-170E 50/60Hz & C-200E 60Hz
45	700560057	1	Crank shaft C-110E 230V 50Hz
45	700560058	1	Crank shaft C-200E 50Hz
46	700560059	1	Key for Ø18mm Shaft
46	700560066	1	Key for Ø24mm Shaft
47	700560060	1	Seal

Continued

5. Spare parts lists

Un-loader valve assembly spare-parts list

Pos:	Part no.:	Qty.:	Description:
1	700540007	1	Brass Cap
2	700540008	1	Spring
3	700540009	1	Spring Seat
4	700540214	1	Back-Up Ring
5	700540209	2	O-Ring
6	700540213	1	Piston
7	700540212	1	Lock Nut
8	700540211	1	Screw
9	700540210	1	Piston Housing
10	700540160	1	O-Ring
11	700540208	1	Back-Up Ring
12	700540207	1	Housing For Un-Loader Valve
13	700540179	1	O-Ring
14	700540215	1	Check Valve
15	700540216	1	Spring
16	700550131	2	O-Ring
17	700540217	1	Outlet Fitting
18	700540206	1	Shutter
19	700540163	1	O-Ring
20	700540205	1	Valve Seat
21	700540203	1	Connector
22	700540031	1	O-Ring
23	700540738	1	Water Inlet
24	700540033	1	Strainer
25	700540034	1	Quick Coupling Female Inlet
26	700540035	1	O-Ring For Quick Coupling
27	700540036	1	Hose Nipple
28	700510136	2	Locknut 3/8"
29	700540025	1	Elbow
30	700540026	1	Quick Coupling Male Outlet
31	700550004	2	Dowty Seal 3/8"
32	700540734	1	Banjo Bolt 3/8"
33	700540736	1	Banjo Bolt 1/2" (high flow)
-	-	-	-
35	700540193	1	Pressure Gauge
36	700540737	1	Holder For Un-Loader Valve
1-22	700540187	1	Un-Loader Valve Complete
37	700540056	2	Dowty Seal 1/2"
38	700540194	1	Plug 1/4"
39	700540195	1	Plug 1/8"
*	700540186	2	Elbow 3/8" M-F

C-200E 50/60Hz

* Not shown

5. Spare parts lists

Repair kit un-loader valve

Part no./ Kit description	Pos:	Qty.:	Individual components Part no.:
700540321 Repair Kit Un-Loader Valve C-110, C-170, C-200 (1 SET)	4	1	700540214
	5	2	700540209
	10	1	700540160
	11	1	700540208
	13	1	700540179
	16	2	700540131
	18	1	700540206
	19	1	700540163
	20	1	700540205

5. Spare parts lists

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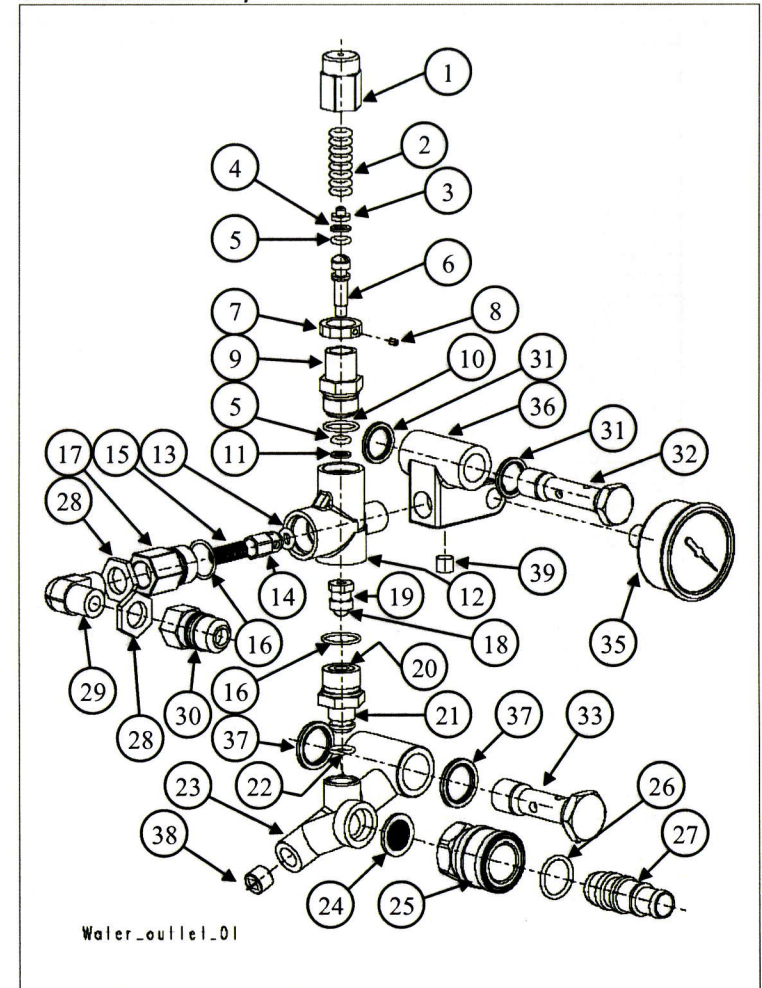
Pos	Part no.:	Qty.:	Description:
57	700560061	1	Pump head pre-assembly (Ø15) C-110E 50/60Hz C-110E 110V 60Hz
57	700560062	1	Pump head pre-assembly (Ø18) C-170/C-200E 50/60Hz
1-47	700560000	1	Pump complete for C-110E 110V/220V 60Hz
1-47	700560001	1	Pump complete for C-110E 230V 50Hz
1-47	700560002	1	Pump complete for C-170E 50/60Hz & C-200E 60Hz
1-47	700560003	1	Pump complete for C-200E 50Hz

Pump spare-parts kit

Part no./ Kit description	Pos:	Qty.:	Individual components Part no.:
Kit A - 700560004 Pump Valves Kit (1 SET)	3	6	700560014
	4	6	700560015
Kit B - 700560005 Pistons (Ø15) (C-110E 50/60Hz) (1 SET)	23	3	700560036
Kit B - 700560008 Pistons (Ø18) (C-170E & C-200E 50/60Hz) (1 SET)	23	3	700560037
Kit C - 700560011 Oil seals (1 SET)	10	1	700560023
	16	1	700560029
	30	3	700560043
	47	1	700560060
Kit D - 700560006 Water seals (Ø15) (C-110E 50/60Hz) (1 SET)	7	3	700560018
	32	3	700560046
	33	3	700560047
Kit D - 700560009 Water seals (Ø18) (C-170E & C-200E 50/60Hz) (1 SET)	7	3	700560019
	32	3	700560046
	33	3	700560048
Kit E - 700560007 Support rings (Ø15) (C-110E 50/60Hz) (1 SET)	6	3	700560016
Kit E - 700560010 Support rings (Ø18) (C-170E & C-200E 50/60Hz) (1 SET)	6	3	700560017

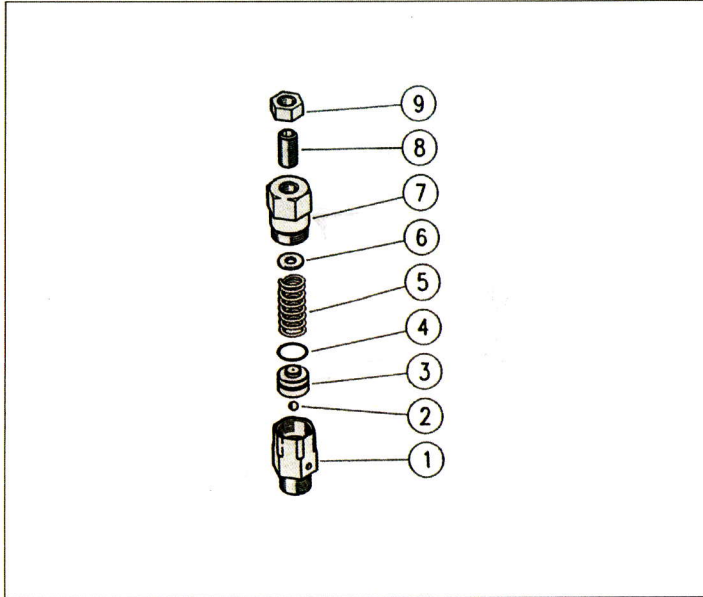
5. Spare parts lists

Un-loader valve assembly



5. Spare parts lists

Safety valve assembly C-200E

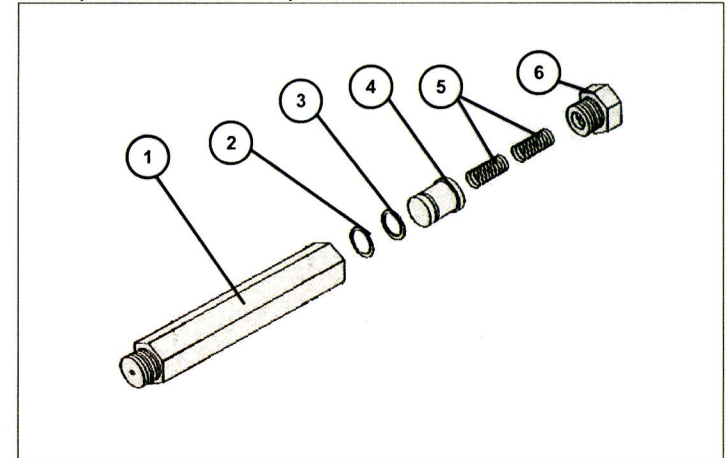


Safety valve assembly spare-parts list C-200E

Pos:	Part no.:	Qty.:	Description:
1	700540119	1	Body Safety Valve 3/8"
2	700540115	1	Rubber Ball
3	700540121	1	Piston
4	700540120	1	O-Ring
5	700540122	1	Spring
6	700540123	1	Washer
7	700540124	1	Fitting
8	700540125	1	Adjusting Screw
9	700510008	1	Nut
1-9	700540110	1	Safety Valve Complete

5. Spare parts lists

Start up accumulator assembly C-110E



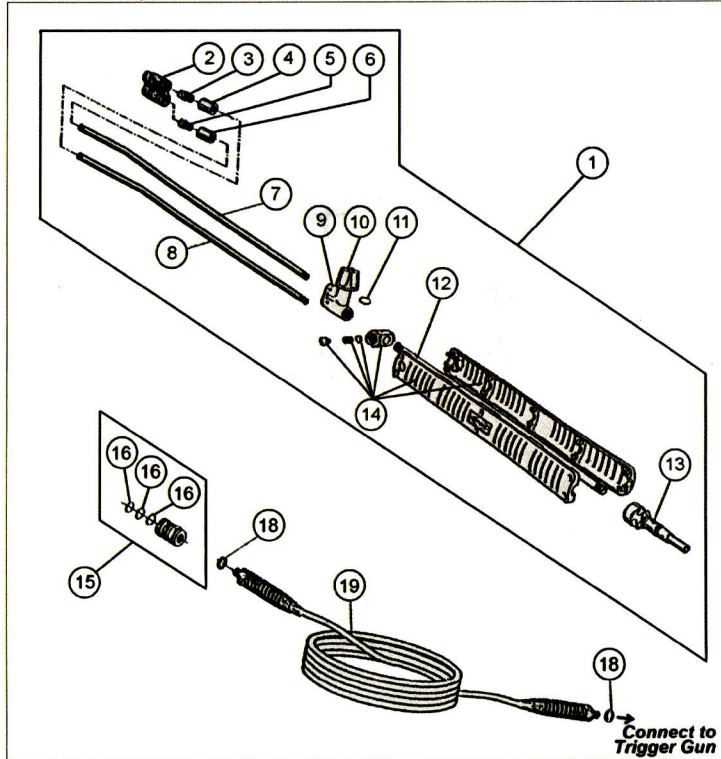
Start up accumulator assembly spare-parts list C-110E

Pos:	Part no.:	Qty.:	Description:
1	700540743	1	Housing Accumulator
2	700540169	1	O-Ring
3	700540168	1	Back-Up Ring
4	700540744	1	Piston
5	700540435	2	Spring
6	700540742	1	Thrust Screw
1-6	700540749	1	Accumulator Complete
*	700550004	1	Dowty Seal 3/8"

*Not shown

5. Spare parts lists

Lance assembly



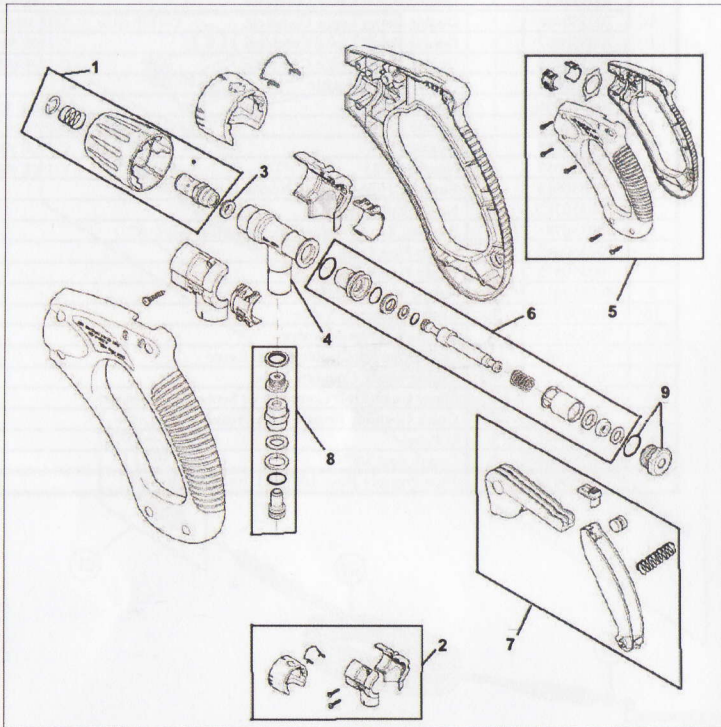
5. Spare parts lists

Lance assembly spare-parts list

Pos:	Part no.:	Qty.:	Description:
1	700550455	1	Double Barrel Lance Complete C-170E 50Hz
1	700550456	1	Double Barrel Lance Complete C-110E 60Hz, C-200E 50/60Hz
1	700550457	1	Double Barrel Lance Complete C-110E 50Hz
1	700550458	1	Double Barrel Lance Complete C-170E 60Hz
2	700550077	1	Nozzle Guard Double
3	700550056	1	Nozzle 1505 C-110E 50Hz
3	700550015	1	Nozzle 15045 C-110E 60Hz, C-200E 50/60 Hz
3	700550075	1	Nozzle 1504 C-170E 50Hz
3	700550057	1	Nozzle 15055 C-170E 60Hz
4	700550013	1	Bushing, High Pressure Nozzle Holder 1/4"
5	700550782	1	Nozzle Low Pressure
6	700550781	1	Bushing, Low Pressure Nozzle Holder 1/4" - 1/8"
7	700550012	1	Lance Pipe Top
8	700550572	1	Lance Pipe Bottom
9	700550011	1	Needle Valve Complete
10	700550575	1	Knob For Needle Valve
11	700550574	1	O-Ring For Needle Valve
12	700550591	1	Lance Pipe For Double Barrel Lance
13	700550259	1	Nipple, Quick Coupling Male
14	700550522	1	Lance Guard L+R Complete w/ Screws And Holder
15	700550003	1	Quick Coupling Female High Pressure
16	700540491	3	O-Ring
18	700550004	2	Dowty Seal 3/8"
19	700550039	1	High Pressure Hose 3/8" R1T 10m Length

5. Spare parts lists

Trigger gun assembly



5. Spare parts lists

Trigger gun assembly spare-parts list

Pos:	Part no.:	Qty.:	Description:
1	101119483	1	Rep. Kit, release handle
2	101119481	1	Rep. Kit, shells for valve housing
3	3000924	1	U-seal
4	106402451	1	Valve housing
5	101119480	1	Rep. Kit, handle
6	101119486	1	Rep. Kit, valve
7	101119482	1	Rep. Kit, release trigger
8	101119484	1	Rep. Kit, swivel joint
9	101119487	1	Plug w. O-ring
1-9	106402070	1	ERGO spray handle swivel complete

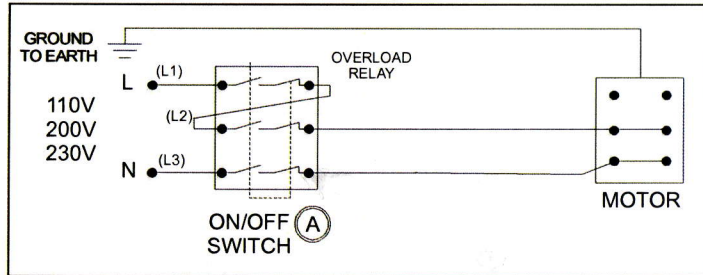
Complete HP hose w/ Ergo 3000 trigger gun

Pos:	Part no.:	Qty.:	Description:
N/A	700551030	1	Hose HP 10 mtr. RIT + coupl. + ERGO trigger (Standard)

5. Spare parts lists

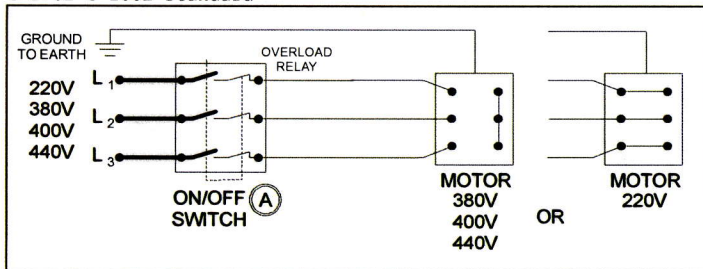
Wiring diagrams

C-110E standard



Pos.	Part no.:	Qty.:	Description:
A	700530005	1	On/Off Switch w/ Overload Relay 230V
A	700530115	1	On/Off Switch w/ Overload Relay 110V

C-170E C-200E standard



Pos.	Part no.:	Qty.:	Description:
A	700530005	1	On/Off Switch w/ Overload Relay 380-415-440V
A	700530096	1	On/Off Switch w/ Overload Relay 230V

5. Spare parts lists

Recommended spare-parts

In events where uninterrupted use of the machine is of critical importance, or when operating at remote locations, like in weekends, holidays, in rural areas or onboard ships at sea, it is recommended to stock a few essential spare-parts for field maintenance and repair.

For Machine:	Valve Kit x1	Pistons Kit x1	Oil Seals x1	Water Seals x1
C-110E 50Hz	700560004	700560005	700560011	700560006
C-110E 60Hz	700560004	700560005	700560011	700560006
C-170E 50Hz	700560004	700560008	700560011	700560009
C-170E 60Hz	700560004	700560008	700560011	700560009
C-200E 50Hz	700560004	700560008	700560011	700560009
C-200E 60Hz	700560004	700560008	700560011	700560009


For Machine:	Trigger Gun Rep. Kit Valve x1	O-ring Quick Coupling x4	O-ring Quick Coupling x2
C-110E 50Hz	101119486	700540035	700550002
C-110E 60Hz	101119486	700540035	700550002
C-170E 50Hz	101119486	700540035	700550002
C-170E 60Hz	101119486	700540035	700550002
C-200E 50Hz	101119486	700540035	700550002
C-200E 60Hz	101119486	700540035	700550002

For Machine:	Inlet Strainer x2	High Pressure Nozzle x1	Un-loader Valve Rep. Kit x1
C-110E 50Hz	700540033	700550056	700540321
C-110E 60Hz	700540033	700550015	700540321
C-170E 50Hz	700540033	700550075	700540321
C-170E 60Hz	700540033	700550057	700540321
C-200E 50Hz	700540033	700550015	700540321
C-200E 60Hz	700540033	700550015	700540321

6. Declaration and Warranty

6. Declaration and Warranty

EU declaration of conformity

CE EU Declaration of Conformity	
Product:	Electric powered heavy duty cold water high-pressure cleaner
Type:	C-110E / C-170E / C-200E
Description:	220-240V 0~, 380-440V 0~, 50/60Hz, IP 54 110 / 170 / 200 [bar]
The design of the unit corresponds to the following pertinent regulations:	EC Machine Directive 98/37/EEC EC Low Voltage Directive 72/23/EEC EC EMC Directive 89/336/EEC
Applied harmonized standards:	EN 292, EN 60335-2-79, EN 55014-1, EN 55014-2, EN 61000-3-2
Applied national standards and technical specifications:	DIN EN 60335-2-79
	DEN-SIN – a division Nilfisk-Advance Pte Ltd. No 22 Tuas Ave 2 Singapore 639453 Tel: +65 62681006 Fax: +65 62684916
John Holm Espersen General Manager	Singapore, April 2009

Warranty

DEN-SIN warrants all equipments of its manufacture furnished under this agreement to be free from defect in workmanship and material for a period of one year from the date of invoice of the equipment. This warranty does not cover normal wear and tear, consumable items, or part failures caused by (i) accident, (ii) abuse, or (iii) failure to maintain the DEN-SIN system containing the affected parts in accordance with DEN-SIN technical specification. All labour is the responsibility, and the expense of the Buyer. The liability of Seller under this warranty is limited, at Seller's option, solely to repair or replacement with equivalent articles. This warranty is condition upon (a) Seller being notified in writing by Buyer within one week after discovery of defects;

(b) the return of defective articles to Seller, transportation charges prepaid by Buyer; and (c) Seller's examination of such article disclosing to its satisfaction that such defects were not caused by negligence, misuse, improper maintenance, improper installation, accident, or unauthorized repair or alteration.

Accessories or equipment furnished by DEN-SIN but manufactured by others, shall carry the warranty that its manufacturer has conveyed to DEN-SIN, and which may be passed on to the purchaser. The original warranty period of any article, which has been repaired or replaced by DEN-SIN, shall not thereby be extended.

7. Spare Parts Request Form

7. Spare Parts Request Form

Company Name: _____
 Delivery Address: _____
 Country: _____ Postal Code: _____
 Contact Name: _____ Contact Number: _____
 Fax Number: _____ Mobile Number: _____
 Email: _____

S/N	Part Number	Description	QTY	Machine Model or Serial Number
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Special Instructions: _____
