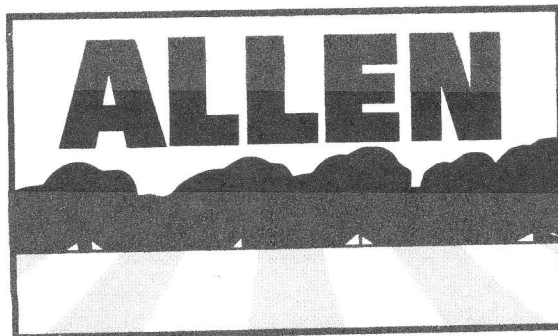


ALLEN WALKOVER SPRAYERS

GROUNDSMAN

OPERATING INSTRUCTIONS & PARTS LIST

KEEP THIS BOOKLET IN A SAFE PLACE



CONTENTS OF THE PACKING CASE

- 1 x Machine body complete
- 1 x Centre handle section
- 1 x Top handle section
- 1 x Bag containing:
 - a) Handle bolts, nuts and washers
- 2 x Grey nozzles TF VP 3
- 1 x Instruction Manual and Guarantee Card

ASSEMBLY INSTRUCTIONS

The WALKOVER GROUNDSMAN has been factory tested prior to packing and only requires the handle section to be fitted.

Fit the top handle section to the centre section using the M6 x 35 setscrews, M6 nuts and washers. When this has been completed assemble both sections to the main chassis, using M6 x 35 setscrews, M6 wing nuts and washers. Adjust to required height by using the varied holes in the lower handle section.

TESTING

A trial run should be carried out on a dry concrete surface to check that the nozzles are in alignment. This should be carried out using clean water to ensure everything is in working order.

Half fill the container with cold water, replace filler cap and move off at a steady walking pace similar to the speed of mowing. This will prime the pump mechanism and water will spray from the nozzle, showing that all air has been bled from the system.

If an airlock remains in the system, unscrew one of the two diaphragm check valve caps and push machine until water flows through the system. Tighten cap and machine will start to spray. **DO NOT over tighten diaphragm cap.**

OPERATING INSTRUCTIONS

When filling the machine add sufficient spray material to cover the area needing treatment or a pro-rata amount if only part filling. Pay careful attention to which colour nozzle is fitted at the time of spraying to avoid any over or under application of chemical. Always follow the chemical manufacturer's instructions relating to the specific area. In many instances dilution rates of chemicals are not critical, but in some cases where a greater volume of water is needed, then 2 x half strength applications are recommended, spraying where possible in a chequer board fashion in North to South and East to West directions.

SPRAY WIDTH

The GROUNDSMAN has a spray width of 24 inches (610mm) which is equal to the width of the wheel track of the machine. To ensure total coverage follow the wheel tracks made on the previous pass.

In common with all WALKOVER sprayers, the spray pattern tails off on the extreme edge of the treated swath which is compensated for when treating the return track.

Two sets of nozzles are provided with the machine giving alternative coverage areas for the 25 litre (5.5 gallons) loading as follows:

- a) *With standard nozzle fitted, Red TF VP2, one full tank covers 525 sq. metres (625 sq. yards) equivalent to 476.2 litres/hectare (42.4 gallons/acre)*
- b) *Alternative nozzle, Grey TF VP 3 delivers to one full tank 278 sq. metres (333 sq. yards) equivalent to 899 litres/hectare (80 gallons/acre)*

The tank is marked to give approximate coverage's for partial filling.

N.B. The coverage areas for each nozzle may vary plus or minus 5% depending on the speed of operation and variations of the terrain.

Always keep all four wheels on the ground when spraying.

NOZZLE ASSEMBLY

The diaphragm control valve assembly is fitted with a quick fit self aligning cap. When fitting the cap and nozzle, the self aligning cap will ensure that the nozzle remains in alignment. To correct errors in alignment rotate nozzle assembly to bring the nozzle tip parallel to the ground.

If the nozzle drips or the spray pattern is distorted, this may be caused by a minute blockage in the diaphragm valve or nozzle filter. To remove the nozzle tip, rotate the cap a half turn anticlockwise, when viewing from the front. Always ensure the nozzle seal is in place on reassembling.

Treat all components with care as they are precision made to give long and accurate working life.

PUMP REMOVAL

Should the pump at any stage during the machine's working life cause trouble it can easily be removed and returned to ALLEN POWER EQUIPMENT LIMITED, for repair or replacement. Work on the inside of the pump can only be carried out by the manufacturer and no attempt should be made to dismantle this unit otherwise the guarantee becomes invalid.

To remove the pump, tip the machine backwards onto the handle to allow easy access. Remove the split pin on the drive side axle and pull the wheel and axle clear of the pump. Having carried out this operation, remove the elbow retaining spring clip and then each of the pipe elbows from pump. These elbows are a push fit and are detached by pulling at a slight angle. Remove the nuts from the pump and slide clear from bracket.

To reassemble the unit, reverse the foregoing operation ensuring that the nuts are not over tightened.

CLEANING AND STORAGE

Always thoroughly clean the sprayer after use. Flush through the whole system with clean water using a small amount of mild household detergent when toxic chemicals have been used. It is very important not to allow chemicals to dry out in the pump mechanism which could granulate and score the interior surfaces. This could impair the performance of your machine. A drain tap is mounted in the bottom of the tank for

easy drainage.

Where temperatures below zero degrees are likely to be experienced ensure that all the liquid has been drained from the machine by removing the hose from the pump. This elbow is a snap fit and pulls out quite easily at a slight angle. Rotate the drive wheel to empty the pump and pipe work and reconnect the pipe into the pump. A small amount of car anti-freeze introduced into the pipe and pump system will give excellent protection.

DO NOT empty chemicals in areas where contamination may occur.

FILTRATION

A basket filter is located under the filler cap and should always remain in position at all times, except when removing for cleaning. Nozzle strainers are in place behind the nozzles. Clean as required.

NEVER

1. Add concentrated active ingredients to an empty tank which will result in pure product entering the delivery pump and pipe lines.
2. Leave the sprayer in winter storage with liquid in the tank or pipe work. Severe frost could distort the pump and burst the pipes.

ALWAYS

Ensure the container is half full of clean cold water at the outset of your spraying operation and the pump primed before adding concentrated chemical.

In the case of highly viscous concentrates and soluble powders, pre-dilute the product to be applied in a watering can or bucket with sufficient water to ensure it is completely dissolved. Half fill the tank with clean cold water. Add the required amount of product and top up to the 25 litre (5.5 gallon) level with water and replace the cap. Rock the unit backwards and forwards a few times to ensure satisfactory mixing and then commence spraying, maintaining a steady pace. If a smaller area is to be treated fill the tank to the appropriate level.

The WALKOVER machine stops spraying immediately it ceases to travel forward. To move the sprayer in a full condition (from one area to another) without spraying, pull backwards on **all four** wheels. The back wheels are sufficiently strong for turning but are not intended for transporting the weight of a full tank.

PRECAUTIONS

The pump mechanism is set by the manufacturer. Any tampering with the pump setting may change the performance of your machine and will render your Guarantee void.

Some of the chemicals which can be applied by this machine onto grass areas and driveways require special precautions for use. Protective clothing including boots, gloves and masks may be necessary and therefore individual manufacturer's recommendations for the particular chemical must be closely adhered to.

ALLEN POWER EQUIPMENT LIMITED disclaim any responsibility for misuse of any proprietary brand of chemical applied by a machine of their manufacture. All reasonable care is taken to ensure correct dosage application of known chemical formulations but ALLEN POWER EQUIPMENT LIMITED do not guarantee either their efficacy or accept any responsibility for damage resulting from users' mistakes in assessing dilution rates.

Experience has shown that combined mixes of chemicals, i.e. fungicides and weed killers, can sometimes interact, resulting in the formation of a gelatinous substance which can crystallise if left in the machine after use. This solidifies within the pump and nozzles and can in extreme instances completely destroy the pump mechanism.

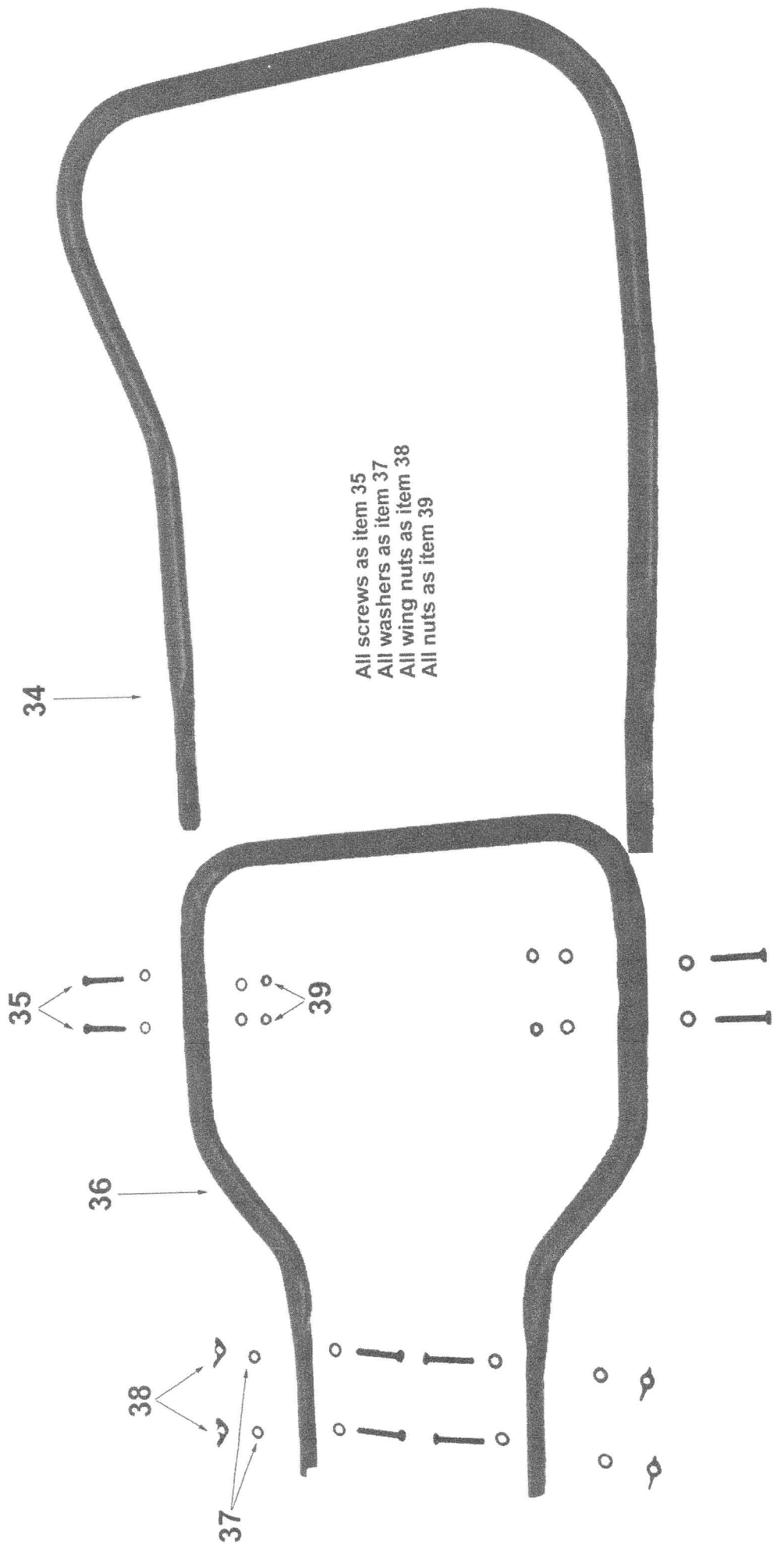
Many proprietary brands of garden and horticultural chemicals are sold in the form of Soluble Powder or Crystals. The Walkover machine will satisfactorily apply these chemicals always providing that the crystals or powder are pre-mixed before adding to the reservoir tank and assuming that the chemical in question is **entirely soluble**.

NEVER leave a soluble powder or a crystal solution, or even an organic product, to stand in the machine for any period of time as sediment may form in the system and the concentration being applied may be too strong and cause scorching. It may also find its way into the pump mechanism causing damage.

DO NOT mix proprietary brands of chemicals unless assured of their compatibility

N.B. THE WALKOVER LAWN SPRAYER IS NOT SUITABLE FOR USE WITH CRYSTALS OF SODIUM CHLORATE.

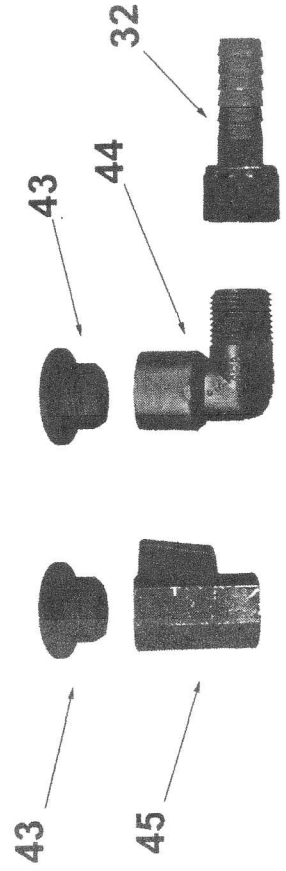
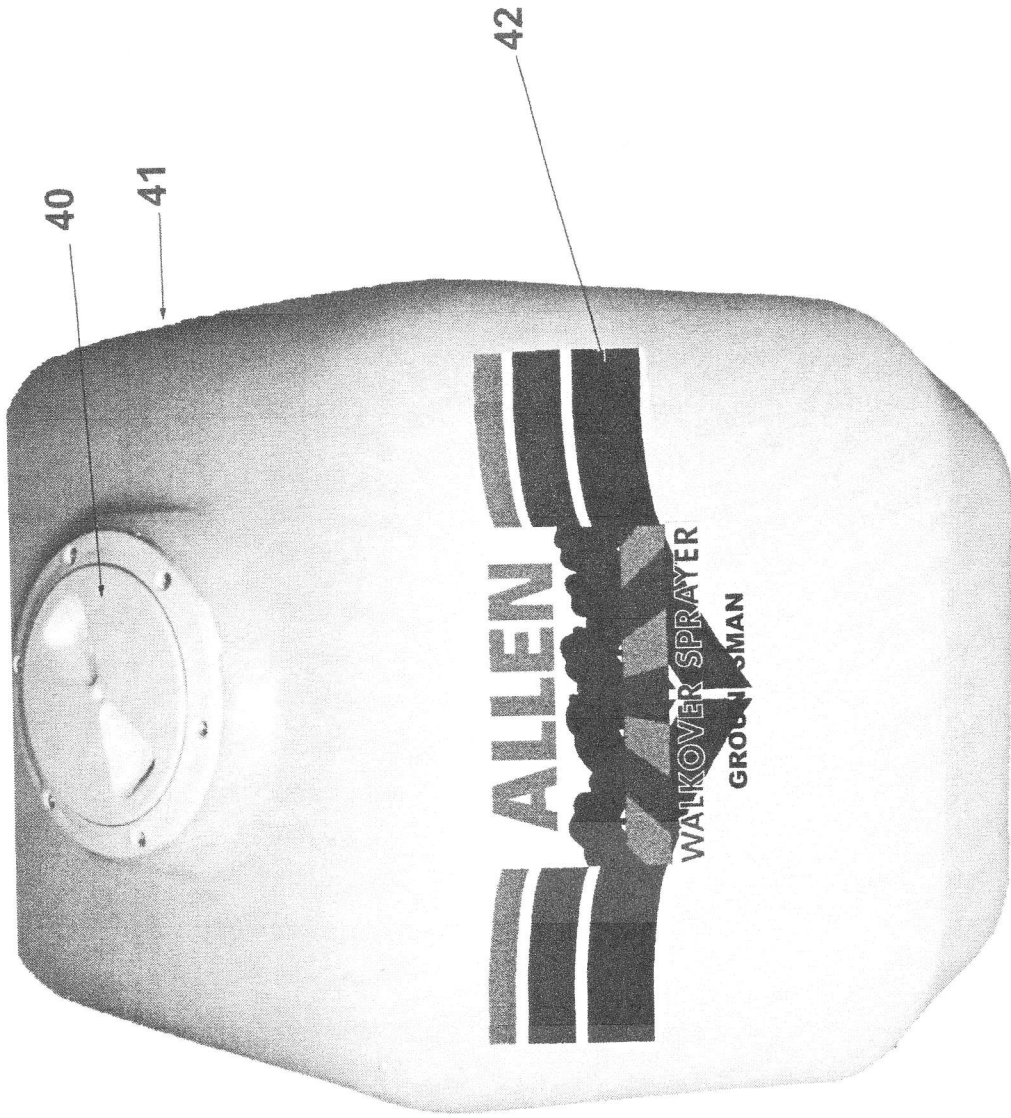
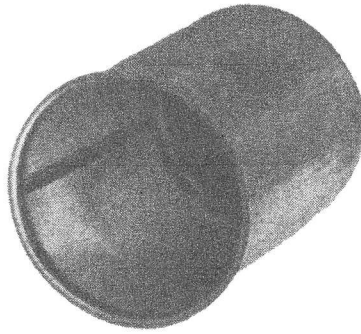
HANDLE ASSEMBLY



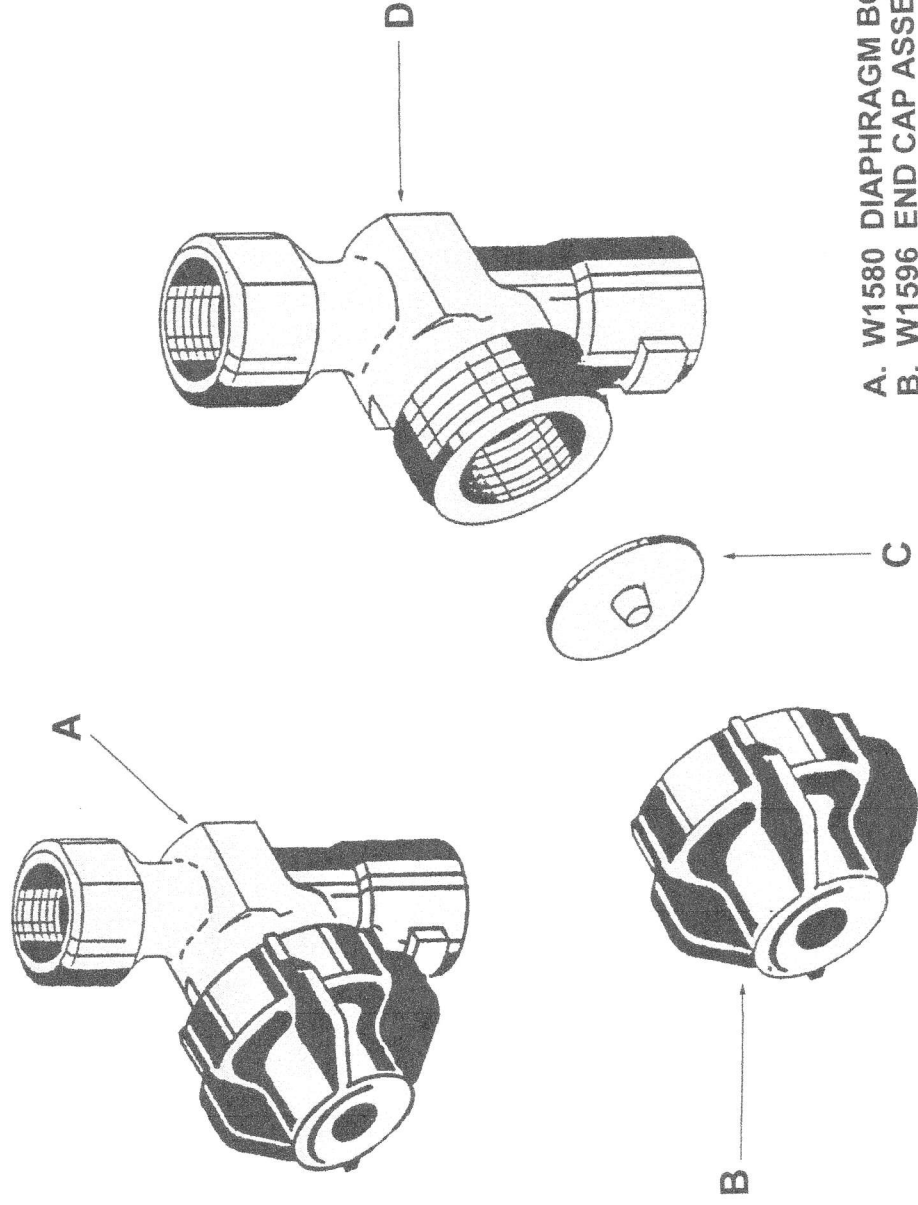
TANK ASSEMBLY

ITEM 47 NOT SHOWN
CONTENT LABEL

46



DIAPHRAGM BODY ASSEMBLY



QJP19011NVE
21950-10-NYE
CP21953-EPR
CP19012-NYB

- A. W1580 DIAPHRAGM BODY ASSEMBLY
- B. W1596 END CAP ASSEMBLY
- C. W1597 DIAPHRAGM EPDM RUBBER
- D. W1599 BODY NYLON

Parts List

Item Number	Quantity	Part Number	Description
1	2	W1032	Wheel 4"
2	2	W1033	Spring Dome Nut $\frac{3}{8}$ "
3	2	W1322	$\frac{1}{8}$ " x $\frac{3}{4}$ " Split Cotter Pin
4	4	W1422	Headed Nylon Bush No. 39
5	2	W1113	Dowel Pin - Drive
6	2	W1030	Wheel 12"
7	2	W1031	Spring Dome Nut $\frac{1}{2}$ "
8	1	W1491	Drive Axle
9	1	W1482	Frame
10	1	W1069	Outlet Securing Clip
11	4	W1043	M4 Nut
12	4	W1068	M4 Spring Washer
13	1	W2056	Pump
14	1	W1492	Free Wheel Axle
15	2	W1581	Nozzle Cap CP25599-1-NYB
16 Red	2	W1574	Nozzle TF.VP 2.0 Red
16 Grey	2	W1575	Nozzle TF.VP 3.0 Grey
17	2	W1568	Seal 19438 - EPR
18	2	W1100	Nozzle Strainer
19	2	W1580	Diaphragm Body Assembly QJP 19011-NYB
20	2	W1123	$\frac{3}{8}$ " BSP(M) x $\frac{3}{8}$ " Hose Tail Elbow
21	6	W1223	Stainless Stepless Clamp 18.5
22	1	W1609	Tube $\frac{3}{8}$ " ID x $\frac{1}{8}$ " x $2\frac{3}{4}$ " Long
23	1	W1125	$\frac{3}{8}$ " Equal Hose Tail Tee
24	1	W1489	Tube $\frac{3}{8}$ " ID x $\frac{1}{8}$ " x 5" Long
25	1	W1165	$\frac{5}{8}$ " to $\frac{3}{8}$ " Hose Tail
26	2	W1055	Stainless Stepless Clamp 24.1
27	1	W1488	Tube $\frac{5}{8}$ " ID x $\frac{1}{8}$ " x 5" Long
28	2	W1096	Stainless Stepless Clamp 22.6
29	2	W1005	Elbow
30	2	W1004	'O' Ring Elbow
31	1	W1493	Tube $\frac{5}{8}$ " ID x $\frac{1}{8}$ " x 6" Long
32	1	W1279	Cap and Liner $\frac{1}{2}$ " BSP
33	1	W1494	Tube $\frac{3}{8}$ " ID x $\frac{1}{8}$ " x $5\frac{1}{2}$ " Long
34	1	W1483	Top Handle
35	8	W1130	M6 x 35 Hex Head Set Screw
36	1	W1537	Bottom Handle
37	16	W1036	M6 Plain Washer
38	4	W1037	M6 Wing Nut
39	4	W1041	M6 Nut
40	1	W1421	Tank Cap and Collar
41	1	W1155	Tank Complete (Drilled)
42	1	W1589	Decal Label
43	2	W1092	Tank Connector $\frac{1}{2}$ " BSP (Machined)
44	1	W1274	Street Elbow $\frac{1}{2}$ " BSP
45	1	W1162	$\frac{1}{2}$ " BSP (F) Ball Valve (RB175)
46	1	W1156	Filter
47	1	W1582	Content Label - Not Shown

W2070 Nozzle assembly consists of numbers 15,17,18,19,20 right or left hand
W2071 Tank assembly consists of numbers 41,42,43,44,45,47

Trouble shooting guide for Walkover Sprayers

Faults	Action to take
1. Nozzles failing to spray together.	<p>Check that the diaphragm control valve units are not over tightened. Slacken all control valve units and retighten finger tight, just stopping leaks when operating the machine.</p> <p>Diaphragm control valves should never be over tightened</p>
2. Nozzles failing to spray.	<p>Check your walking speed. You could be walking too slow to operate the unit.</p> <p>Taps in off position.</p> <p>Nozzle strainer or inline filter blocked.</p> <p><i>Air Lock.</i> Unscrew one diaphragm control valve unit, push or pull the machine until liquid flows. Tighten diaphragm control valve as in 1 above. Do not over tighten.</p> <p><i>Blocked Nozzle.</i> Remove nozzle cap by turning the cap one half turn anti-clockwise. Clean nozzle or replace. Replace cap and try machine again.</p>
3. Blocked tubes or tank.	<p>Remove diaphragm control valves and nozzle caps. Disconnect a convenient tube joint. Using the water pressure from a garden hose, force blockage through the system, increasing the water pressure as necessary. Reassemble when blockage is clear.</p>
4. Drop in pressure.	<p><i>Leak from pump.</i> Remove the pump from the machine and return to dealer for repair.</p> <p><i>Worn Pump.</i> If the pressure drops as your walking speed increases the pump is worn. Replace the pump.</p>

Faults	Action to take
4. Drop in pressure....continued	<p><i>Leak in pipe work or at pipe joints.</i> Replace pipe tube as necessary. Tighten or replace pipe clips as required.</p> <p><i>If pneumatic wheels fitted.</i> Check that the wheel is not spinning on the axle. Tighten the wheel nut as necessary.</p> <p>Change to a larger type nozzle</p>
5. Streaking - uneven spray pattern.	<p><i>Blocked or damaged nozzle.</i> Remove as in 2 and clean or replace.</p> <p><i>Material build up on nozzle.</i> Clean nozzle cut out, with stiff card.</p> <p><i>Nozzle incorrectly aligned.</i> Release nozzle cap by turning the cap one half turn anti-clockwise, realign nozzle and retighten the cap.</p> <p><i>Mixed nozzles.</i> You may have different nozzles fitted. Refit matching nozzles as required.</p>
<p><i>Machines fitted with a tap.</i></p> <p>6. Machine still sprays when the tap is turned off.</p>	<p>The return tube to the tank is blocked. Remove and flush with garden hose to clear blockage.</p> <p>If the unit is being towed, the towing speed is too fast.</p>

These instructions also apply to Walkover SiteLine machines.

Recommended Dilution / Application Rates For Walkover Spraying Machines

Quantities of product to add to one full tank.

WALKOVER MODEL AND TANK CAPACITY	NOZZLE SIZE AND COLOUR	AREA COVERED BY ONE FULL TANK	MAXICROP MOSSKILLER LAWN TONIC (Allen Power Equipment Ltd. suggested total dose) SEE NOTES BELOW	MAXICROP SUPERGRASS Compound Fertiliser	MAXICROP TRIPLE Root Stimulant	VITAX GREEN-UP Lawn Feed and Weed	VITAX GREEN-UP Weedfree Lawn Weed Killer
GARDENER 10 (10 Litres)	28AN4 - BRASS	150 sq. yds. 125 sq. m	4½ pints 2.5 litres	2½ pints 1.5 litres	¼ pint 0.15 litres	17½ fl oz 500 ml	4¼ fl oz 125 ml
GARDENER 20 (20 Litres)	28AN4 - BRASS	300 sq. yds. 250 sq. m	9 pints 5 litres	5 pints 3 litres	½ pint 0.3 litres	35 fl oz 1 Litre	8 ½ fl oz 250 ml
GROUNDSMAN (25 Litres)	TF.VP-2.0 - RED	625 sq. yds. 525 sq. m	2½ gallons 10.5 litres	1½ gallons 6.5 litres	1 pint 0.5 litres	3½ pints 2.07 litres	18 fl oz 525 ml
	TF.VP-3.0 - GREY	333 sq. yds. 280 sq. m	1¼ gallons 5.5 litres	6 pints 3.5 litres	½ pint 0.25 litres	1 pt 17 fl oz 1.1 litres	9½ fl oz 280 ml
PROFESSIONAL (25 Litres)	TK.1.5 - BRASS	800 sq. yds. 670 sq. m	3 gallons 13.5 litres	1¾ gallons 8 litres	-	4½ pints 2.64 litres	1 pint 2fl oz 608.8 ml
	TF.VP-2.0 RED	600 sq. yds 500 sq. m	2¼ gallons 10 litres	1¼ gallons 6 litres	2 pints 1 litre	3⅓ pints 1.98 litres	16⅔ fl oz 500 ml
PADDOCKMASTER (25 Litres)	TF.VP-2.0 - RED	1000 sq. yds. 825 sq. m	3½ gallons 16.5 litres	2¼ gallons 10 litres	2 pints 1 litre	5½ pints 3.3 litres	1⅓ pints 836 ml
	TF.VP-3.0 - GREY	670 sq. yds. 550 sq. m	2½ gallons 11 litres	1½ gallons 6.5 litres	-	3¾ pints 2.2 litres	18½ fl oz 556.8 ml
FIELDMASTER (60 Litres)	TF.VP-2.0 - RED	1525 sq. yds. 1275 sq. m	5½ gallons 25.5 litres	3½ gallons 15.5 litres	-	8½ pints 5 litres	2 pints 2 fl oz 1.28 litres
	TF.VP-4.0 - WHITE	1025 sq. yds. 1000 sq. m	4½ gallons 20.25 litres	2½ gallons 12 litres	1 gallon 4.5 litres	5¾ pints 4 litres	1¾ pints 1 litre

NOTES:

For the best results 2 x ½ strength applications of Maxicrop Moss Killer & Lawn Tonic are recommended spaced 7 days apart.

CAUTION: DO NOT use Maxicrop Moss & Lawn Tonic on concrete patios or tarmac as it will leave a permanent stain. Maxicrop Moss Killer & Lawn Tonic is intended for use only on lawns.

Users Notes

GUARANTEE

Please return your completed Guarantee Card immediately upon receipt of your WALKOVER SPRAYER. This ensures that as a user you will automatically appear on our mailing list which is periodically used to advise WALKOVER owners of any new developments relating to the machine.

If there is any component, or components, manufactured by ALLEN POWER EQUIPMENT LTD that are found to be defective within 12 months from the date of purchase (or in the case of a machine used for hire purposes, 45 days), ALLEN POWER EQUIPMENT LTD undertake to replace the faulty component/components free of charge through authorised dealers.

The following are NOT covered under this Guarantee:

1. A NEW MACHINE - which has been subject to operation in excess of recommended capacities, misuse, negligence or accident, or has been altered or modified in a manner not authorised by ALLEN POWER EQUIPMENT LTD.
2. TRANSPORTATION CHARGES - to and from an authorised dealer.

ALLEN POWER EQUIPMENT LTD operates a policy of continual improvement and reserves the right to alter product specification without giving prior notice.

After each season, we recommend that you have your machine serviced by your dealer, preferably between October and January, to avoid delay at the start of the following season.

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	8820098.5	UK
	0178065	Europe
	P3566485.1-08	Germany
	4508248	USA

Patents pending in Australia

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	B369887	Australia
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	1065057	Ireland

Manufactured by:

ALLEN

ALLEN POWER EQUIPMENT LTD.
THE BROADWAY, DIDCOT, OXFORDSHIRE,
ENGLAND, OX11 8ES
TEL (01235) 515400 FAX (01235) 515401

WEB: WWW.ALLENPOWER.COM
EMAIL: SALES@ALLENPOWER.COM