



AIR BLAST SPRAYERS

**Assembly, Operation &
Parts Manual For
Model GSN-100FM,
GSN-150FM & GSN-200FM**

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GEARMORE AIR BLAST SPRAYER

INTRODUCTION

We welcome you as an owner of the Gearmore 3-point hitch sprayer. Before you read on to the operation and maintenance of the sprayer, please read the following general information.

Power Source - The sprayer is designed to mount to any 540 R.P.M. tractor with a 3-point hitch. The horsepower required will vary depending on the pressure setting of the control valve.

Transmission - Your sprayer is equipped with a special single speed transmission with neutral. Speed 1 and neutral are indicated by the decal on the machine. Neutral is when you want to use your sprayer for handgun spraying and thus the fan will not be turning.

Pump - The pump on the sprayer is a diaphragm pump. Pistons power the diaphragms that pump the liquid. The unit has protection against corrosion, as the valves are stainless steel.

Tank - The tank comes with a mechanical agitation system. It also has a sump so the tank can be completely drained.

Blower - Air is supplied by an 8 blade propeller. The fan is made of a special high strength plastic alloy and precision balanced for smoother operation. The whole fan assembly is protected by heavy wire mesh screening. However, special care should be taken when working around the blower.

Strainers - The sprayer is equipped with three strainers. A large filter screen is located under the tank cover. A main strainer located by the side of the pump and a strainer screen in every nozzle assembly. All strainers are easily accessible for cleaning.

Nozzles - The sprayer is equipped with special ceramic nozzle tips that can be changed for different gallonage requirements. The nozzles can be shut-off individually by turning 90 degrees.

TO OPERATE SPRAYER

1. Connect sprayer to tractor 3-point hitch.
2. Connect up the P.T.O. driveshaft, after you have checked to make sure the driveshaft is not too long.
3. Check strainer screen to make sure it is clean.
4. Check strainer shut-off valve, making sure the handle is in the open position.
5. Select transmission speed.
6. Refer to calibration page to calibrate the sprayer. Set regulator pressure as required. Important - The pressure regulator adjusting knob must be unscrewed (turned to left) as far out as possible before operating sprayer. Then gradually screw in (turn to right) to desired pressure. Failure to operate in this manner could cause a sudden surge, which could damage the sprayer. By sliding the control handle left towards the pressure gauge you can turn the valve 1/2 a turn to put the valve in bypass position. This would be used for mixing chemicals etc. It takes the pressure off the pump and sends the liquid back to the tank. Turn the valve in the opposite direction for spraying. By sliding the handle away from the pressure gauge you can adjust the pressure setting by turning the valve.
7. Engage tractor P.T.O and run for a couple of minutes to make sure the agitator paddles have mixed the chemicals thoroughly. Last, turn the control valve handles to the position required. Either right hand, left hand or both sides spraying.

Remember, it is always best to make a practice run with water to be sure you have the correct rates and coverage.

LUBRICATION

1. Driveshaft - The driveshaft comes not greased, so must be done before sprayer is put into use. After that, grease every 50 hours. It is also necessary from time to time, to untelescope the driveshaft to clean and re-grease tubings.
2. Transmission - Observe the sight gauge, and install 90 weight transmission oil when necessary.
3. Pump - The clear oil reservoir should be filled to the indicator mark. If oil is low, add engine oil, non-foaming, non-detergent 30 weight oil. The pump oil must be changed after the first 100 running hours and then at the end of every working season. See pump page for more details.
4. Mechanical Agitator - The large brass hex nut on the end of agitator shaft has packing inside to prevent leaks. In addition, a grease zerk is provided and should be greased every 10 hours. If leaking occurs after greasing, the packing may have to be replaced.

GENERAL MAINTENANCE

Carefully follow all instructions as stated in this operators manual. This includes lubrication, maintenance and operation of the sprayer. The sprayer was designed and built for years of reliable service if properly cared for. However, an air blast sprayer is a high R.P.M. machine, thus daily attention is required.

1. Check all bolts for tightness.
2. Check sprayer for leaks.
3. Check agitator belt for operation.

CLEANING AND STORAGE

1. Wash and flush out sprayer after completion of each phase of your spraying program.
2. Flush out sprayer when changing chemicals if there is a possibility of incompatibility.
3. Clean sprayer very thoroughly before storing at the end of the spraying season. If you are in a cold climate, final rinse should be with a sufficiently concentrated anti-freeze to prevent freeze-up in areas that were not thoroughly drained.
4. Check sprayer over for needed repairs before time to spray again.
5. Preparing the sprayer for use in the Spring means completion of all needed repairs, installation of all drain plugs and checking sprayer for leaks with a tank of water.

SAFETY TIPS

- * Sprayer should be operated only by qualified persons.
- * Always fill sprayer slowly to avoid spillage.
- * When starting sprayer, maintain a safe distance from moving parts.
- * Never run P.T.O. at speeds in excess of 540 R.P.M.
- * Do not make adjustments when sprayer is running, unless specifically recommended.
- * Never leave sprayer unattended while it is running.
- * Keep hands, feet and clothing away from all moving parts.
- * Handle chemicals carefully; follow the manufacturer's directions for mixing and applying chemicals.

GENERAL SAFETY INFORMATION

- * Use of pressure relief device on the discharge side of pump is required to prevent damage from pressure build up if the discharge is closed or blocked while the power source is still running.
- * **WARNING:** DO NOT PUMP FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES. THE PUMP SHOULD BE USED ONLY WITH LIQUIDS COMPATIBLE WITH THE PUMP COMPONENT MATERIALS. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY.
- * Do not operate pump above recommended R.P.M.
- * Do not pump at pressure higher than the maximum recommended for the pump (see Specifications).
- * Operate pump between 45 and 145 F liquid temperatures.
- * Make certain that the power source conforms to the requirements of your equipment.
- * Provide adequate protection in guarding around the moving parts such as the shaft and pulleys.
- * Disconnect power before servicing.
- * Release all pressure within the system before servicing any component.
- * Drain all liquids from the system before servicing.
- * Secure the discharge lines before starting the pump. An unsecured discharge line may whip, causing personal injury and/or property damage.
- * Check hoses for weak or worn condition before each use. Make certain that all connections are tight and secure.
- * Periodically inspect the pump and the system components. Perform routine maintenance as required (see Maintenance section).
- * Do not operate a gasoline engine in an enclosed area. Be sure the area is well ventilated.
- * Use only pipe, hose and fittings rated for maximum rated pressure of pump or pressure at which pressure relief valve is set. Check with local supplier for proper pressure rating. Do not use used pipe!
- * Do not use these pumps for pumping water or other liquids for human or animal consumption.

PUMP MAINTENANCE

The pump is serviced, tested, and ready for use. Nevertheless, before starting the sprayer we advise checking the oil level.

The oil level should be filled to the mark on the plastic tube.

When adding oil, remove cap and fill to level mark with SAE 30 weight engine oil.

CHANGING THE OIL

1. Remove the pump and drain the oil, by turning the pump upside. To do this remove the filler cap and turn the P.T.O. shaft by hand.
2. Fill the crankcase with mineral (flushing) oil to wash all internal parts. Then drain pump again.
3. Add new oil and at the same time turn the P.T.O. shaft by hand. When the correct oil level has been reached continue to turn the shaft until all the air bubbles in the oil have disappeared.

DIAPHRAGM AND VALVE REPLACEMENT

I. Valve and O Ring Replacement.

1. Occasionally debris can cause the valves to not seat properly or damage the O-rings. To check for this problem follow these steps:
2. Remove the check valve manifold. (See parts list for your model.) With manifold removed, valves can readily be removed and checked for debris or wear.

To replace valves or O-rings, refer to Parts List for appropriate kits.

II. Diaphragm Replacement

1. Drain the oil from the pump.
Rotate the shaft to remove excess oil.
2. Remove the pump heads.
3. Use a box wrench to remove the diaphragm retaining bolt, support washer and diaphragm.

To replace diaphragms order appropriate repair kit. See Parts List.

4. Turn the crankshaft to bring the piston to its down-stroke and seat the new diaphragm into the sleeve groove. Install retaining washer and tighten bolt.
5. Refill crankcase with 30W oil. Rotate the shaft to distribute oil and fill to proper level.

TROUBLESHOOTING

<u>PROBLEM</u>	<u>CAUSE</u>	<u>REMEDY</u>
The pump does not draw water.	One or more valves are seating improperly. Suction line is plugged or collapsed. Clogged strainer.	Examine the valve seatings and clean them. Examine suction line. Clean strainer.
Pressure gauge fluctuates excessively.	The pump is sucking in air through the suction union or air has not been entirely evacuated from the pump.	Examine the suction hose and make sure it is firmly secured. Run the pump with the outlet hose open to evacuate air from pump.
The liquid flow is irregular.	One or more valves are seating improperly.	Examine the valve seatings and clean them.
Output drops and the pump is noisy.	Oil level is too low.	Add oil to correct level (halfway up the sight tube).
Oil comes out of the discharge port.	One or more diaphragms split.	Drain the pump of oil. Dismantle the heads and fit new diaphragms. Fill to correct oil level with Motor oil (30W).
Water is pumped at little or no pressure.	The sealing valve on the pressure control valve is worn.	Renew washer and, if necessary, the valve seat.

FORMULA AND RATE CHART FOR CALIBRATING GEARMORE AIR BLAST SPRAYERS

These must be known:

- (1) Tree spacing in feet (swath width).
- (2) Tractor speed in feet per minute.
- (3) Gallons per acre desired.

Note: (a) 1 acre = 43,560 sq. ft.
 (b) 1 MPH = 88 ft/min.

Tree spacing ___ ft. x tractor speed ___ ft/min. x applic. rate ___ gal/acre ÷ 43,560 = G.P.M.

Divide G.P.M. by number of sprayer nozzles to determine G.P.M. per nozzle. Now choose correct nozzle disc and pressure setting from charts. Charts give G.P.M. per nozzle disc.

CALIBRATION FORM

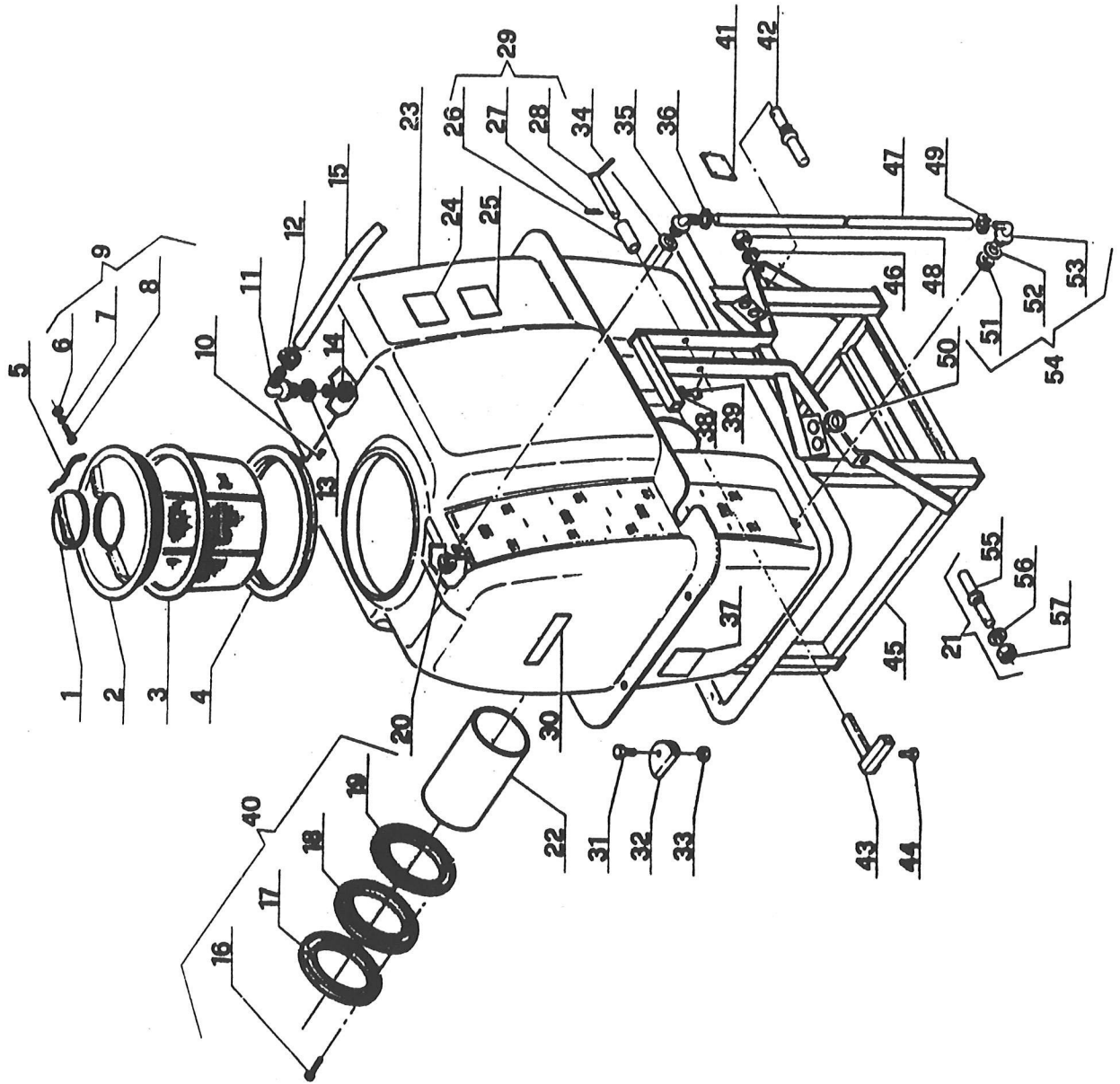
Tree spacing _____ ft.
 Tractor speed _____ ft/min.
 Application rate _____ gal/acre

Tree spacing ___ ft. x tractor speed ___ ft/min. x applic. rate ___ gal/acre ÷ 43,560 = G.P.M.

Next: G.P.M. _____ - number of nozzles _____ = _____ G.P.M. per nozzle
 Refer to chart for: Nozzle disc # _____ Swirl plate _____
 Pressure setting _____ P.S.I.

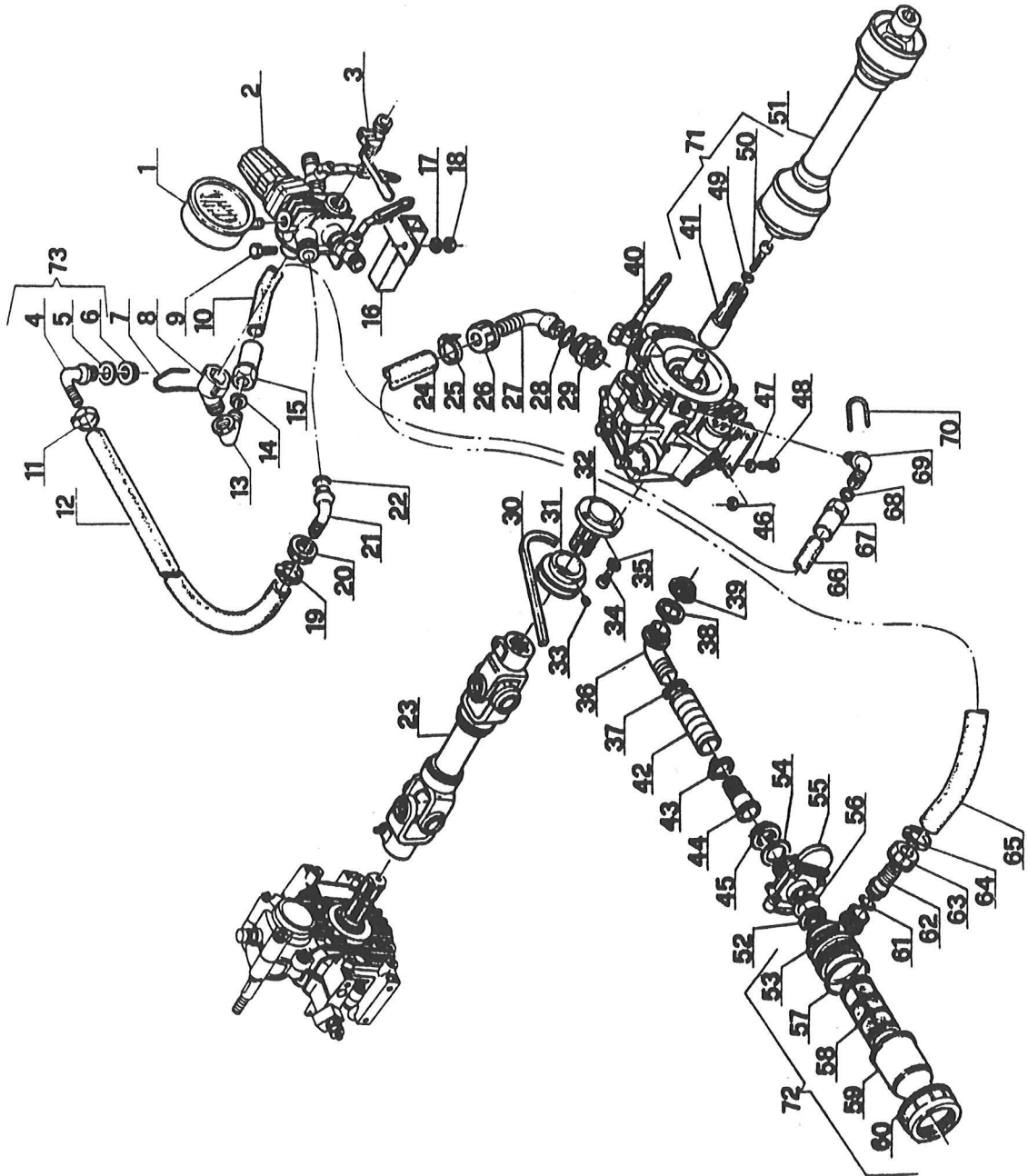
RATE CHART FOR SINGLE NOZZLES, WITH SMALL PINK DISC

DISC SIZE	SWIRL PLATE	Pressure (P.S.I.)										
		50	75	100	125	150	175	200	250	300	350	400
0.8	2 hole	.16	.18	.20	.22	.24	.26	.28	.30	.34	.36	.38
1.0	1.0	.25	.30	.36	.40	.44	.48	.51	.58	.64	.69	.72
1.2	1.0	.40	.49	.57	.63	.69	.74	.78	.87	.97	1.04	1.11
1.5	1.2	.55	.64	.74	.81	.90	.96	1.02	1.12	1.22	1.31	1.37
1.8	1.5	.76	.94	1.09	1.21	1.32	1.39	1.47	1.61	1.74	1.87	1.99
2.0	1.8	.92	1.15	1.37	1.50	1.65	1.73	1.95	2.11	2.37	2.54	2.63
2.2	2.0	1.02	1.27	1.53	1.67	1.82	1.96	2.11	2.35	2.57	2.77	2.94
2.5	2.2	1.57	1.81	2.05	2.26	2.45	2.63	2.81	3.03	3.29	3.53	3.72



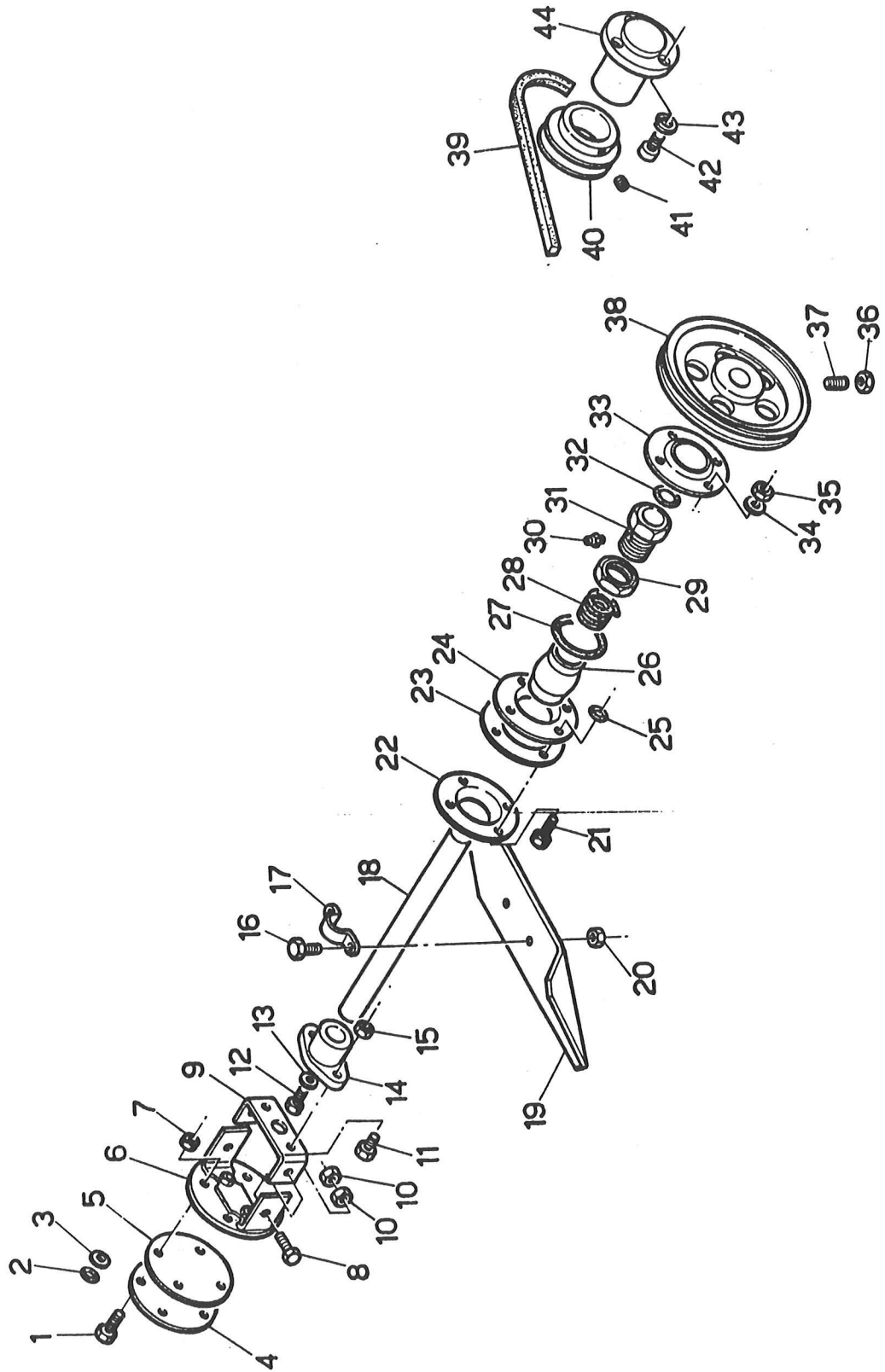
<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	0600007	Vent Lid Tank
2	1	0600020	Tank Cover GSN100FM
2	1	0600006	Tank Cover GSN150-200FM
3	1	0600019	Tank Filter GSN100FM
3	1	0600005	Tank Filter GSN150-200FM
4	1	0600054	Tank O-Ring GSN100FM
4	1	0600014	Tank O-Ring GSN150-200FM
5	1	1400007	Plastic Chain D.3.5 L=300
6	1	1800177	SS Nut M5
7	9	1800113	SS Washer 6.4x12.5
8	1	1800003	SS Bolt TPS M5x12
9	1	0100429	Complete Cover GSN100FM
9	1	0100101	Complete Cover GSN150-200FM
11	1	1400062	Curve Connector D.20 1/2G
12	2	1500003	Strap Ring 18x25
13	1	1700001	Gasket 33x21x2
14	1	1400001	Ring Nut 1/2
15	1	1600174	Hose PVC 19x26 25 Bar L=1200
16	12	1800035	Bolt TE M 10x12
17	2	0600010	Flange D.160
18	2	0600003	Tank Gasket D.160
19	2	0600009	Threaded Flange D.160
20	2	0600050	Ring Nut
21	2	2100007	Complete Double Pin
22	1	0600076	Tank Tube D.160 L=230 GSN100FM
22	1	0600077	Tank Tube D.160 L=300 GSN150-200FM
23	1	0600074	Tank GSN100FM
23	1	0600075	Tank GSN150FM
23	1	0600094	Tank GSN200FM
24	1	2600001	Warning Label
25	1	2600002	Be Careful Label
26	1	2100008	Spacer 19.4x25.4x51
27	1	2100001	Pin R3
28	1	0100203	Pin D.18
29	1	0100504	Complete Pin D.18
30	2	2600015	Gearmore Label 220x75
31	4	1800072	Bolt TE M 10x80 GSN100-150FM
31	4	1800048	Bolt TE M 10x120 GSN200FM
32	4	0100206	Tank Washer
33	9	1800186	Self Lck Nut M 10
34	2	0600049	Gasket 17x27
35	2	0600048	Curve Connector 13
36	2	0600051	Strap Ring
37	1	2600007	Filter Label
38	5	1800131	Washer 11x30
39	2	1800063	Bolt TE M 10x20
40	2	0600011	Complete Flange
43	1	0100236	Valve Bracket
44	2	1800063	Bolt TE M 10x20
45	1	0100612	Frame GSN100FM
45	1	0100613	Frame GSN150FM
45	1	0100738	Frame GSN200FM
47	1	0600052	Tube 12x17 L=780
49	2	0600051	Strap Ring

<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
50	5	2900001	Rubber Gasket D.22
51	2	0600050	Ring Nut
52	2	0600049	Gasket 17x27
53	2	0600048	Curve Connector13
54	2	0600053	Complete Curve Connector13
55	2	2100022	Double Pin
56	2	2100020	Lock Washer Double Pin
57	2	2100021	Double Pin Nut

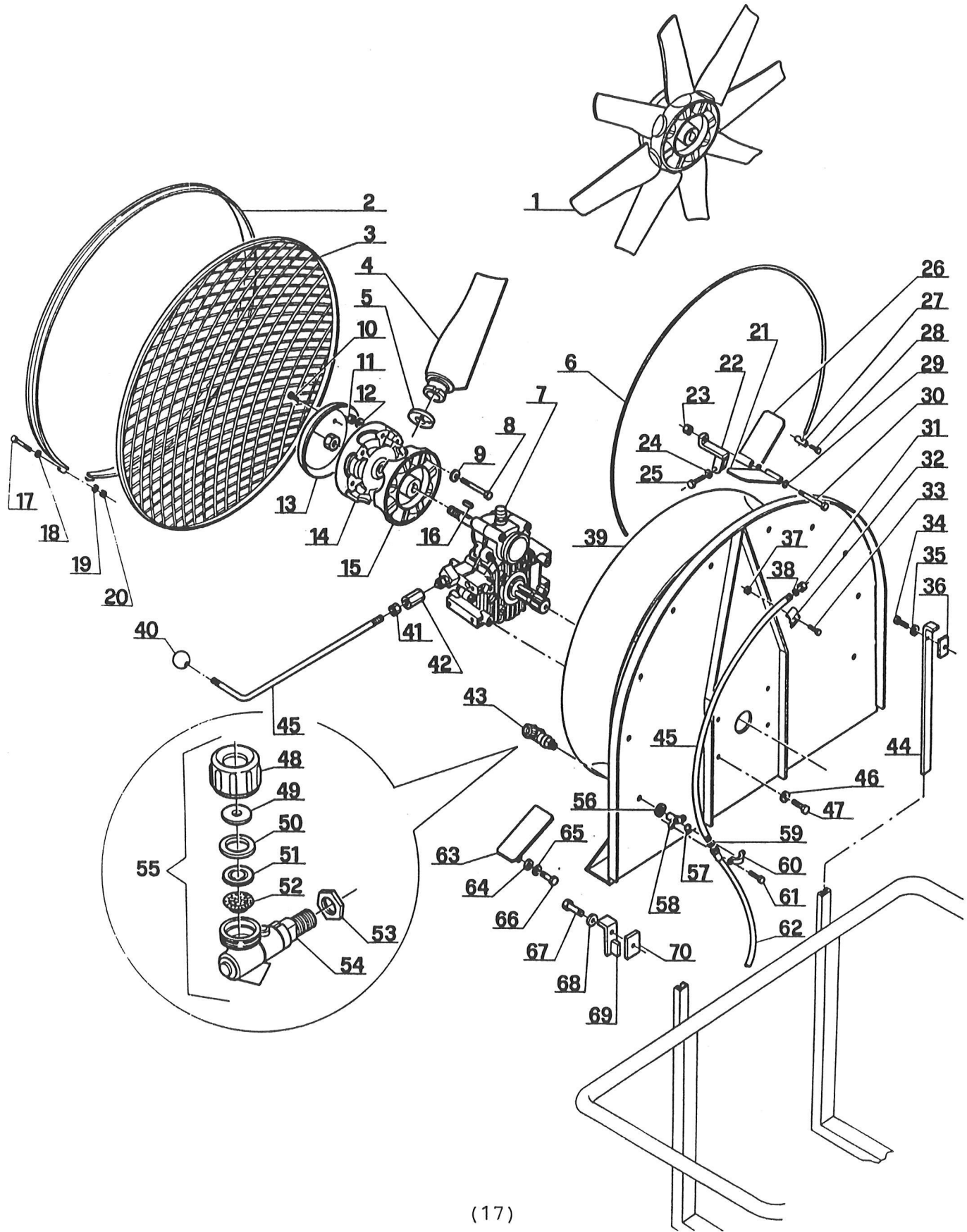


<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	550545	Gauge 40 Bar 1/4"
2	1	RM40S	Valve RM 40 I 2 Ways
3	2	30491	Cock RH 1/2-3/8
3	1	30492	Cock LH 1/2-3/8
4	1	1400062	Curve Connector D.20 1/2G
5	1	1700001	Gasket 33x21x2
6	1	1400001	Ring Nut 1/2
7	2	1040690	Fork
8	1	1040770	Junction RM40
9	2	1800021	Bolt TE M 8x20
10	1	1600172	Co. Hose PVC 13x24 100 Bar L=870 RA.3/4
11	2	1500003	Strap Ring 18x25
12	1	1600174	Hose PVC 19x26 25 Bar L=1200
14	2	1700025	OR D.22.2x1.2x3
15	2	1300004	Self Lck Connector 13x24 3/4
16	1	0100235	Valve Support
17	8	1800120	Washer 8.4x17
18	5	1800180	Nut M8
19	2	1500003	Strap Ring 18x25
20	1	0200047	Ring Nut
21	1	0200045	Connector D.18
22	1	0200060	OR D.18.72x2.62 T.3075
23	1	0900028	Cardan Shaft T30 LE400 GSN100FM
23	1	0900027	Cardan Shaft T30 LE470 GSN150FM
23	1	0900032	Cardan Shaft T30 LE525 GSN200FM
24	1	1600296	Hose Armovin D.30 L=850
25	4	1500004	Strap Ring 25x35
26	1	0200042	Ring Nut
27	1	0200043	Connector D.30
28	1	0200044	OR D.29x3
29	1	450120	Nipple 1" M - 1 1/4" M
30	1	2200025	Belt A22 GSN100FM
30	1	2200004	Belt A23 GSN150-200FM
31	1	2300002	Pulley 65 1 A/35
32	1	2400001	Grooved Shaft
33	1	1800290	Bolt Stei M 8x10
34	6	1800034	Bolt TCEI M 10x20
36	1	1400129	Connector D.30 1" GSN100FM
36	1	1400065	Curve Connector D.30 1" GSN150-200FM
37	4	1500004	Strap Ring 25x35
38	3	1700016	Gasket 45x33x3
39	1	1400024	Ring Nut 1"
40	1	AR503	Pump AR 503 AP SP SGC
41	1	1518	Cardan Junction
42	1	1600292	Hose Armovin D.30 L=150
43	4	1500004	Strap Ring 25x35
44	1	1400048	Connector D.30
45	2	1400013	Ring Nut 1" 1/4
46	9	1800186	Self Lck Nut M 10
47	5	1800131	Washer 11x30
48	12	1800036	Bolt TE M 10x25
49	1	1800123	Lock Washer 8.4x14.4

<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
50	1	1800026	Bolt TCEI M 8x35
51	1	0900007	Cardan Shaft W2300-710MM SC15
52	3	1700016	Gasket 45x33x3
53	1	1400066	Filter Body
54	2	1700012	OR D.31.89x26x65x2.62
55	1	1400094	Gate Valve MF 1" 1/4
56	3	1700016	Gasket 45x33x3
57	1	1700034	OR D.90x3.5
58	1	1400067	Filter
59	1	1400068	Filter Cover
60	1	1400069	Filter Rng Nut
61	2	1700012	OR D.31.89x26.65x2.62
62	1	1400048	Straight Connector D.30 GSN150FM
62	1	1400049	Curve Connector D.30 GSN100-200FM
63	2	1400013	Ring Nut 1" 1/4
64	4	1500004	Strap Ring 25x35
65	1	1600296	Hose Armovin D.30 L=850
66	1	1600172	Co. Hose PVC 13x24 100 Bar L=870 RA.3/4
67	2	1300004	Self Lck Connector 13x24 3/4
68	2	1700025	OR D.22.2x16.2x3
69	1	1040760	Pump Junction
70	2	1040690	Fork
71	1	0200090	Complete Cardan Junction "C"
72	1	1400050	Filter
73	1	1400114	Complete Curve Connector D.20



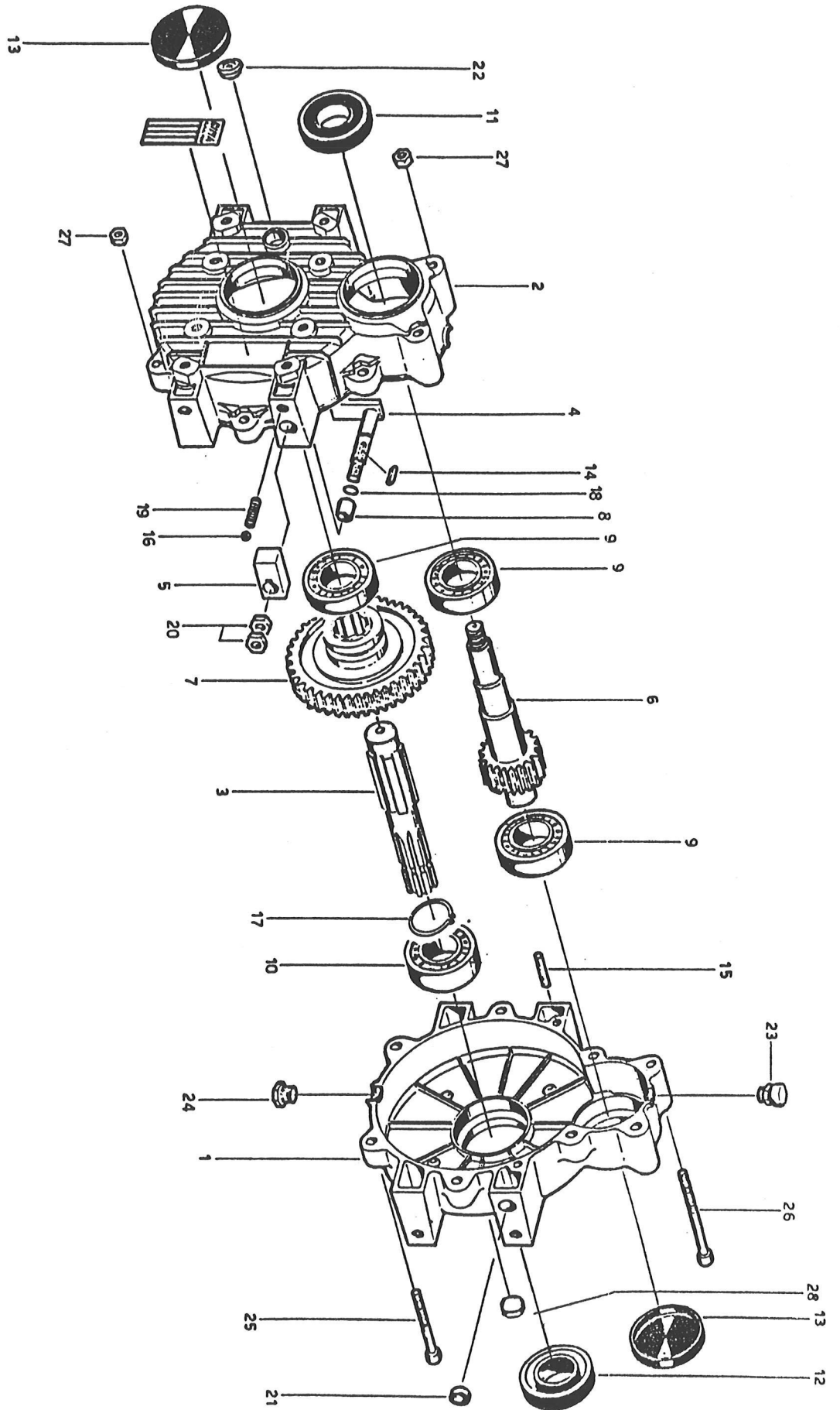
<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	12	1800012	SS Bolt TE M 6x25
2	8	1700005	OR D.8.84x5.28x1.78
3	9	1800113	SS Washer 6.4x12.5
4	1	0100039	SS Blind Flange
5	1	1700008	Gasket 80x3
6	1	0100044	Female Clamp
7	16	1800182	SS Nut M6
8	12	1800012	SS Bolt TE M 6x25
9	1	0100430	Male Clamp "A"
10	16	1800182	SS Nut M 6
11	12	1800012	SS Bolt TE M 6x25
12	1	1800079	SS Bolt TPSEI M 6x16
13	1	1800125	SS Washer 9x24
14	1	0100431	Shaft Support "A"
15	16	1800182	SS Nut M 6
16	2	1800010	SS Bolt TE M 6x16
17	1	0100041	SS Clamp 16
18	1	0100622	Agitator Shaft D.16 L=270 GSN-100FM
18	1	0100621	Agitator Shaft D.16 L=345 GSN-150FM
18	1	0100330	Agitator Shaft D.16 L=360 GSN-200FM
19	1	0100617	Propeller 120x55x2 GSN-100FM
19	1	0100028	Propeller 160x80x2 GSN-150FM
19	1	0100487	Propeller 120x80x2 GSN-200FM
20	16	1800182	SS Nut M 6
21	12	1800012	SS Bolt TE M 6x25
22	3	0100031	SS Flange
23	1	1700007	Gasket 80x46x3
24	3	0100031	SS Flange
25	8	1700005	OR D.8.84x5.28x1.78
26	1	0100040	Mechanical Agitator Ball
27	1	1700004	OR D.44.75x37.69x3.53
28	1	1700003	Gasket D.4 L=450
29	1	0100030	Nut 3/4
30	1	1800300	Hydraulic Greaser M6
31	1	0100029	Nut 3/4
32	1	1700002	OR D.20.22x15.08x2.62
33	3	0100031	SS Flange
34	9	1800113	SS Washer 6.4x12.5
35	16	1800182	SS Nut M 6
36	5	1800180	Nut M8
37	1	1800293	Bolt STEI M 8x30
38	1	2300001	Pulley 1301A/35
39	1	2200025	Belt A22 GSN-100FM
39	1	2200004	Belt A23 GSN-150-200FM
40	1	2300002	Pulley 65 1A/35
41	1	1800290	Bolt STEI M 8x10
42	6	1800034	Bolt TCEI M 10x20
44	1	2400001	Grooved Shaft



<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	0100619	Fan D.700/A PVC 8 Blades 30G
2	1	0100583	Stop Grill 700
3	1	0100582	Grill 700
4	8	0100620	Blade PVC 60/A For Fan D.700
5	8	0100082	Insert 30G
6	2	0100573	Protection Rod D.5 L=1850
7	1	0300099	Gearbox Car 3 1:4.6
8	8	1800052	Bolt TE M 6x55
9	8	1800111	Washer A 6.4x12.5
10	2	1800006	Bolt TPS M 5x25
11	8	1800184	Self Lck Nut M 6
12	8	1800111	Washer A 6.4x12.5
13	1	0100739	Fan Cover 230 PVC
14	1	0100825	Hub All.230
15	1	0100824	Hub All.230
16	1	1800418	Key A 6x6x35
17	1	1800030	Bolt TE M 8x60
18	8	1800120	Washer 8.4x17
19	8	1800120	Washer 8.4x17
20	3	1800181	Self Lck Nut M 8
21	2	0100198	Superior Wing
22	1	0100199	Superior Wing Support
23	9	1800186	Self Lck Nut M 10
24	8	1800120	washer 8.4x17
25	1	1800025	Bolt TE M 8x25
26	2	0100198	Superior Wing
27	4	1800365	Protection Clamp
28	4	1800365	Protection Rod Bolt
29	2	1800129	Grower Washer 10.5x17.5
30	1	1800047	Bolt TE M 10x90
31	2	0100097	Blind Plug 1/2
32	4	0100099	Nozzle Support Stop
33	4	1800015	Bolt TPS M 6x25
34	4	1800037	Bolt TE M 10x30
35	10	1800130	Washer 10.5x21
36	6	0100107	Stop Boom Plate
37	4	1800179	Nut M 6
38	2	1700021	Gasket 19x4 White
39	1	0100614	Conveyor 700 Z
40	1	1800413	Bakelite Handle M 12 D,40
41	1	1800190	Nut M 12
42	1	0100253	Bushing D.12x30
43	10	0800194	Single Nozzle at 1.2
44	2	0100615	Superior Support
45	1	0100618	Control Lever Car 3
46	10	1800130	Washer 10.5x21
47	12	1800036	Bolt TE M 10x25
48	10	0800197	Nozzle ring Nut at

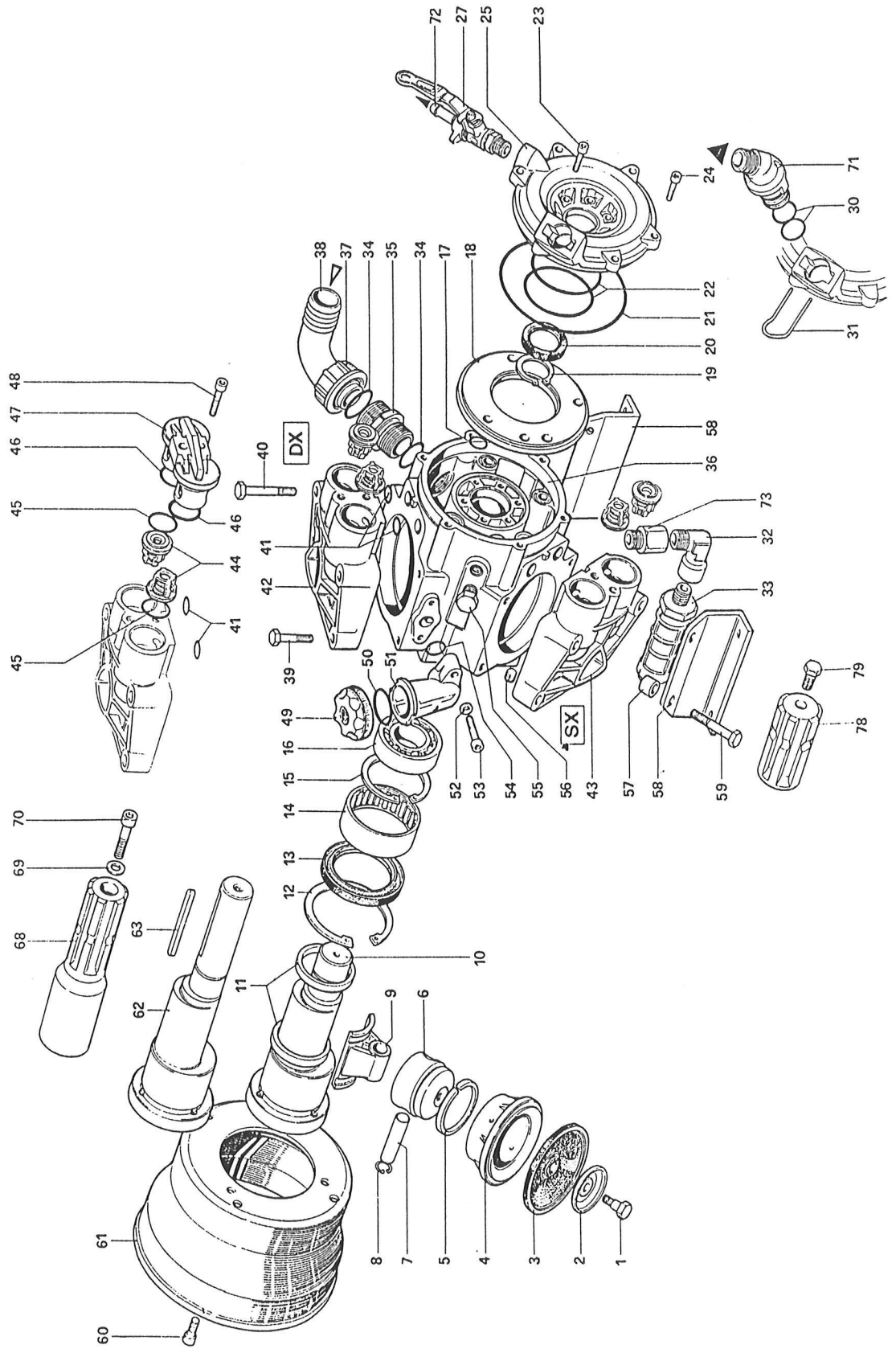
<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
49	10	0800033	Ceramic Disc Small 0.8
49	10	0800034	Ceramic Disc Small 1.0
49	10	0800035	Ceramic Disc Small 1.2
49	10	0800036	Ceramic Disc Small 1.5
49	10	0800037	Ceramic Disc Small 1.8
49	10	0800038	Ceramic Disc Small 2.0
49	10	0800039	Ceramic Disc Small 2.2
49	10	0800040	Ceramic Disc Small 2.5
50	10	0800041	Gasket
51	10	0800042	Swirl Plate Small Blk
51	10	0800043	Swirl Plate Small 1.0
51	10	0800044	Swirl Plate Small 1.2
51	10	0800045	Swirl Plate Small 1.5
51	10	0800046	Swirl Plate Small 1.8
51	10	0800047	Swirl Plate Small 2.0
51	10	0250166	Swirl Plate Small 2.2
52	10	0800048	Filter
53	10	0800031	Nut
54	10	0800194	Single Nozzle at 1.2
55	10	0800194	Single Nozzle at 1.2
56	6	1800162	Washer 19x34
57	10	1700020	OR D.1.16x9.92x2.62
58	10	0800003	Nozzle Body
59	4	1700010	Gasket 18x12x2 White
60	10	0800004	Nozzle Buckle
61	20	1800002	Bolt TCEI M 5x16
62	2	1600295	Co. Hose 10x19 100 Bar L=1800 GSN-100FM
62	2	1600294	Co. Hose 10x19 100 Bar L=2000 GSN150-200FM
63	1	0100264	Lateral Wing RH
63	1	0100265	Lateral Wing LH
64	10	0800130	Washer 10.5x21
65	10	1800130	Washer 10.5x21
66	12	1800036	Bolt TE M 10x25
67	12	1800036	Bolt TE M 10x25
68	10	1800130	Washer 10.5x21
69	2	0100616	Inferior Support
70	6	0100107	Stop Boom Plate

MOLTIPLICATORE CAR3P 1:4.6 CODICE 0300099
GEARBOX CAR3P 1:4.6 CODE 0300099



<u>REF#</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	0300165	Entrance Body Car
2	1	0300166	Exit Body Car
3	1	0300167	Entrance Shaft
4	1	0300168	Lever
5	1	0300169	Lever Support
6	1	0300171	Exit Shaft Car
7	1	0300061	Gear
8	1	0300172	Spacer
9	3	1000030	Bearing 25x62x17 6305
10	1	1000018	Bearing 30x62x16 6206
11	1	1100021	Oil Seal 25x52x8
12	1	1100022	Oil Seal 35x52x8
13	2	0300170	Shaft Cover
14	1	1800423	Key A 5x5x15
15	4	1800319	Elastic Pin 8x20
16	1	0300139	Ball 5/16"
17	1	1200012	Seeger E30
18	1	0300066	OR
19	1	0300173	Spring
20	2	1800190	Nut M12
21	1	0300174	Lateral Plug
22	1	0300141	Level Plug SLP20
23	1	0300017	Plug 3/8
24	1	0300063	Blind Plug 3/8" Gas
25	6	1800106	Bolt TCEI M 8x40
26	2	1800107	Bolt TCEI M 8x90
27	8	1800180	Nut M 8
28	1	0300175	Plug

AR 503



AR 503 PUMP

NEW STYLE PUMP USED ON

GSN-100FM S/N 118 & UP

GSN-150FM S/N 113 & UP

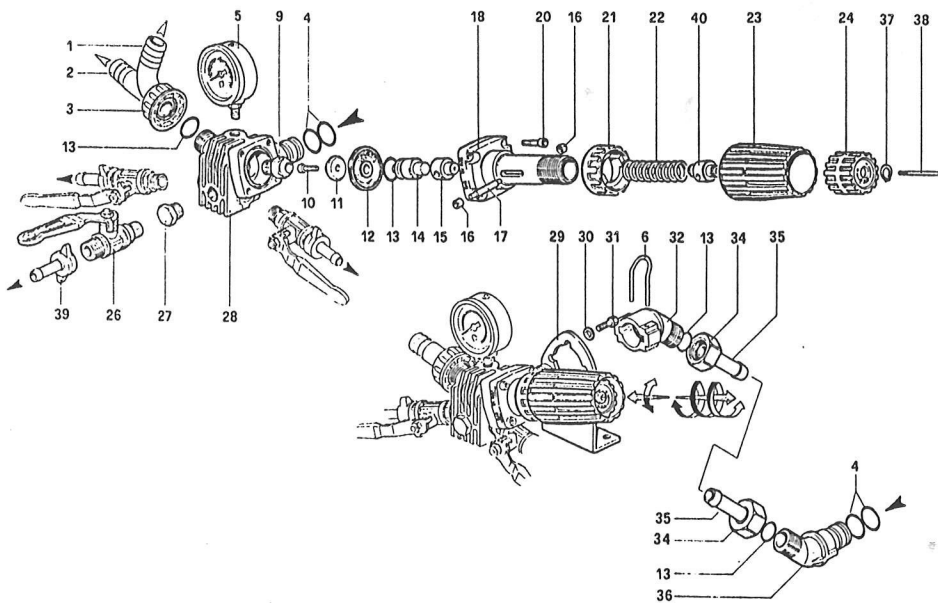
GSN-200FM S/N 106 & UP

<u>REF.</u>	<u>QTY.</u>	<u>PART #</u>	<u>DESCRIPTION</u>
&1	3	1040130	BOLT DIAPHRAGM
2	3	1040180	WASHER DIAPHRAGM
@&3	1	1986	DIAPHRAGM RUBBER KIT SET OF 3
4	3	1300110	CYLINDER
5	3	160230	PISTON RING
6	3	620120	PISTON 56
7	3	380300	PISTON PIN
8	6	380080	CIRCLIP PISTON
9	3	1300140	CONNECTING ROD
11	2	1300120	LOCK RING CONN. ROD
12	1	1300240	CIRCLIP 70
&13	1	1300220	OIL SEAL 55-70-8
14	1	1300210	BEARING HK5520
15	1	1260790	CIRCLIP 52
16	1	180400	BEARING 6205
&*17	5	740290	O RING 2056 14x1.78
18	1	1300020	SPACER COVER FLANGE
19	1	1260770	CIRCLIP 25
&20	1	1300230	OIL SEAL 25x35x7
&*21	1	1300270	O RING 3500 126.67x2.62
&*22	2	640030	O RING 3237 60x2.62
23	6	880280	BOLT ALLEN 6x18
25	1	1300030	AIR MANIFOLD
27	1	3049	BALL VALVE
30	2	390180	O RING 3075 18.72x2.62
&31	1	1040690	LOCK RING
32	1	120150	ELBOW 3/8 PIPE
33	1	269050	RELIEF VALVE
*34	2	390290	O RING 29x3
35	1	450120	NIPPLE
36	1	1300010	PUMP HOUSING
&37	1	580060	NUT PLASTIC
&38	1	580040	ELBOW PLASTIC
39	4	200230	BOLT 10x45
40	4	640230	BOLT 10x60
&*41	6	480440	O RING 3068 17.13x2.62
42	2	1300101	HEAD PUMP
43	1	1300102	HEAD PUMP
#&44	1	1987	CHECK VALVE KIT WITH O-RINGS
#&*45	6	620030	O RING 134 25.8x3.53
#&*46	6	540361	O RING 2131 33.05x1.78
47	3	1300190	CAP HEAD
48	6	540290	BOLT ALLEN 8x25
49	1	550050	OIL CAP
*50	1	550040	O RING 3106 26.52x2.62

<u>REF.</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
&51	1	550030	OIL SIGHT TUBE
52	2	550331	WASHER 6
53	2	850850	BOLT ALLEN 6x30
&*54	1	180101	O RING 17.5x2
55	1	30171	PLUG 3/8
56	1	770070	PLUG 10x10
57	2	1300280	SPACER
58	2	1300090	MOUNTING BRACKET
59	4	1300360	BOLT 10x65
62	1	1300160	CRANKSHAFT
62A	1	1300040	CRANKSHAFT (New Style)
63	1	650250	KEY 8x7x40
63A	1	1300290	KEY 6x6x50 (New Style)
68	1	1518	PTO ADAPTER 1-3/8
69	1	961340	WASHER 8
70	1	680350	BOLT ALLEN 8x35
71	1	1040760	3/4" PUMP FITTING (New Style)
73	1	1040490	FITTING M-F 3/8" (New Style)
78	1	1300060	PTO ADAPTER 1-3/8" (New Style)
79	1	1800025	BOLT M8x25 (New Style)

KITS

<u>*KIT 1984</u> <u>O RING</u>		<u>&KIT 1985</u> <u>PUMP KIT</u>		<u>@KIT 1986</u> <u>DIAPHRAGM</u>		<u>#KIT 1987</u> <u>VALVE</u>	
<u>CODE</u>	<u>QTY</u>	<u>CODE</u>	<u>QTY</u>	<u>CODE</u>	<u>QTY</u>	<u>CODE</u>	<u>QTY</u>
740290	5	180101	1	620080	3	1049050	6
1300270	1	480440	6			540361	6
640030	2	540361	6			620030	6
390290	2	550030	1				
480440	6	580040	1				
620030	6	580060	1				
540361	6	620030	6				
550040	1	620080	3				
180101	1	640030	2				
390180	2	740290	5				
		1040130	3				
		1040690	1				
		1049050	6				
		1300190	3				
		1300220	1				
		1300230	1				
		1300270	1				
		390180	2				
		390290	2				



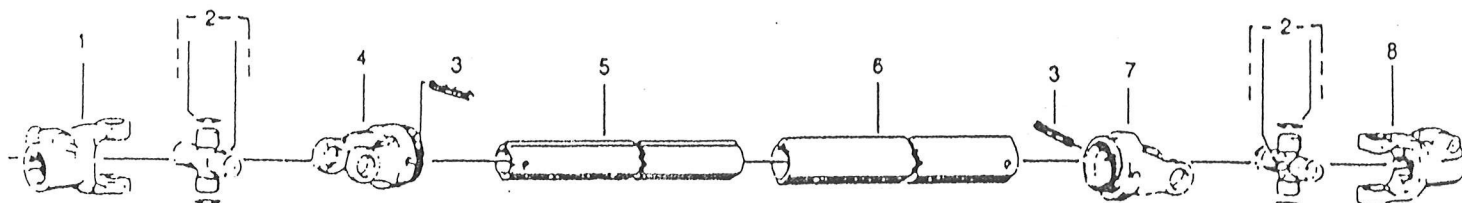
KITS

\$KIT 1988 O-RINGS		@KIT 1989 VALVE KIT	
CODE	QTY	CODE	QTY
390180	7	390180	4
880830	2	394760	1
		480550	1
		880830	1
		1040630	1
		1040640	1
		1040690	1
		1150520	1
		1150530	1
		1150540	1
		1150550	1
		1150560	1
		1150570	1
		1150650	1
		1150660	1

RM 40 VALVE

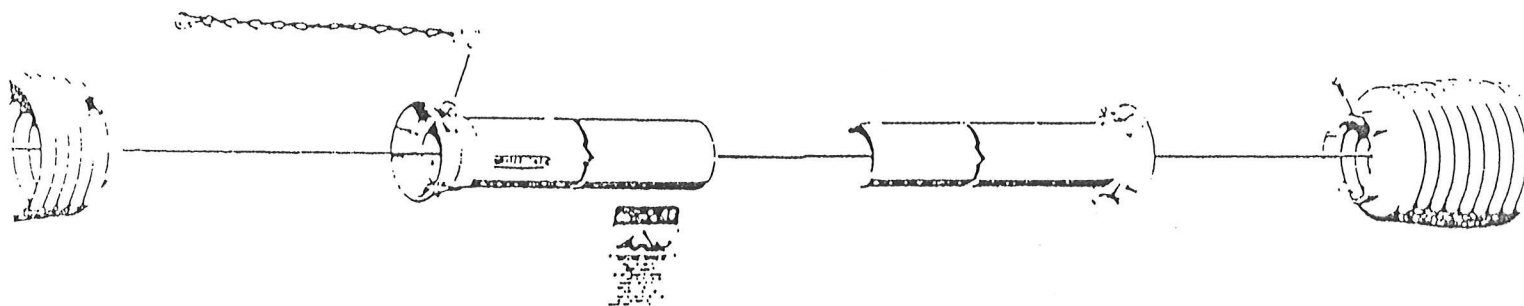
REF.	QTY.	PART #	DESCRIPTION
1	1	550460	ELBOW 18
2	1	800340	FITTING 20
3	1	550450	NUT PLASTIC 3/4" GAS
\$@4	7	390180	O RING 3075 18.72x2.62
5	1	550545	PRESSURE GAUGE
@6	1	1040690	LOCKCLIP
@9	1	1150520	VALVE SEAT
10	1	680560	BOLT 6x15 ALLEN
@11	1	1040640	VALVE SEAT
@12	1	1040630	DIAPHRAGM DESMOPAN
\$@13	1	1988	O RING 3062 15.54x2.62
14	1	1040620	PISTON
@15	1	1150560	SPACER
16	2	1150600	BUSHING
@17	1	1150540	ROLL PIN
18	1	1150510	VALVE BODY
20	4	780330	BOLT 6x20 ALLEN
@21	1	1150530	CONTROL NUT
@22	1	394760	SPRING
@23	1	1150550	CONTROL KNOB
@24	1	1150570	CONTROL KNOB
26	2	30491	BALL VALVE 3/8
27	1	30171	PLUG 3/8
28	1	1150500	VALVE BODY
29	1	1150590	MOUNTING BRACKET
30	2	390311	WASHER 8.5
31	2	180431	BOLT 8x15 ALLEN
32	1	1040770	FITTING PRESSURE
34	2	1040790	NUT HOSE FITTING 3/4
35	2	1150580	NIPPLE HOSE 13
36	1	1040760	FITTING PUMP
37	1	480550	CIRCLIP
38	1	1150650	ALLEN BOLT M3X60
39	1	10131	NIPPLE HOSE 10
40	1	1150660	SPACER

DRIVELINE FOR GSN100FM, GSN150FM & GSN200FM



Outer Guard Half*

Inner Guard Half*



<u>REF.</u>	<u>NEW PART</u>	<u>DESCRIPTION</u>
1	041378	1-3/8" Quick Disc Yoke
2	044444	U-Joint Complete Assembly
3	020614	Roll Pin
4	041315	Yoke Internal OV
5	054078	Shaft OV 640
6	016621	Tube 1 635
7	041318	Yoke Internal 1
	339107	Quick Disconnect Pin Kit
	365350	Bell
	087279	Retainer
	058247	Shield Tractor Half 580 Outer
	057742	Shield Implement Half 580 Inner
	044321	Chain