

## OWNER'S MANUAL FOR THE



# **SPRAY-ON 200 range**

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#### SAFETY PRECAUTIONS

**Warnings** are mandatory instructions to prevent serious injury or permanent damage. **Cautions** are advisory instructions to ensure reliable operation of the equipment. **Notes** are for convenient operation.

#### **WARNING**

Making pesticides is a most dangerous time as it involves handling the concentrated material. For toxic compounds, use protective clothing such as overalls, hat, gloves, boots and respirator.

When using concentrated sprays, full protection is necessary.

When using diluted sprays, wear at least a hat, long-sleeved cotton overalls and boots. If you use pesticides regularly it is a good idea to always wear a respirator to avoid cumulative effect ... other protection may be required – check the label. It may have specific directions for that particular chemical.

Protective clothing should always be properly cared for. Rinse heavily contaminated clothes in the open before washing in the laundry.

Wash and dry these clothes every day – but keep them separate from other washing.

Respirators need special care ... clean respirator after spraying. Use soapy water then rinse and allow to dry completely before storing in a clean plastic bag. Replace canisters in respirator after every 8 hours use.

## **C-Dax SPRAY-ON 200**

## **OWNER'S MANUAL**

(Pt.No.90077 Issue 3 Dated 14 July 2009)

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#### INTRODUCTION

You have just purchased a new Spray-On 200 (SO200) spot/boom Sprayer. The Spray-On 200 sprayer incorporates many unique features that make it a useful and versatile sprayer.

#### **DESCRIPTION**

The C-Dax SO200 spot/boom sprayers are a series of high strength spray units manufactured of non-corrosive polyethylene that either come complete as a trailed unit or as a stand alone tank assembly for deck mounting.

#### **SPECIFICATIONS**

(Specifications subject to change without notice)

Capacity 205L

Power Consumption 12 VDC 6A (Nominal)
Pump 12 VDC Flojet pump

Tank Non-corrosive, medium density, UV stabilised polyethylene

Filtration Triple filter system comprising; fine mesh tank strainer, large capacity 50 mesh

suction filters, and spray gun/boom filter(s)

Frame Zinc plated mild steel (trailed only)

Boom Mounting Uprights with correct hole spacing to suit all C-Dax ATV booms (trailed only)

#### NOTE

For the SO200 flat deck unit we recommend that booms to go with the unit should be purchased with a Quicksmart attachment system to allow for easy mounting and height adjustment.

#### **ORDER INFORMATION**

#### **Deck Mounted with Handgun**

SO200 Pt.No. 87501

**Trailed with Handgun** 

SO200T Pt.No. 87500 Pt.No. 87502 Pt.No. 87503

#### **WARRANTY**

C-Dax Ltd warrants to the original purchaser that the equipment is sold free from defects in materials and workmanship for a period of 12 months from date of retail sale (6 Months from date of retail sale for all equipment sold in the U.K.).

Accordingly, C-Dax Ltd undertakes to repair the equipment, or at our option replace, without cost to the original purchaser either for materials, parts or labour, any part which within the specified warranty period from time of delivery is found to be defective. PROVIDED that the equipment has been used for normal purposes in accordance with the instructions, and has not been subject to neglect, misuse or accident, and has not been repaired, serviced or dismantled by any person other than a service agent or person authorised by C-Dax Ltd.

The warranty does not extend to cover: consequential damage; repair or replacement of parts due to fair wear and tear; or damage resulting from neglect, misuse, accident or hireage. SPECIFICALLY the warranty excludes battery damage, damage arising from chemical attack, and units built to customers specifications.

All goods returned to C-Dax Ltd are freight paid by the <u>sender</u> and if subject to a warranty claim, <u>must</u> be accompanied by a completed warranty claim form. Warranty claim forms are available from C-Dax dealers.

#### **LIABILITY**

The maximum liability, which is accepted by C-Dax Ltd, is limited to replacement of faulty goods only. Every care has been taken in the manufacture of our goods but because use of the goods is outside the control of the manufacturer, the end user assumes all responsibility for the use. Neither the manufacturer nor retailer shall be liable for loss or damage resulting from use.

Any advice or recommendations given by C-Dax Ltd, its agents, or employees is given in good faith and based on the best information available to us. No liability or responsibility is accepted or implied as a result of any information or advice tendered by C-Dax Ltd, its agents or employees. The end user accepts all responsibility arising from that advice.

#### THEORY OF OPERATION

Spray fluid is prepared and placed in the tank via the lid opening and strainer basket. Foreign matter is trapped in the strainer mesh for disposal after the tank has been filled.

When the pump is switched on power is applied to the pump motor from the battery. When the pump operates, fluid is drawn through the filtered suction line and into the pump.

With each rotation of the pump motor, fluid is forced via valves into a high-pressure chamber in the pump head. Fluid exits from the chamber via a check valve into the delivery hose of the sprayer. Providing the delivery hose has an open orifice fluid will flow from the hose. If the hose is closed such as when the spray gun valve is not operated, pressure will build up in the hose and pump head.

When the spray gun valve is opened, the pressure will drop and the pump will start to operate.

#### **OPERATING HINTS**

#### **Spray Hose**

Secure the spray hose and lance in the stowed position under the two lugs of the fresh water tank as shown on the cover of this manual.

#### **Nozzle Choice**

The provided nozzles have been selected to match the performance of the pump.

- The flat fan nozzle [44649] gives good atomisation without too much drift at 35PSI (2.5 bar).
- The adjustable nozzle [60027] gives a solid cone pattern, ideal for spot spraying.

If smaller nozzles are used the pump will 'cycle' - turn on and off. This is accommodated by the pump but causes pressure fluctuations, and may eventually reduce pump life.

#### Pump

The pump does not have a "continuous rating" at pressures above 25 psi (1.7 bar). Running continuously for more than one hour is not recommended.

#### CAUTION

For best performance <u>do not</u> adjust the tip so fine that the pump starts to cycle. A coarser spray pattern will produce less drift.

#### **WARNING**

The SO200 has a maximum capacity of 205L. If mounting this sprayer on an ATV, check that the vehicle weight limits are not exceeded.

### **CHEMICAL APPLICATION**

As no control can be exercised over the use of the equipment or over weather, plant or soil conditions, or over the storage, handling, mixing, use or application of sprays or chemicals, C-Dax Ltd will not accept any liability for loss or damage (consequential or otherwise) arising directly or indirectly from the use of this equipment.

#### **Chemical Advice**

C-Dax Ltd or their agents cannot make recommendations or give advice as to the use of chemicals and cannot accept responsibility for any damage, injury or other consequence for disregarding this warning notice. Contact your chemical supplier for advice.

#### **MAINTENANCE**

#### Cleaning

Clean the sprayer regularly! After each use flush the unit out three times with fresh water. Use CDAX Neutralise for the second rinse.

#### **CAUTION**

To prevent damage to the sprayer and spray gun, drain the water from the sprayer and spray gun when there is a risk of frost.

#### **Filters**

The tank strainer basket is retained by the lid to assist cleaning. Always clean the strainer before filling the tank with spray solution.

Clean all filter screens regularly.

#### NOTE

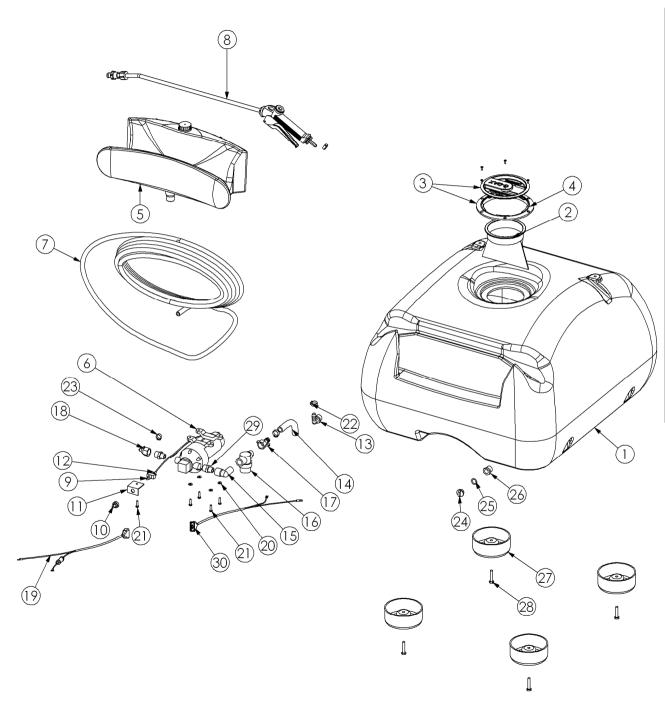
If the pump is observed to be leaking from between the motor and black pump body or from the motor itself, cease operation and have the pump serviced immediately. C-Dax Ltd and their distributors have a comprehensive parts inventory and capable staff. Because of the complications of the pump it may be best to get your C-Dax agent to post it back to the authorised service centre.

#### **TROUBLESHOOTING**

C-Dax Ltd and their distributors have a comprehensive parts inventory and capable service staff. Repairs should only be undertaken by C-Dax, or an authorised C-Dax service centre.

Switch on but pump does not operate	1. Blown fuse	Check wiring and replace 15A fuse
	2. Pressure switch operated	Operate spray gun trigger
	3. Pressure switch failed	Replace pressure switch
	4. On/Off switch failed	Replace switch
Pump runs but does not stop.	Spray gun trigger open	Close trigger
	2. Air lock in pump	Operate spray gun trigger until all air is expelled from the pump and hose.
	3. Suction hose loose	Check and tighten all suction hose connections between pump inlet and tank.
	4. Dirt or spray residue in pump valves	Replace valves.
	5. Blocked suction filter mesh	Clean filter mesh.
Pump runs but pulses while pumping	Spraying pressure higher than the pump shut off pressure	Reduce spraying pressure by opening the adjustable spray tip.
	2. Pump shut off pressure too low	Increase pump shut off pressure. Refer maintenance.
Fluid leaks from drain holes in pump	Internal leak within pump head	Remove pump for servicing.

## SO200 (Flat-deck) PARTS DIAGRAM & LIST

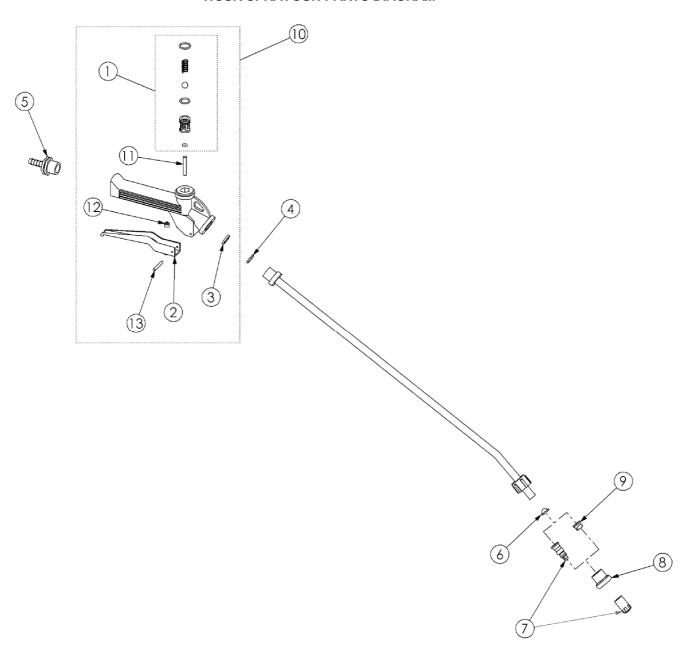


Item No.	QTY.	Part No	Description	
1	1	54003	Tank-SO200-200L-MDPE	
2	1	80010	Filter-Basket-D150-W/Ring	
3	1	83772	Lid & Ring ASY-D150-T&G-Vented-NYBLUE	
4	6	41013	Screw-CSK-POZI-8Gx1/2-SS	
5	1	86465	Tank ASY-Freshwater-SO200	
6	1	52150	Pump-Flojet-12V-7.6LPM-Triplex	
7	1	11201	Hose-DLVY-40 Bar-8.5(10m)	
8	1	84183	Gun-Spray-ADJ Fan-600MM-PP/SS	
9	1	34515	Switch-TOG-SPST-250V16A	
10	1	41270	Cover-Switch-For 34515	
11	1	81031	Bracket-Quadmate-50L	
12	1	30003	Connector-Spade INS F-6.3MM Red	
13	1	13618	ELB-HSK-13x1/2NPT(M)-NY	
14	1	11225	Hose-Suction 13mm	
15	1	14020	ELB-SHSK-13x12BSPF-PP	
16	1	255-213	Filter-Puimp-1/2Mx1/2F-NPS	
17	1	8-070-01	ST-SHSK-13x1/2BSPF-PP	
18	1	8-060-01	Elbow-SHSK-1-2BSPFx10-PP	
19	1	80131	Cable ASY-Battery-2.2M	
20	4	44002	Washer-Flat-M5-ZP	
21	5	41075	Screw-PH-POSI-M5x20-ZP	
22	2	12139	CLAMP-HOSE-OETIKER 1 Ear-198	
23	2	12159	Clamp-Hose-Oetiker-SS-17	
24	1	10702	Plug-Drain-3/8 BSP (M)-BK	
25	1	10809	O Ring-5/8x1/8 N70	
26	1	12581	ST-1/2BSPMx3/8BSPF-PP	
27	4	50017	Foot-SO200-MDPE	
28	4	42519	SCREW-HH-M8x40-ZP	
29	2	13688	ST-1/2NPTMx3/8M-PP	
30	1	83390	Cable-ASY-Pump-SM50F	

## SO200T (Trailed) PARTS DIAGRAM & LIST

Item No.	QTY.	Part No	Description
1	1	86456	Frame-SO200T-ZP
2	1	54003	Tank-SO200-200L-MDPE
3	1	80010	Filter-Basket-D150-W/Ring
4	1	83772	Lid & Ring ASY-D150-T&G-Vented-NYBLUE
5	6	41013	Screw-CSK-POZI-8Gx1/2-SS
6	1	86465	Tank ASY-Freshwater-SO200
7	4	24347	Flat Cap-Plastic-25x4-BLK
8	1	52150	Pump-Flojet-12V-7.6LPM-Triplex
9	1	86457	Axle ASY-SO200T-ZP
10	2	48802	Spring-2 Leaf-240KG
11	1	11201	Hose-DLVY-40 Bar-8.5(10m)
12	1	84183	Gun-Spray-ADJ Fan-600MM-PP/SS
13	2	44831	Wheel ASY-BRG TBLS Turf-18x750x8
14	4	80653	Mount-Trailer Spring-ZP
15	8	42582	Bolt-M10x80-ZP
16	2	84453	BKT-Mudguard-Trailer-ZP
17	12	42565	NUT-NYLOC-M10-ZP
18	2	51554	Mudguard-Blue-MDPE-1/2
19	1	34515	Switch-TOG-SPST-250V16A
20	1	41270	Cover-Switch-For 34515
21	1	81031	Bracket-Quadmate-50L
22	1	30003	Connector-Spade INS F-6.3MM Red
23	8	41079	RIVET-3/16"x15-TRUSS HD-AL
24	2	42566	NUT-NYLOC-M16-ZP
25	2	42809	Bolt-M16x90-ZP
26	4	40127	Screw-HH-M8x55-8.8-ZP
27	4	42519	SCREW-HH-M8x40-ZP
28	4	42552	Nut-Nyloc-M8-ZP
29		13618	ELB-HSK-13x1/2NPT(M)-NY
30		11225	Hose-Suction 13mm
31	1	14020	ELB-1-2Fx1-2M-PP
32	1	255-213	Filter-Puimp-1/2Mx1/2F-NPS
33	1	8-070-01	ST-SHSK-13x1/2BSPF-PP
34 35	1	8-060-01 80131	Elbow-SHSK-1-2BSPFx10-PP Cable ASY-Battery-2.2M
	1		
36 37	<u>4</u> 5	44002 41075	Washer-Flat-M5-ZP Screw-PH-POSI-M5x20-ZP
38			CLAMP-HOSE-OETIKER 1 Ear-198
39	2	12139 43805	Handle-Tow Hitch-1-7-8-ZP
40	1	43803	Screw-HH-M10x25-ZP
40	2	12159	Clamp-Hose-Oetiker-SS-17
42	1	86468	Drawbar ASY-SO200T
42	1	10702	Plug-Drain-3/8 BSP (M)-BK
44	1	10702	O Ring-5/8x1/8 N70
45	1	12581	ST-1/2BSPMx3/8BSPF-PP
45	2	13688	ST-1/2BSPMX3/8BSPF-PP ST-1/2NPTMX3/8M-PP
46	4	42555	WASHER FLAT M8 ZP
47	4	42555	Washer FLAT M8 ZP Washer-Spring-M8-ZP
49	4	42530	BOLT-M10x65-ZP
50	1	83390	Cable-ASY-Pump-SM50F
	1	1 00070	Cable-7131-1 0111p-31/1301

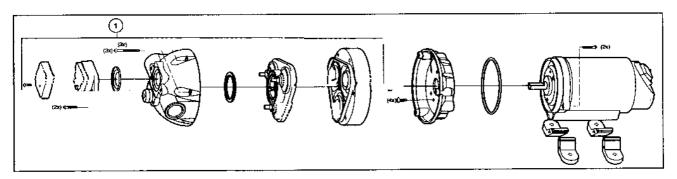
## **HGSR SPRAYGUN PARTS DIAGRAM**



ITEM No	PART No	DESCRIPTION	QTY
1	60018	Kit-Repair-HGSR-Gun Body	1
2	60025	Lever-Trigger-PP-Blue	1
3	60019	Gasket-19x12x3-NY-White	1
4	60020	Oring-15x12x1.5-Viton	2
5	60023	Hose Tail 10mm	1
6	60022	Filter-Cup-50 Mesh-SS	1
7	60027	Adjustable, Brass Hollow Cone Spray Tip	1
8	60021	Nozzle Holder-Red	1
9	44649	Spray Tip Flat Fan-110°SF 08 (OPTION)	1
10	60016	Gun Body w/ Handle-HGSR	1
11	60017	Piston pin -SS	1
12	60026	Pin spacer	1
13	60024	Pin-Hinge-Trigger-SS	1

## FLOJET SPRAY PUMP RELACEMENT PARTS

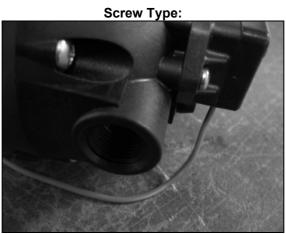
The following replacement parts available for the 12V Flojet 7.6 L/Min pump are available from any C-Dax dealer:



NOTE: PLEASE SELECT THE CORRECT HOSE CONNECTION TYPE FOR YOUR PUMP







ITEM	PART NO.	DESCRIPTION	
1	43715	Pumphead Kit (includes pressure switch)	
		To suit Screw Type	
1	43714	Pumphead Kit (includes pressure switch)	
		To Suit QuickConnect Type	
	52150	Replacement Pump	
		Screw Type	
	52151	Replacement Pump	
		QuickConnect Type	