

CONTENTS

Circular Sprayer Product Range	2
Undavina & Spraydome Installation Procedure	3-4
Pre-Operation Checking Procedure	5
Operating Procedures	6-7
Parts & Drawings	8-11
- XT Spraydome & Undavina	8-9
- Undavina XT 250 - Shroud & Head Only	10
- Spraydome XT 1200	11

CIRCULAR SPRAYER PRODUCT RANGE

Spraydome 1200



Undavina 900



Spraydome 1000



Undavina 600



Spraydome 600



Undavina 400



Spraydome 400



Undavina 250



Typical Circular Sprayer Vineyard Setup

UNDAVINA® & SPRAYDOME® INSTALLATION PROCEDURE

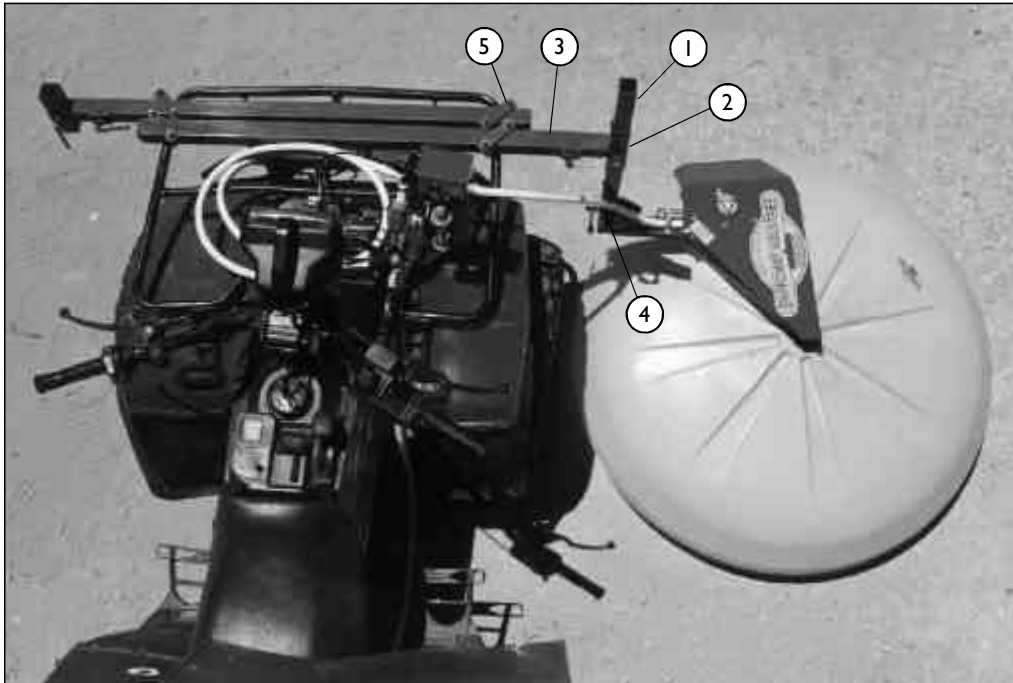


Figure 5.

1. Remove the Undavina® or Spraydome® from the shipping carton and place on a work area, taking care not to damage the CDA head beneath the spray cover.
2. Remove the WARRANTY CARD from the sprayer, fill out the relevant information and post it back to Enviromist Industries or your national distributor to ensure full warranty.
3. Using the clamp bolt, washers and nuts provided, assemble the vertical support bar (Fig.5, No.1) to the bracket on the chassis arm (Fig.5, No.4) of the sprayer.
 - (a) The clamp bolt (two bolts welded to form a U shape) should be inserted from the front of the sprayer.
 - (b) The clamp nut and thicker washer to be placed on the top thread.
 - (c) The Nyloc nut and thinner washer to be placed on the bottom thread.
 - (d) Refer to the Undavina® or Spraydome® drawings for further detail if required.
4. Locate and mount the mounting tube(s) (Fig.5, No.3) to the vehicle in the most appropriate position relative to the height and size of the vehicle, and the operating and transport positions of the Undavina® or Spraydome®.
 - (a) **Four Wheel ATV Mounting:**

Place the mounting tubes across the front carry rack. Firmly secure the mounting tube(s) using the clamp assemblies (Fig.5, No. 5) provided, taking care not to over tension bolts which might crush the carry rack. Allow sufficient height for vertical adjustment of the sprayer(s) and clearance around the wheels
 - (b) **Tractor Mounting:**

Fabricate suitable mounting brackets and if necessary modify the mounting tube(s) (Fig.5, No. 3) and attach to the tractor preferably between the front and rear wheels, allowing sufficient height for vertical adjustment of the sprayer(s) and clearance around the wheels.

UNDAVINA® & SPRAYDOME® INSTALLATION PROCEDURE *cont.*



Figure 5a.

5. Slide the "T"- bar adjustment arm (Fig.5, No. 2) over the vertical support bar (Fig.5, No. 1) that is attached to the sprayer (from step 3) and secure at about middle height using the "T"- bar clamp bolt. The "T"- bar should be aligned away from the applicator as illustrated in figures 5 and 5a.
6. Slide the "T"- bar adjustment arm (Fig.5, No.2) (that is attached to the sprayer) into the mounting tube (Fig.5, No.3) (that is attached to the vehicle) and secure in an appropriate position by tightening the mounting tube clamp bolt.
7. Adjust the applicator to the required width and height for work or transport, and lock into position. As indicated in step 4, ensure sufficient height for vertical adjustment of the sprayer(s) and clearance around the vehicle wheels.
8. If you are installing an Enviromist CDA sprayer, refer back to step 5 of "Backplate Installation Procedure" for instructions regarding connection of the sprayer's control box to the backplate. Enviromist Hi-Flo nozzle systems are at this stage simply connected to the tank & pump system.

IMPORTANT:

The bottom of the shroud should clear the top of the target to be sprayed by approximately 50mm (2"), ensuring the CDA head is clear of any ground interference.

If the shroud is set too high, the risk of spray drift increases dramatically.

If the shroud is set too low, debris may interfere with CDA operation, and hitting the ground or obstructions may damage the CDA

PRE-OPERATION CHECKING PROCEDURE

1. Before attempting to use any Enviromist equipment, READ the Operator's Manual thoroughly.
2. Read and follow instructions on chemical manufacturer's labels.
3. Always wear applicable protective clothing.
4. Check that all maintenance procedures have been followed.

Before filling the sprayer with chemical mixture, it is recommended that you complete the following test procedures to check that the system is working correctly.

5. Check all plumbing and fittings to ensure that all connections are correctly coupled and there is no damage or leaks.
6. Check that tank, strainers, lines and nozzles are clean.

WARNING: USE CLEAN WATER ONLY for the balance of this procedure!! DO NOT use chemical mixture when checking the sprayer.

7. Place a small amount of clean rainwater in the clean, empty chemical mixture tank, ensuring the strainer is in place when filling. Failure to use the

strainer will increase the likelihood of system blockages from contaminated water. The smaller fresh-water flushing tank should also be filled at this point if one is incorporated into the system.

8. Turn the inline switch **ON** (Refer page 10, Fig.2, No.5 from main manual) .
9. **For CDA Systems:** Turn the Control Unit switch(es) **ON** (Refer page 10 Fig.2, No. 11 from main manual).

At this stage the pump should start and the liquid flow will purge all air from the system liquid lines. Refer to the instructions printed on the tank if a fresh water flushing system is in use.

10. **For CDA Systems:** Check that the CDA beneath the shroud is working correctly. The disc of the CDA should be spinning counter clockwise when viewed from below and spreading a very fine mist. If not, refer to the TROUBLE SHOOTING section within this manual.

11. **For Hi-Flo Nozzle Systems:** Check that the nozzle is working correctly. At this stage a calibration check can be performed if required.

12. The sprayer is now ready for field operations.

OPERATING PROCEDURES

1. Establish the rate of chemical to be applied using the chemical manufacturer's recommendations.
2. Calculate the correct amount of chemical to add using the procedures in the pages **HOW TO CALCULATE APPLICATION RATES**.
3. Check the sprayer control switch(es) is **OFF** (Refer page 10, Fig.2, No. 11 from main manual).
4. Mix water and chemical thoroughly and then add mixture to the tank.

IN FIELD ADJUSTMENTS

Before starting operations, the width and height of the applicator must be adjusted to suit your conditions.

ADJUST WIDTH of Undavina(s)[®] or Spraydome(s)[®] to suit operation.

When striking the butt of a vine or tree **ENSURE THAT THE SPRING ARM MECHANISM IS NOT EXCESSIVELY USED.**

The trunk of the tree or vine should strike approximately between the 2 and 3 o'clock position looking down on the top of the right hand Undavina[®] or Spraydome[®].



The flexible disc under the Undavina[®] cover should hardly touch the trunk of the tree or vine.

The trunk of the tree or vine should not be pushed more than 100mm (4") into the cover from its perimeter when passing. This will give a smooth operation and deflection and therefore extend the life of the machine.

If an operating head cover is set to greater than 100mm (4") overlap it will cause excessive movement and constant hammering on the pivot arm stop which will lead to excessive wear and tear.

5. HEIGHT ADJUSTMENT

On all units, set the height of the shroud to clear the top of the spray target by approximately 50mm (2").

The ends of the skirt or dome should not touch the ground, random high grass will pass through or under the unit.



OPERATING PROCEDURES *cont.*

WARNING: If a Spraydome® is set too low, constant contact between the dome and the ground or high grass may result in permanent deformity of the dome.

WARNING: Continued scuffing against the wheel of the operating vehicle may cause irreparable damage to a cover or dome.

WARNING: If the Undavina® is set too low the skirt will foul with the ground or vegetation. This will open the protective skirt of the Undavina® and may cause unnecessary drift or interfere with the spray pattern and return a variable result.

6. OPERATION

To operate the sprayer, turn the Inline Switch **ON** (Refer page 10, Fig.2, No. 5 from main manual), then control switches **ON** (Refer page 10, Fig.2, No. 11 from main manual) as required, then travel at the speed determined for your application rate.

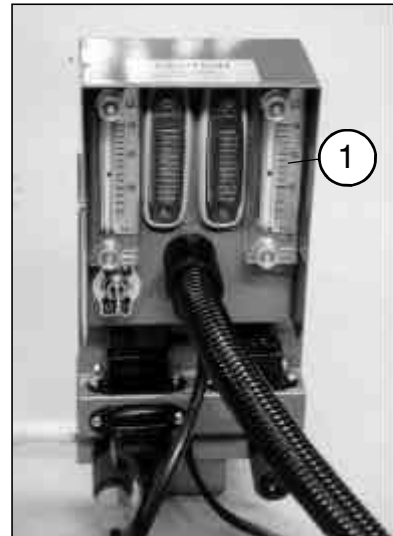
It is recommended that the vehicle speed with Enviromist equipment should not exceed 10kph (6mph).

When turning at the end of rows the sprayer(s) may be turned OFF and ON as required using the Inline Switch (Refer page 10, Fig.2, No. 5 from main manual). If it is required that heads be turned off independently then the chemical supply line for that head must be disconnected at the Back Plate while the pump is not operating. Other options to turn heads off independently are available if required. Your dealer will be able to advise you these options.

7. FLOW INDICATOR

The ball in the flowmeter (No.1) on the Control Unit not only indicates to the

operator that the sprayer is working but gives a reasonably accurate indication of the flow rate to that operating head. (see note below).



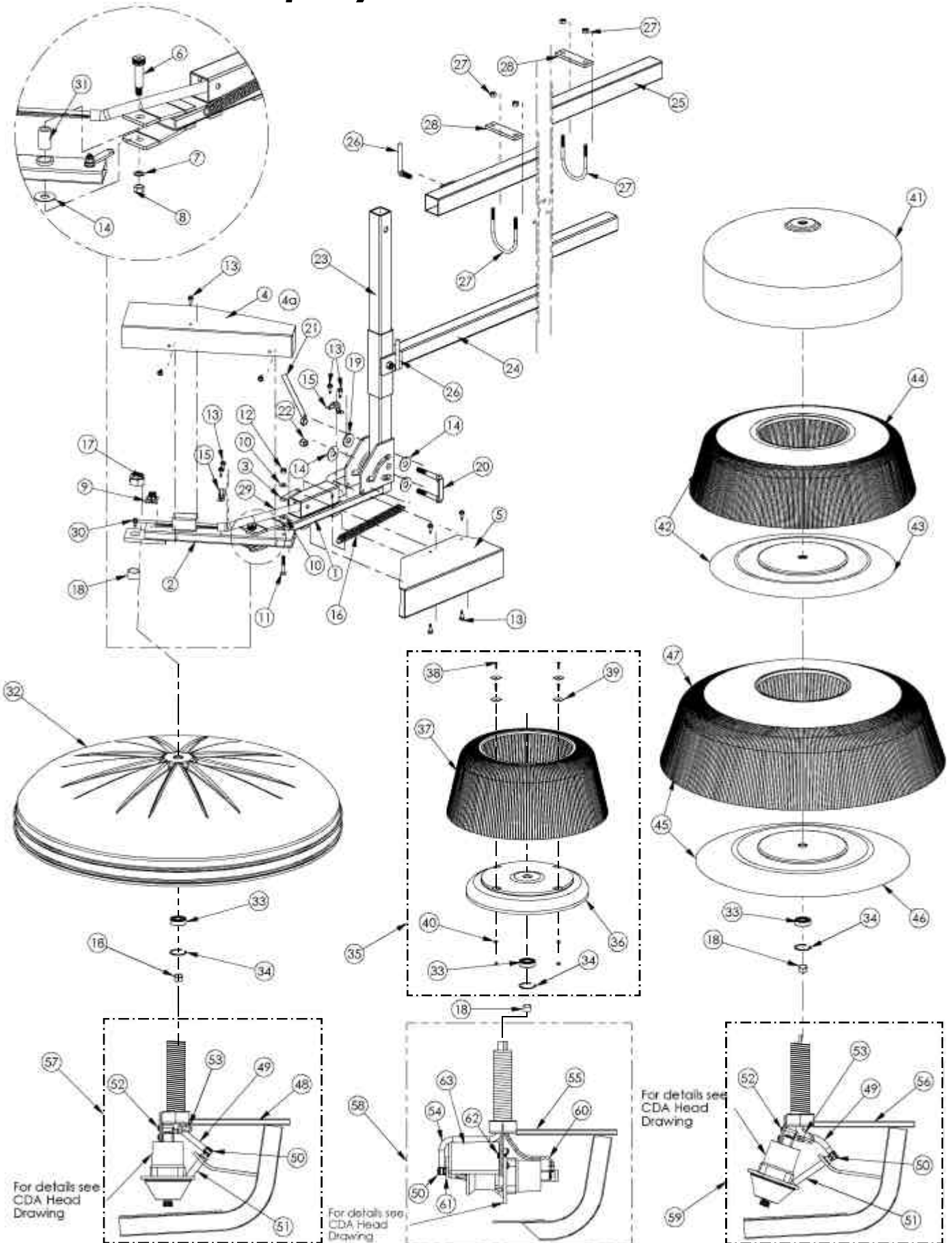
If the ball drops while operating **something is wrong** and the chemical is not being applied as required. If this happens while spraying **stop the unit** and rectify the problem before attempting to spray again.

Refer to the **TROUBLE SHOOTING** section in main manual for additional information.

Note: The flow meter is calibrated using water only and is accurate. As the concentration of chemical increases the flow rate may vary slightly from what is indicated, but in most cases there is no need to take this variation into account.

Note: When the pump is first switched on the indicator will fluctuate wildly, this is caused by air and water passing intermittently through the meter and the jet. Once the air is out of the line the indicator will settle down.

XT Spraydome & Undavina



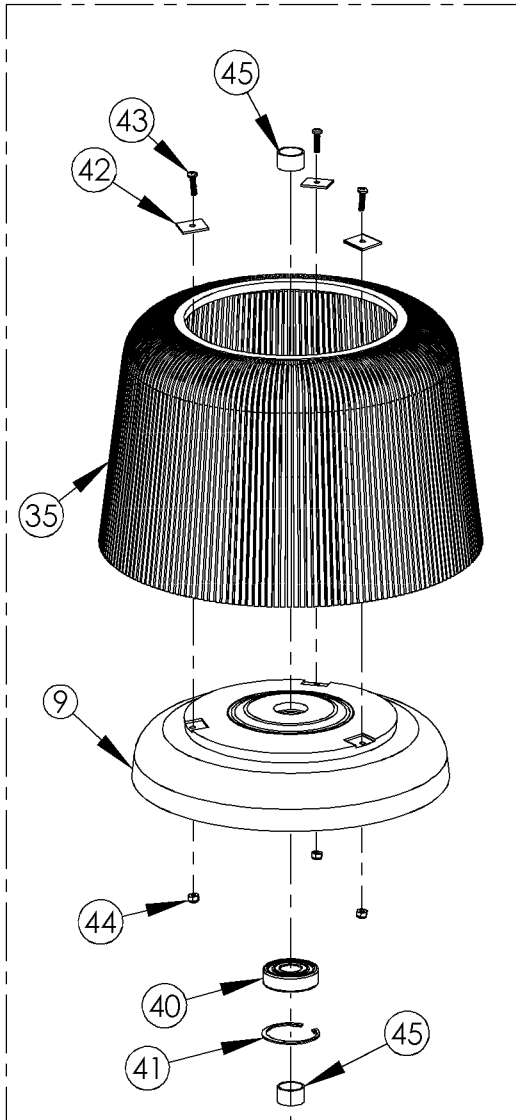
XT Spraydome & Undavina

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	ZU058	Chassis Arm XT - RH/LH Universal	33	GB002	Bearing
2	ZU059	Sleeved Pivot Arm	34	GB003	Bearing Clip
3	ZU005	Pivot Connector II	35	ZU062	U/V400 Disc & Shroud Assy.
4	ZU075	Chassis Guard RH	36	ZU036	400 Poly Disc including bearing & Circlip
4a	ZU076	Chassis Guard LH	37	ZU037	400 Shroud
5	ZU074	Universal Guard	38	UF102	3/16 x 3/4 S/S Bolt
6	UF073	1/2 x 1-1/2 Shoulder Screw	39	ZU050	Shroud Securing Plate
7	UF009	3/8 Spring Washer	40	UF120	3/16" S/S Nyloc Nut
8	UF032	3/8" BSW Nut	41	ZD010	600mm Dome including bearing & Circlip
9	ZE008	Three Way Connector	42	ZU063	U/V 600 Disc & Shroud Assy.
10	UF004	1/4 x 5/8 x 18G Flat Washer	43	ZU032	600mm Steel & Elastomer Disc
11	UF017	1/4 x 1-1/4 S/S Set Screw			- including bearing & Circlip
12	UF028	1/4 Nyloc Nut	44	ZU033	600 Shroud
13	UF076	Hex Hd Tek Screw	45	ZU064	U/V 900 Disc & Shroud Assy.
14	UF007	1/2" Flat Washer	46	ZU017	900mm Steel & Elastomer Disc
15	GE045	20mm Saddle			- including bearing & Circlip
16	IE001	Tension Spring	47	ZU018	900 Shroud
17	UF031	M20 Nyloc Nut	48	ZD003	1000 & 1200 Head Bracket
18	ZD001	Spacer	49	ZD009	6mm Feed Tube
19	FJ001	Thick 3/8 Washer	50	ZU023	Elbow - EB4 (cut)
20	ZU009	Clamp Bolt Assembly	51	MI013	Ulva + Feed Nozzle - Blue
21	ZU010	Chassis Clamp Nut	52	UF010	4AB x 1/2 Self Tapper
22	UF029	3/8" BSW Nyloc Nut	53	ZU028	CDA Head Wiring
23	ZU011	Vertical Support	54	ZU085	U/V 400 Feed Tube (6mm)
24	ZU012	Adjustment Arm	55	ZU092	Recirc 400 Head Bracket
25	ZU013	Mounting Tube	56	ZU034	900/600 Head Bracket
26	ZU015	Clamp Bolt	57	AA277	1000/1200 CDA & Head Bracket Set
27	SC001	U' Bolt Assembly (+ Nut)	58	AA275A	400 CDA & Head Bracket Set
28	ZU022	Clamp Plate	59	AA276	600/900 CDA & Head Bracket Set
29	ZU031	Hose & Cable Assy.	60	ZU084	250 CDA Head Wiring
30	ZU025	Elbow - Shaved	61	ZU089	Feed Nozzle - Modified
31	DE009	Nylon Bush	62	UF048	Self Tap Screw
32	ZD005	1000Dome - Hard Edge	63	ZU083	Recirculation Cover
		- including Bearing & Circlip			

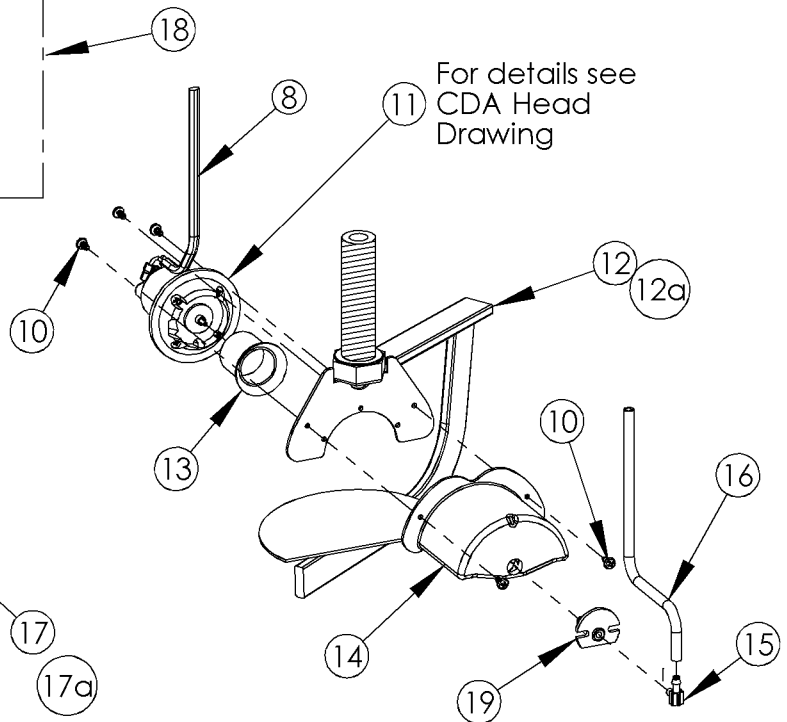
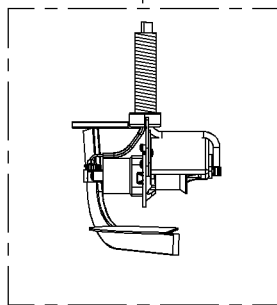
ITEMS NOT SHOWN IN PARTS DRAWING	
PART NO.	DESCRIPTION
ZD020	400mm Dome including bearing & circlip
ZU077	U/V 250 Disc & Shroud Assy
ZU078	250 Poly Disc - Yellow
ZU079	250 Flexible Skirt

Undavina XT 250 - Shroud & Head Only

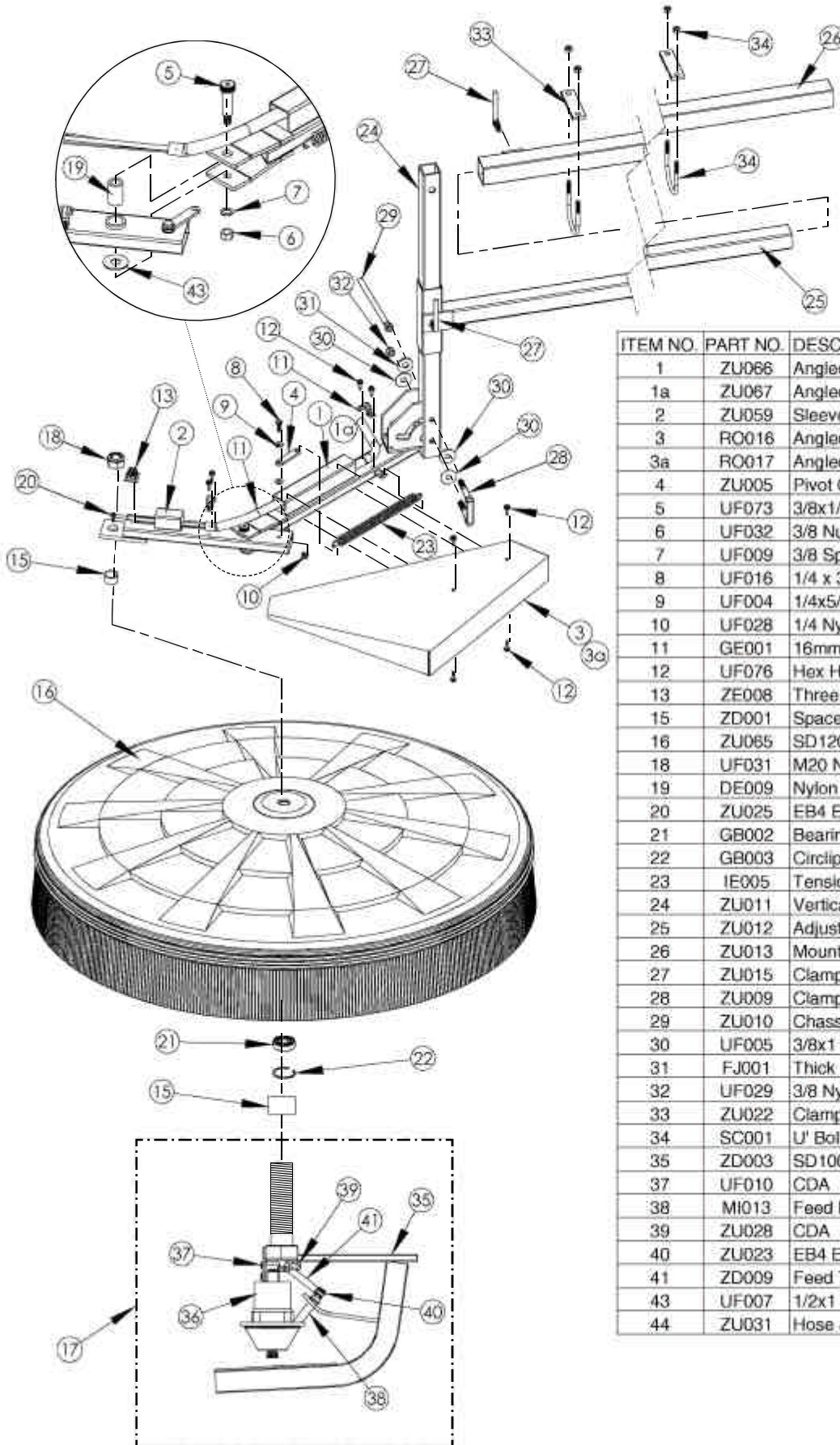
Undavina 250 Head Assembly



ITEM	PART	DESCRIPTION
8	ZU084	250 CDA Head Wiring
9	ZU078	250 Poly Disc including Bearing & Circlip.
10	UF048	Self Tap Screw
11	ZD004a	250 CDA (includes ZU082)
12	ZU080	250 Head Bracket - Right Hand
12a	ZU081	250 Head Bracket - Left Hand
13	ZU082	Atomiser Drum
14	ZU083	Recirculation Cover
15	BI017	EB4 Elbow
16	ZU085	Feed Tube
17	AA449	250 CDA & Head Bracket set - RH
17a	AA450	250 CDA & Head Bracket set - LH
18	ZU077	U/V 250 Disc & Shroud Assy.
19	ZU089	Feed Nozzle
35	ZU079	250 Brush
40	GB002	GB002 Bearing
41	GB003	GB003 Circlip
42	ZU050	ZU050 25mm Shroud Securing Plate
43	UF102	3_16 x 3_4 Screw
44	UF120	3_16 SS Nut
45	ZD001	ZD001 Spacer



Spraydome XT 1200



ITEM NO.	PART NO.	DESCRIPTION
1	ZU066	Angled Chassis Arm MKII - RH
1a	ZU067	Angled Chassis Arm MKII - LH
2	ZU059	Sleeved Pivot Arm
3	RO016	Angled Guard - RH
3a	RO017	Angled Guard - LH
4	ZU005	Pivot Connector II
5	UF073	3/8x1/2x1-1/2BWSHSS Shoulder Bolt
6	UF032	3/8 Nut
7	UF009	3/8 Spring Washer
8	UF016	1/4 x 3/4 Set Screw
9	UF004	1/4x5/8x18G Flat Washer
10	UF028	1/4 Nyloc Nut
11	GE001	16mm Saddle
12	UF076	Hex Hd Tek Screw
13	ZF008	Three Way Connector
15	ZD001	Spacer
16	ZU065	SD1200 Disc & Shroud Assy.
18	UF031	M20 Nyloc Nut
19	DE009	Nylon Bush
20	ZU025	EB4 Elbow - Shaved
21	GB002	Bearing
22	GB003	Circlip
23	IE005	Tension Spring 2.5mm
24	ZU011	Vertical Tube
25	ZU012	Adjustment Arm
26	ZU013	Mounting Tube
27	ZU015	Clamp Bolt
28	ZU009	Clamp Bolt Assembly
29	ZU010	Chassis Clamp Nut
30	UF005	3/8x1 1/4 16g Flat Washer
31	FJ001	Thick 3/8 Washer
32	UF029	3/8 Nyloc Nut
33	ZU022	Clamp Plate
34	SC001	U' Bolt Assembly (+ Nut)
35	ZD003	SD1000/1200 Head Bracket
37	UF010	CDA Mount Screw
38	MI013	Feed Nozzle - Blue
39	ZU028	CDA Head Wiring
40	ZU023	EB4 Elbow - Modified
41	ZD009	Feed Tube
43	UF007	1/2x1 1/4x 16g Flat Washer
44	ZU031	Hose & Cable Assembly