

# Wallis & Stevens 7C

hand operated sprayer for cold bitumen emulsion

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## Operation Instruction and Spares Parts List for

## Wallis & Stevens 7C

direct from drum hand-operated sprayer  
for use with 205 litre drums of cold bitumen emulsion

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## GENERAL DESCRIPTION

The No. 7C "Direct" Sprayer needs no introduction as it is in use in all parts of the world and its success is confirmed by the many repeat orders received.

A surprisingly large area can be sprayed in a given time, conversely it is extremely useful for patching work.

The pump is of robust construction with minimum number of wearing parts.

The sprayer carriage accepts the standard type drum which can be placed horizontally or vertically according to the position of the drum outlet; no time is lost by having to transfer emulsion to a pressure tank.

Whilst having been primarily designed for spraying cold emulsion the machine will spray other suitable liquids including weed killer for which it has been highly successful and for which a special fine jet can be purchased.

## CONSTRUCTION

The sprayer is of metal construction throughout and although of substantial design and well braced and stayed there is no unnecessary weight, consequently it is convenient and easy to handle.

## WHEEL MOUNTING

Four 16" x 4" cushion tyred wheels are fitted revolving on rigid axles and a foot or hand operated brake which operates on the rear wheels to hold the machine on inclines and keep it steady whilst pumping. Simply place drum on sprayer as shown, insert suction pipe and sprayer direct from drum.

## PUMP

This is of special construction for handling cold bituminous emulsions - it is efficient and easy to operate. The pump is double acting with ball valves and air chamber is incorporated which has adequate capacity to ensure an even and balanced discharge. A grease lubricated renewable gland carries the pump spindle. The pump is easily removed from the carriage if attention is necessary and dismantling is a simple operation, large end and top covers giving easy access.

## STRAINER

Successful spraying is ensured by the fitting of a large capacity strainer. The strainer chamber through which the emulsion enters the pump is located to keep fully primed when operated is intermittent. The strainer is readily accessible for cleaning or replacement.

## SPRAYING NOZZLE

Of three piece construction and is very easy to dismantle and clean. Fitted with the standard 1/4" spray nozzle cap.

## EQUIPMENT

The sprayer is fitted with 10 feet of armoured spray hose and a 5 feet spraying lance with control cock and spraying nozzle.

A toolbox with hinged lid forms part of the construction.

## **OPERATING INSTRUCTIONS:**

### **MOUNTING DRUM - HORIZONTALLY**

Stand the Drum on end with outlet hole away from the Sprayer. Back the Sprayer against the Drum. Push the top of the Drum towards the Sprayer allowing the Drum and Sprayer to slip until one end of the Drum is resting on the Sprayer frame and the other end on the ground. The drum can then be slid along the frame.

### **MOUNTING DRUM - VERTICALLY**

Stand the Drum on end with outlet hole downwards and towards the sprayer. Proceed as above, lifting end off the ground, but now turn the Drum into a vertical position on frame.

### **SUCTION COUPLING - AT REST**

The suction pipe should be at right angles to the sprayer with the “coupling pipe” in “coupling cup”, and with the “drum pipe” placed over the pipe rest provided at side of machine.

### **SUCTION COUPLING - IN OPERATION**

Having placed Emulsion Drum in position, release coupling by pressing down, lift off suction pipe, insert in drum and in coupling cup, press down and swing “clamp” into position.

### **IMPORTANT - OPEN SPRAY CONTROL COCK BEFORE COMMENCING TO PUMP**

### **SUCTION COUPLING - ON CEASING SPRAYING**

Press down and release “clamp”, slightly raise pipe, pause, and allow to drain into “cup”; then lift from drum and put back to “rest”, the other end in coupling cup.

### **SUCTION COUPLING - CLEANING**

Keep the coupling and coupling cup clean - wash out with oily cleansing liquid, particularly when finishing spraying.

### **STRAINER**

The Strainer is easily accessible and should be kept clean. The Strainer cover (with vertical pipe) is readily removed by undoing three wing nuts. A renewable Gasket is provided. Keep the cover tight.

### **PUMP**

Keep the Pump Gland packed and well lubricated. Do not drain the Pump except in frosty weather. At night, or when not in use keep the strainer cover in place with the Suction pipe placed on the pipe rest.

*NOTE - Should the Pump Plunger be withdrawn, separate the Pump Leathers when replacing and insert one at each end of the Pump Barrel.*

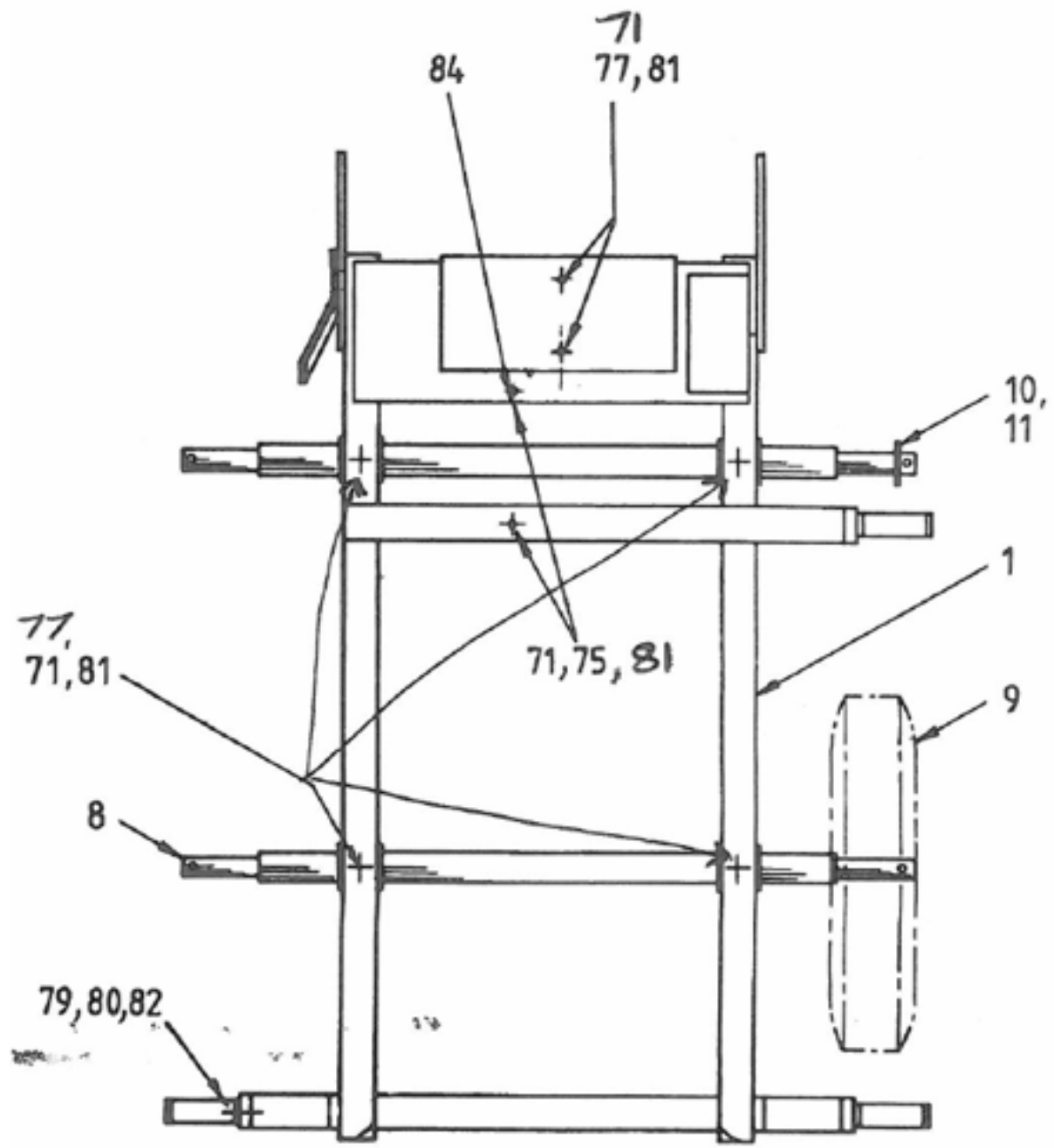
## **CLEANING**

Keep the Pump Gland packed and well lubricated. With an oily cleansing liquid, such as a paraffin and lubricating oil mixture. A soluble solvent should be circulated through the system into a can containing the cleaning liquid and operating the pump with the spray nozzle held over the can. When sufficiently circulated, the liquid can be kept in the can for future use.

## **JETS**

Three (3) Jet sizes are available 1/4" is fitted as standard, with optional 5/16" and 3/8" available to accommodate varying applications

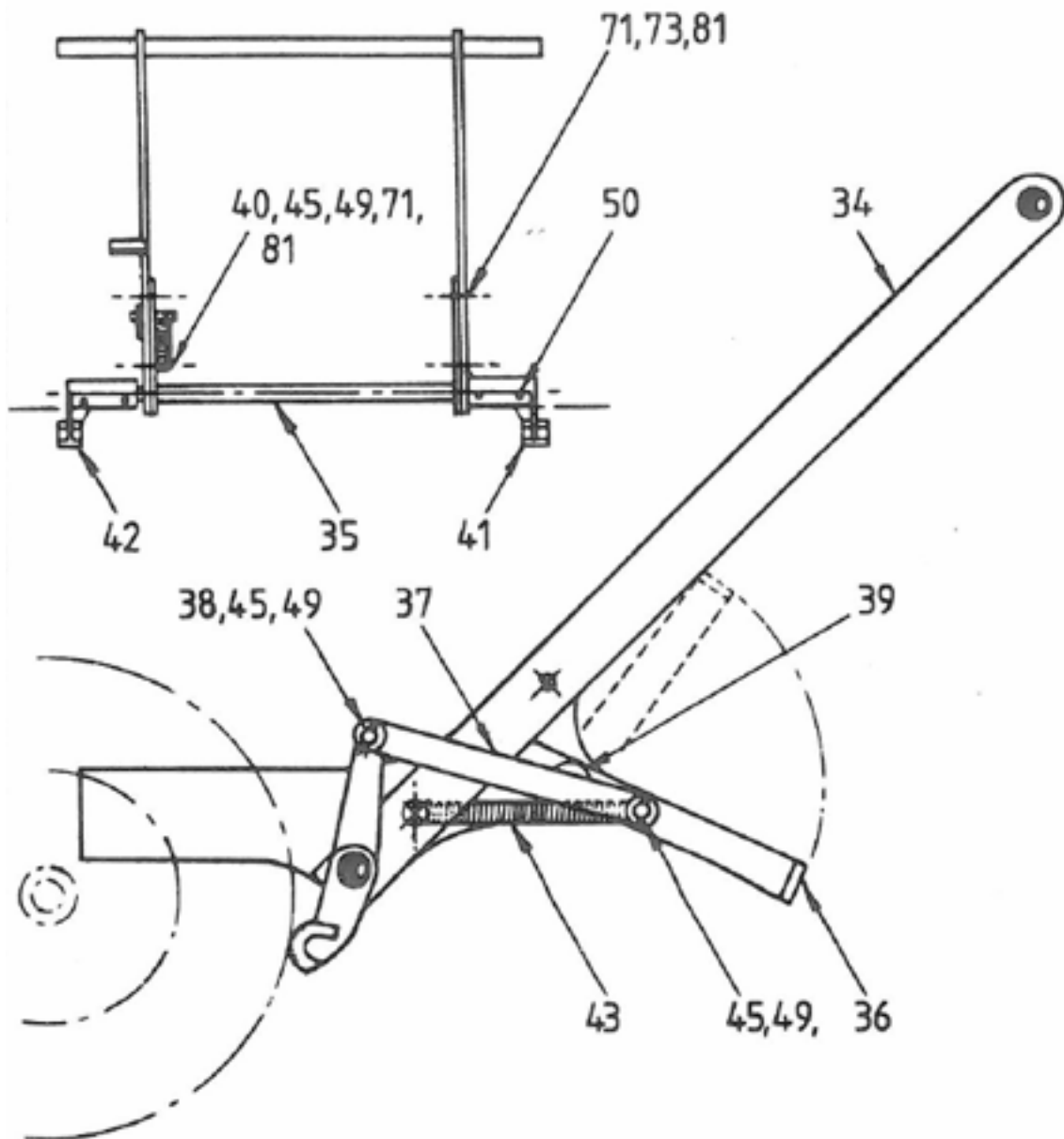
GROUP 1 - CHASSIS



**GROUP 1 - CHASSIS**

ILLUSTRATION No.	Part No.	Description	Quantity
1	880 19616	SUBFRAME	1
8	880 13241	AXLE	2
9	880 52533	CUSHION TYRED ROAD WHEEL	4
10	07 82 0158	WASHER	4
11	07 27 0457	SPLIT PIN	4
71	07 16 0157	NUT	8
75	07 05 0755	BOLT	2
77	07 05 0955	BOLT	6
79	07 38 1154	SETSCREW	1
80	07 16 0156	NUT	1
81	07 83 0157	LOCK WASHER	4
82	07 83 0156	LOCK WASHER	1
84	07 82 0155	WASHER	2

GROUP 2 - BRAKE

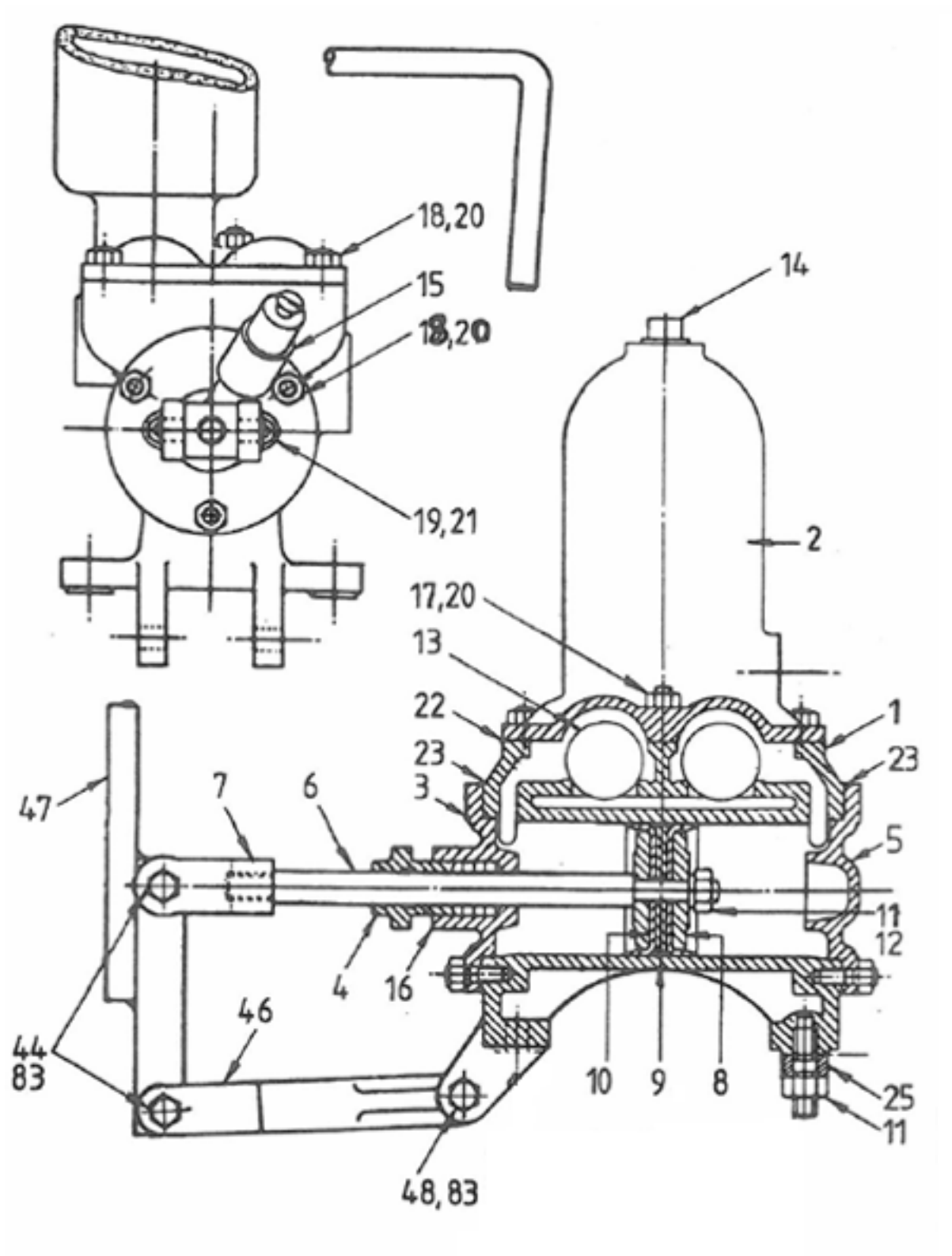




**GROUP 2 - BRAKE**

ILLUSTRATION No.	Part No.	Description	Quantity
34	880 13350	HANDLE	1
35	880 13345	BRAKE SPINDLE C/W LEVER	1
36	880 13349	BRAKE FOOT LEVER	1
37	880 13343	BRAKE LINK	1
38	880 13348	PIN FOR BRAKE SHAFT LEVER	1
39	880 13347	PIVOT PIN FOR FOOT LEVER	1
40	880 15926	BOLT FOR SPRING ATTACHMENT	1
41	880 19379	BRAKE LEVER (R.H)	1
42	880 19378	BRAKE LEVER (L.H)	1
43	880 52391	TENSION SPRING	1
45	07 27 0253	SPLIT PIN	3
49	07 84 0355	WASHER	3
50	07 42 0256	SETSCREW	4
71	07 16 0157	NUT	4
73	07 38 1155	SETSCREW	3
83	07 83 0157	LOCKWASHER	4

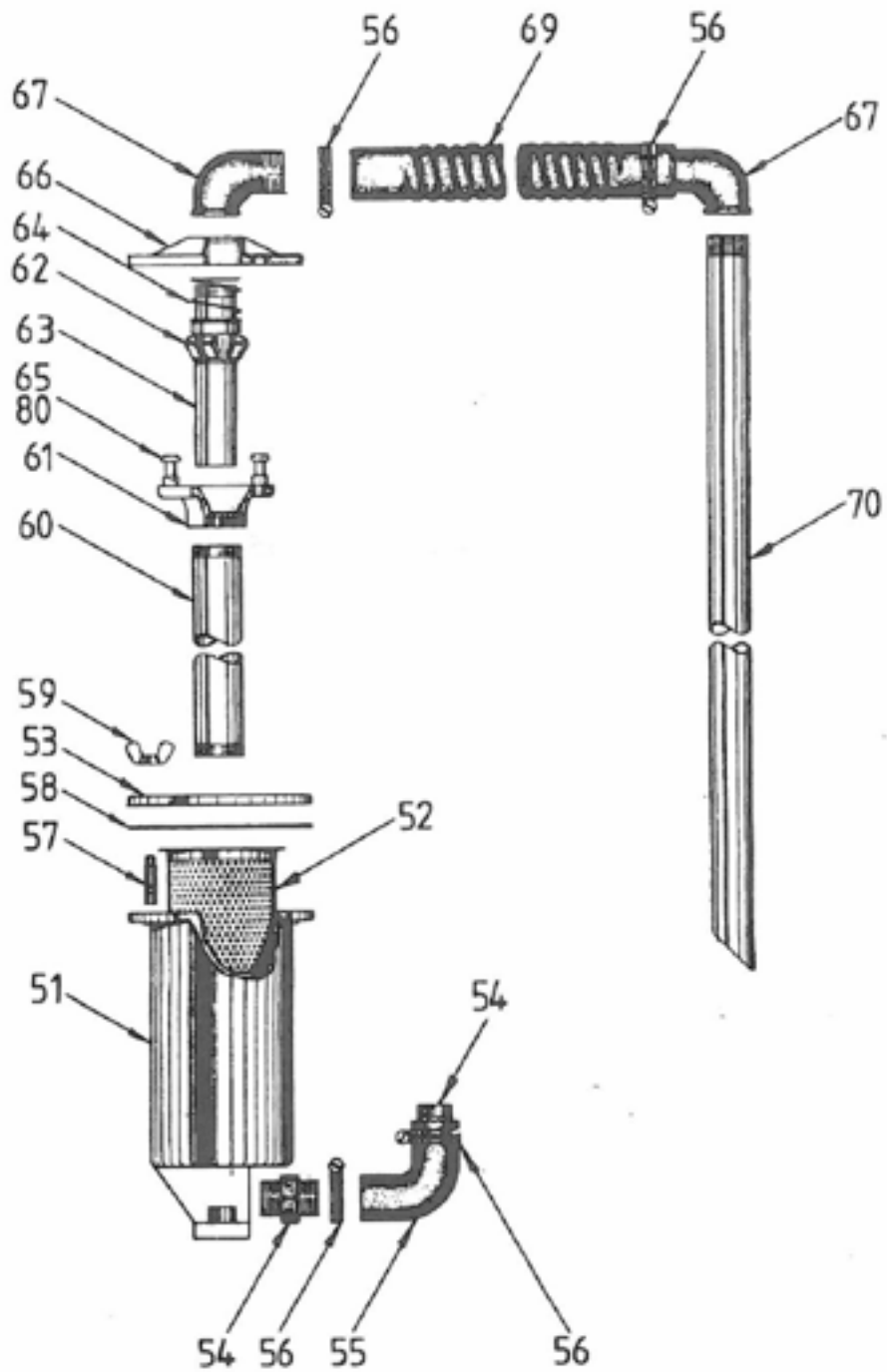
GROUP 3 - PUMP



**GROUP 3 - PUMP****PUMP ASSEMBLY (880 19392) IS COMPLETE COMPRISING ITEMS 1-25**

ILLUSTRATION No.	Part No.	Description	Quantity
1	880 12376	PUMP BARREL	1
2	880 13098	AIR VESSEL	1
3	880 13177	FRONT CYLINDER COVER	1
4	880 13201	PUMP ROD GLAND	1
5	880 13178	BACK CYLINDER COVER	1
6	880 13242	PUMP ROD	1
7	880 13179	PUMP ROD JOINT	1
8	880 13181	CUP LEATHER WASHER	2
9	880 13183	PLUNGER CENTRE PLATE	1
10	880 52186	CUP LEATHER	2
11	07 21 0651	NUT	2
12	07 85 0156	LOCKWASHER	1
13	880 50564	STEEL BALL	4
14	97 10 0618	PLUG	1
15	880 51913	GREASE LUBRICATOR	1
16	880 52183	PACKING	1(MTR)
17	07 66 0753	STUD	1
18	07 66 0453	STUD	10
19	07 66 0652	STUD	2
20	07 21 0451	NUT	11
21	07 21 0351	NUT	2
22	88052081	TOP COVER JOINT	1
23	88052082	CYLINDER COVER JOINT	2
24	07 66 0855	STUD	1
25	07 16 0158	NUT	1
44	07 05 1255	BOLT	2
46	880 13180	PUMP HANDLE LINK	1
47	880 12971	PUMP HANDLE	1
48	07 05 1655	BOLT	1
83	07 14 0157	NUT	3

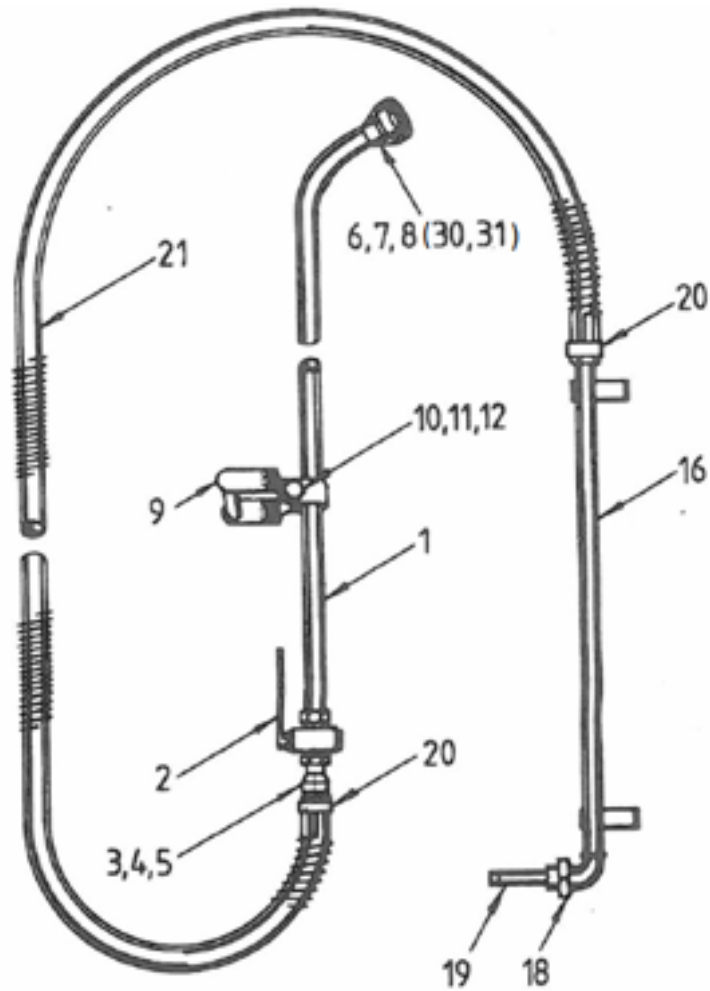
GROUP 4 - STRAINER AND SUCTION PIPE



**GROUP 4 - STRAINER AND SUCTION PIPE**

ILLUSTRATION No.	Part No.	Description	Quantity
51	880 12992	STRAINER CASING	1
52	880 51712	STRAINER	1
53	880 19627	STRAINER COVER	1
54	97 10 0577	NIPPLE FOR SUCTION PIPE	2
55	880 50774	RUBBER BEND	1
56	07 18 0160	HOSE CLIP	4
57	880 11230	STUD FOR STRAINER CASING	3
58	880 52087	STRAINER COVER JOINT	1
59	880 51574	WING NUT	3
60	880 13313	STRAINER COVER PIPE	1
61	880 19626	CUP (SUCTION PIPE CPLG)	1
62	880 50773	CONE WASHER (SUCTION PIPE CPLG)	1
63	880 13314	SUCTION PIPE COUPLING	1
64	880 52400	SPRING (SUCTION PIPE CPLG)	1
65	07 05 0554	BOLT	2
66	880 13311	CLAMP	1
67	97 10 0135	ELBOW	2
69	880 50771	SUCTION HOSE	1
70	88013270	SUCTION PIPE	1
80	07 16 0156	NUT	2

GROUP 5 - SPRAY PIPE LINE



**GROUP 5 - SPRAY PIPE LINE****SPRAY LANCE ASSEMBLY COMPLETE (880 52810) COMPRISES ITEMS 1-12**

ILLUSTRATION No.	Part No.	Description	Quantity
1	880 13271	SPRAYER PIPE	1
2	880 50346	CONTROL COCK	1
3	880 51088	NIPPLE	1
4	97 10 0387	REDUCING SOCKET	1
5	880 13274	SPRAYER PIPE NIPPLE	1
6	880 11479	SPRAYER PIPE BODY	1
7	880 19383	SPRAYER NOZZLE CAP (1/4" HOLE)	1
8	880 11481	SWIRLER	1
9	880 13351	SPRAYER PIPE HANDLE	1
10	07 05 0554	BOLT	1
11	07 16 0156	NUT	1
12	07 83 0156	LOCKWASHER	1
16	880 19628	DELIVERY PIPE	1
18	97 10 0157	ELBOW UNION	1
19	880 19625	DELIVERY PIPE (SHORT)	1
20	07 18 0158	HOSE CLIP	2
21	880 50772	SPRAY HOSE	1
		(OPTIONAL)	
30	880 19384	SPRAY NOZZLE CAP (5/16" HOLE)	1
31	880 19385	SPRAY NOZZLE CAP (3/8" HOLE)	1