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**Turbine Drive Water-Reels®**  
**Engine Drive Slurry-Reels**

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T40A/1 Single Axle ST7

E40A/1 Single Axle ST7

# Parts Manual

Serial No. 340,000 - 359,999



**AG-RAIN®**

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# *Water-Reel<sup>®</sup> Irrigation*

## **PARTS MANUAL**

**Turbine/Engine Driven 40A/1 (ST 7)**

**S/N 340,000-359,999**

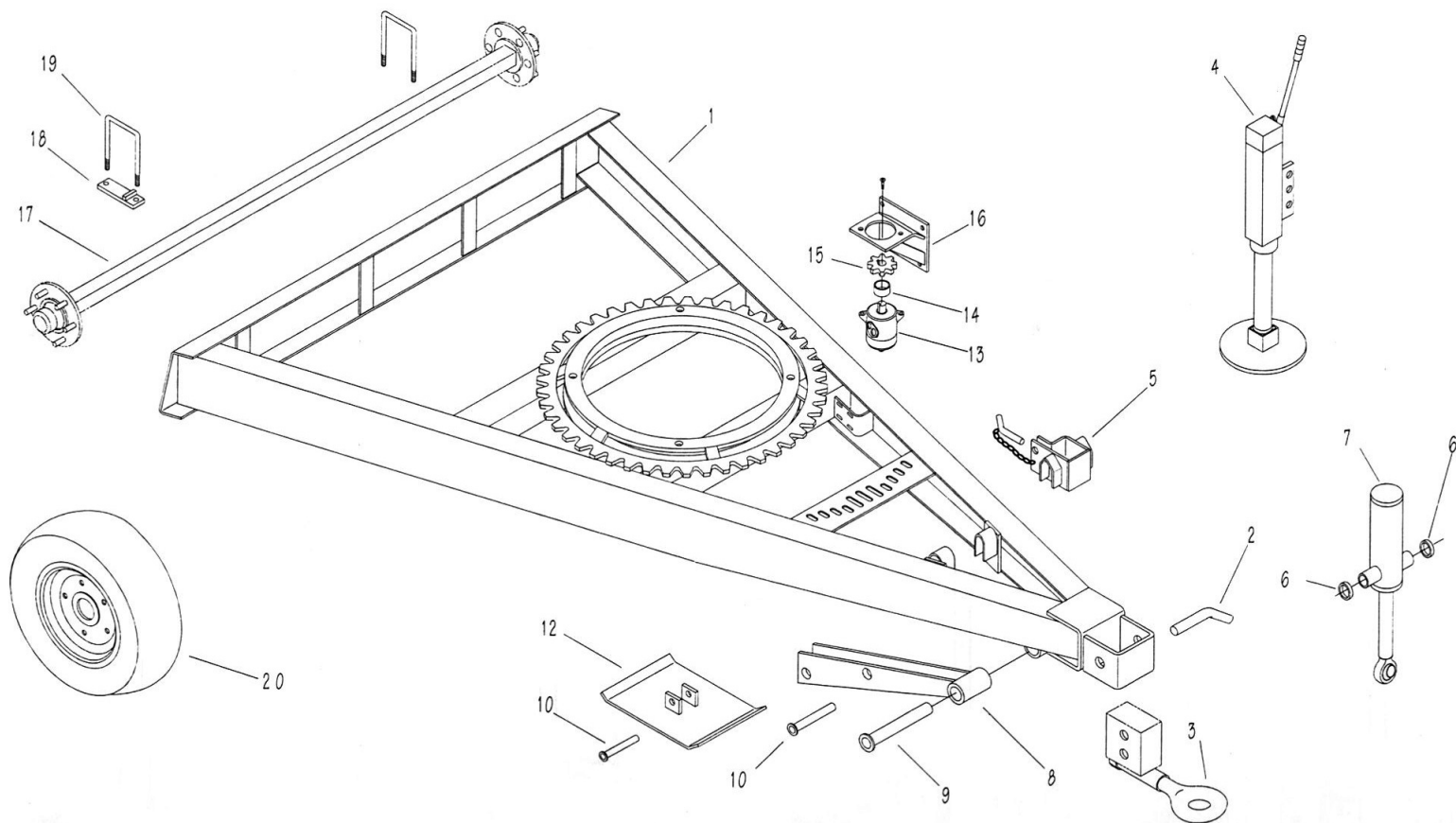
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Notes:

For Parts That Are Described As "Left" Or "Right" The Water Inlet Side Of The Machine Is Considered The Right Side.

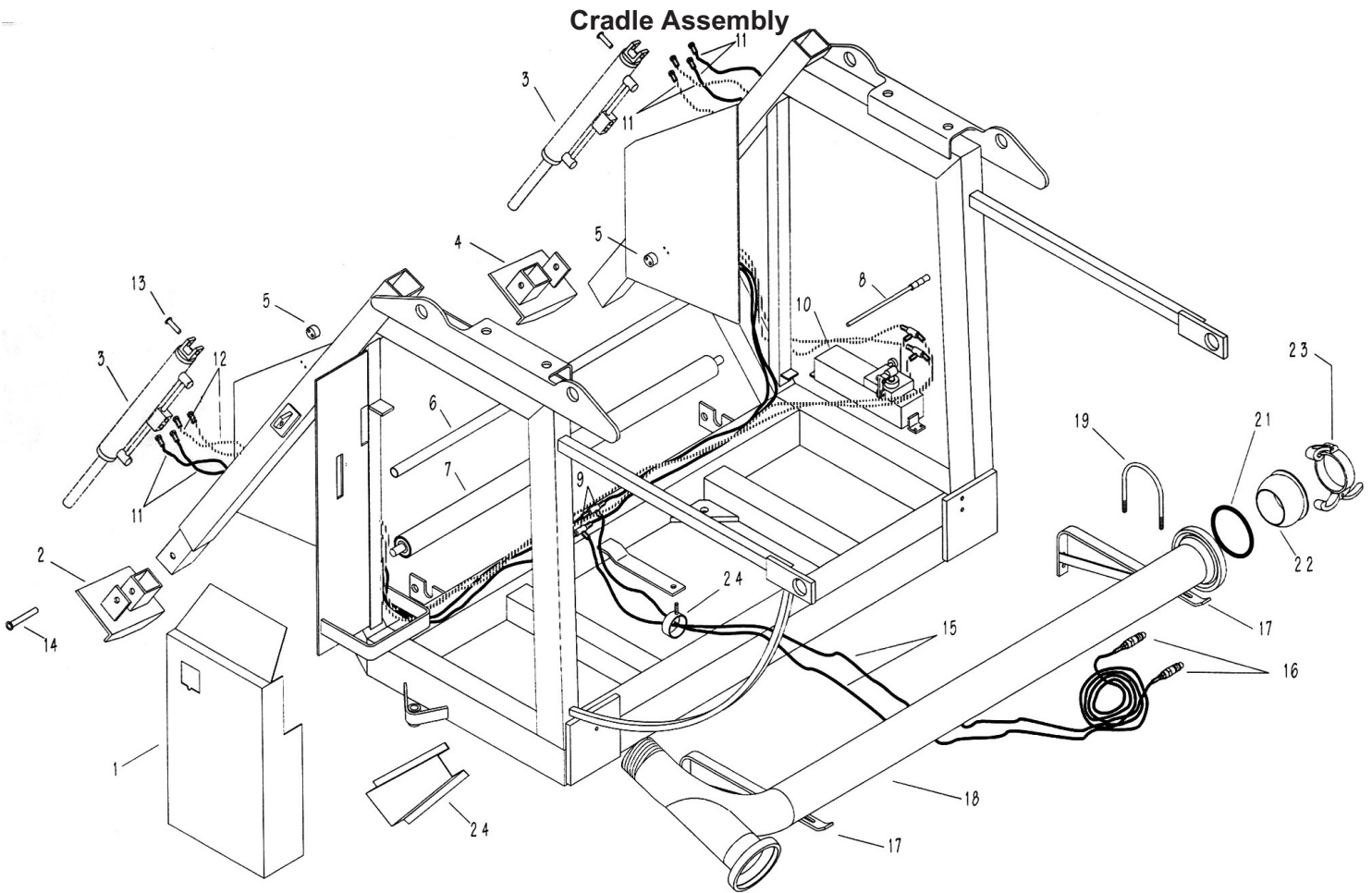
Items Such As Common Fasteners, Grease Fitting, And Other Small Parts Easy To Acquire Locally Are Not Listed.

## Running Gear Assembly

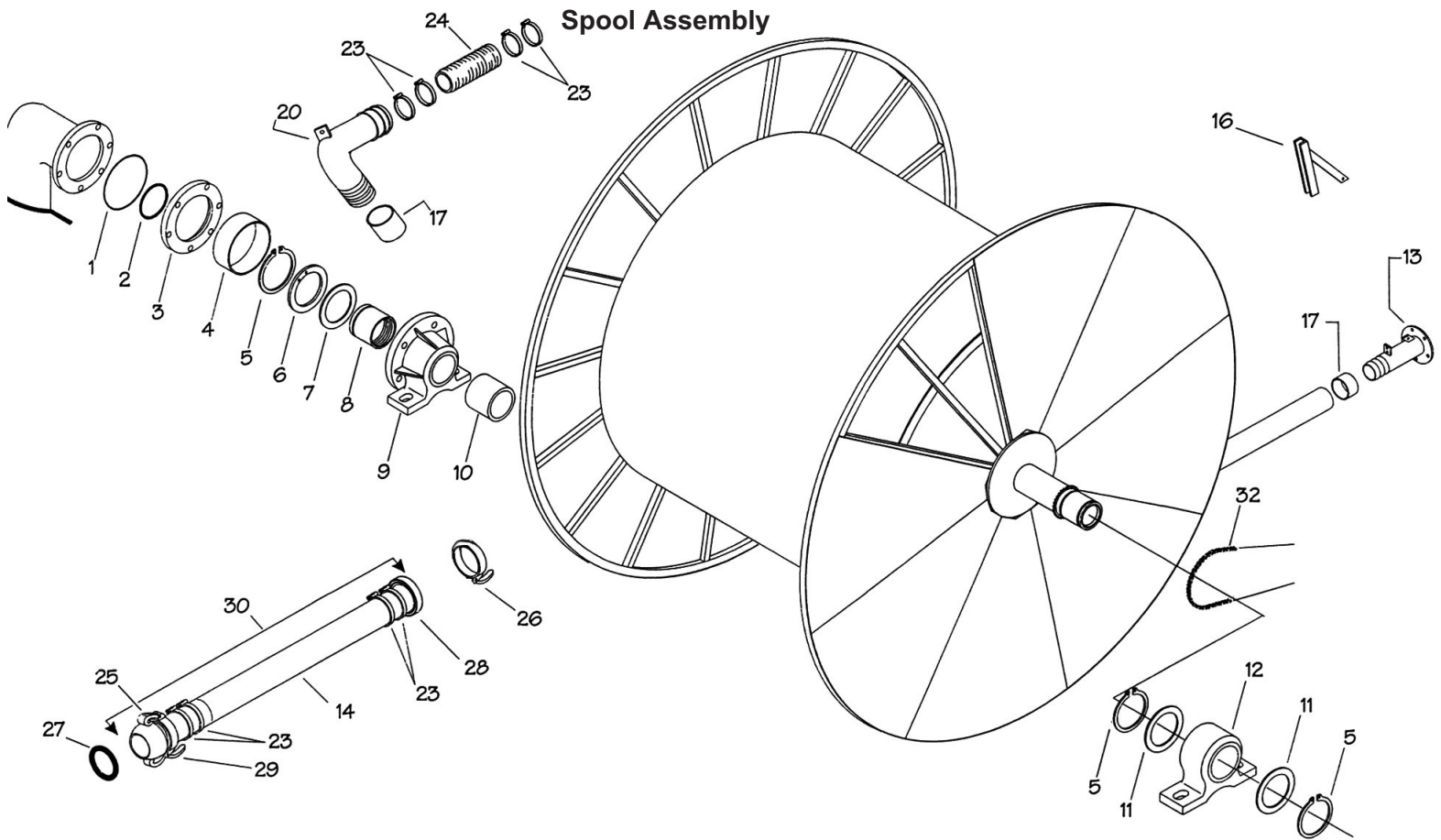


No.	Part Number	Description	Qty.
1	022-0864-0	Chassis	1
1B	500-0264-0	Tandem	
2	022-0865-0	Pin	1
3	022-0866-0	Hitch (Not as shown)	1
4	022-0867-0	Jack Assembly	1
5	022-0868-0	Adapter Jack	1
6	022-0869-0	Spacer for Jack	2
7	022-0870-0	Cylinder	1
8	022-0871-0	Jack Lever	1
9	022-0872-0	Pin dia. 30	1
10	022-0873-0	Pin dia. 25	2
12	022-0874-0	Base Jack	1
13	022-0875-0	Hydraulic Motor	1
14	022-0876-0	Spacer	1
15	022-0877-0	Pinion	1
16	022-0878-0	Hydraulic Motor Support	1
17	022-0879-0	Axle 60 x 60 x 2180	1
18	022-0831-0	Clamp Plate	4
19	022-0880-0	U-Bolt	4
20	022-0881-1	Wheel 11.5/80 -15.3	2

### Cradle Assembly

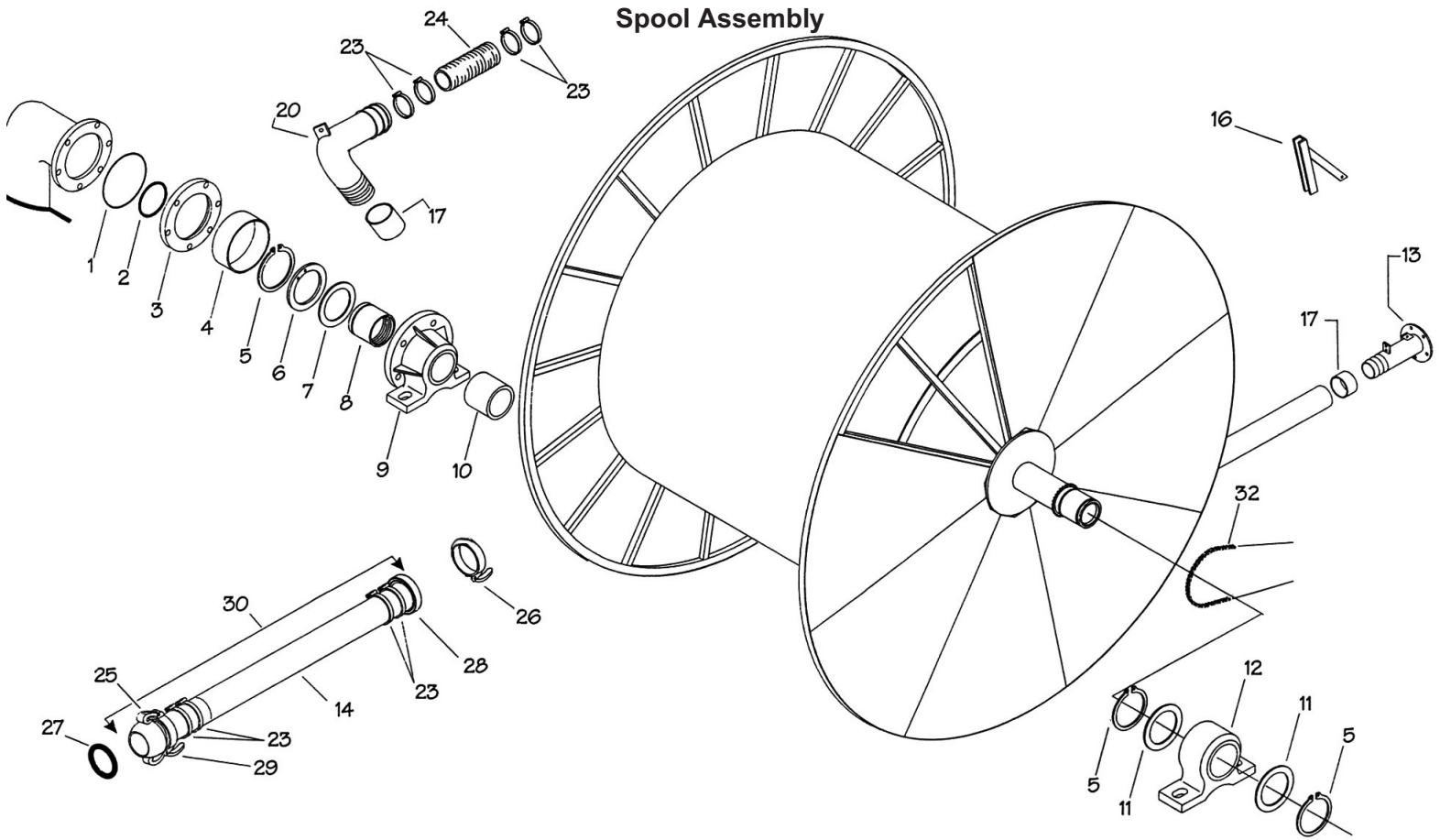


No.	Part Number	Description	Qty.
1	022-0881-0	Door	1
2	022-0882-0	Turbine Side Feet	1
3	022-0883-0	Cylinder dia 60	2
4	022-0884-0	Chain Side Feet	1
5	022-0885-0	Pad	2
6	022-0886-0	Hose Guide Fork	1
7	022-0887-0	Roller, Horizontal (ST7 Base)	1
8	022-0888-0	Pump Lever	1
9	022-0889-0	Tee, Hydraulic Fitting	2
10	022-0890-0	Hydraulic Pump	1
11	022-0891-0	Rubber Hose R1T Elbow x Straight 1.8	6
12	022-0892-0	Rubber Hose R1T Elbow x Straight 3.7	2
13	022-0893-0	Pin dia. 25 L;55	2
14	022-089-0	Pin dia. 25 L;170	2
15	022-0895-0	Rubber Hose R1T Elbow x Straight 8.0	2
16	022-0896-0	Quick Coupling Male 1/2"	2
17	022-0897-0	Double Supply Support	2
18	022-0898-0	Double Supply Pipe 4"	1
19	022-0899-0	U-Bolt M8 3" 1/2	2
21	588-0023-3	Seal Ring 4"	1
22	597-0312-0	Plug with Lever, Mall Ball, 4" (Includes #23 in Picture)	1
24	022-0900-0	Rubber Hose Support	1



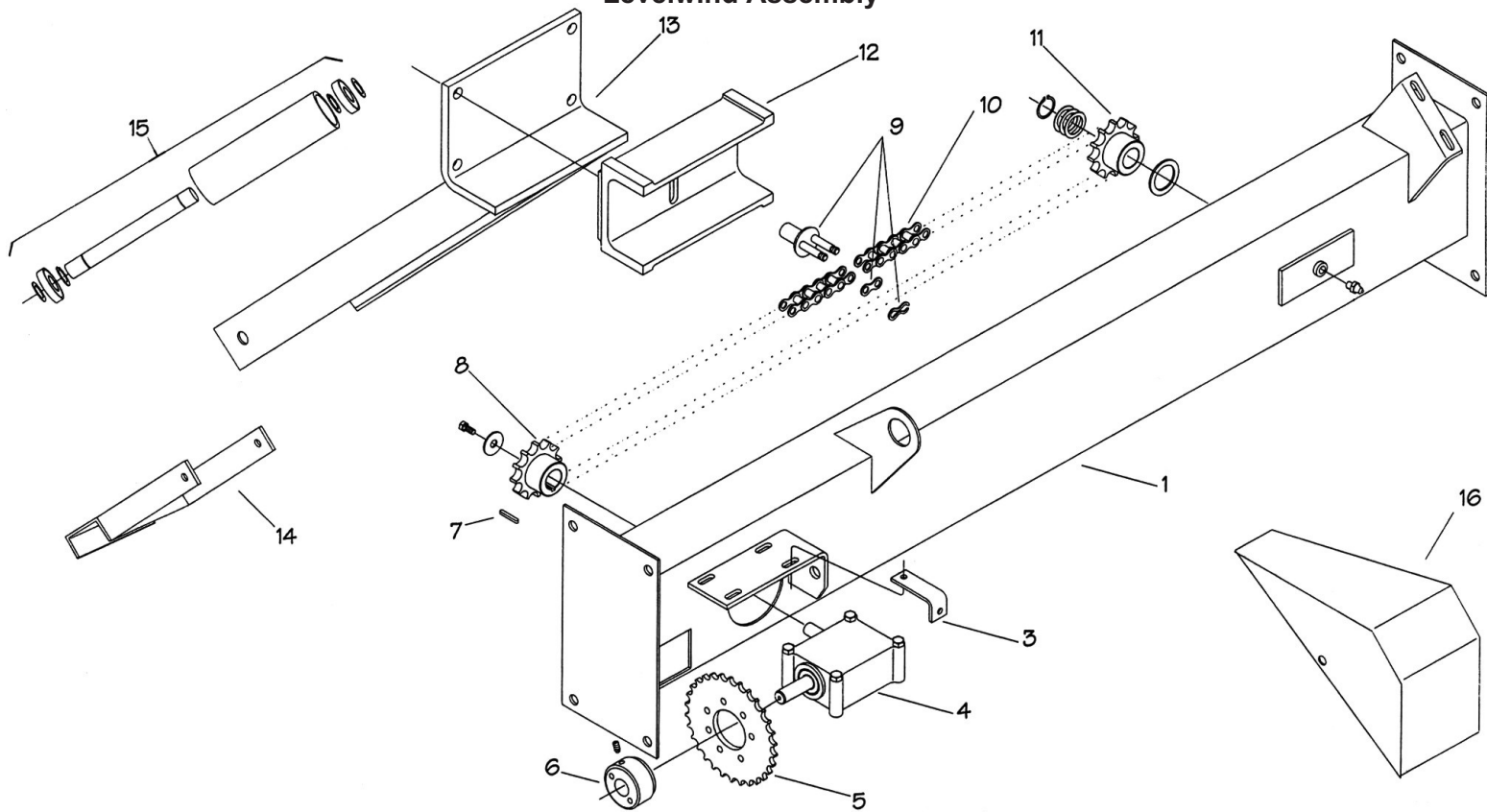
No.	Part Number	Description	Qty.
1	022-0486-1	O-Ring 154mm x 3.53	1
2	022-0842-0	O-Ring 110mm x 7mm	1
3	022-0851-0	Sealing Housing 40/A1	1
4	022-0853-0	Spacer	1
5	022-0008-0	Snap Ring E110	3
6	022-0009-0	Washer, Thrust	1
7	022-0010-0	Washer, Wear 144x 110	1
8	593-0245-0	Ring Nut, Slip Joint	1
9	022-0013-0	Flanged Support	1
10	022-0858-0	Sleeve	1
11	022-0038-1	Spacer	2
12	022-0015-0	Spool Bearing	1
13	022-0740-0	Tube End 40A 340,000	1
14	252-4962-0	Hose, Irr Supply 4" ID	
16	022-0741-0	Stop Bar	1
17	020-0383-3	Hose Band 120mm	2
20	020-0862-0	Elbow	1
23	030-1816-7	Clamp, Supra 131mm -139mm	4
24	022-0657-0	Hose 4.65" ID x 33" Long x .35 " Wall Thickness	1
25	588-0023-1	Lever Ring 4" 451 108mm	1
26	400-4927-0	Band, Ring Lock 4" (Not Shown)	1
27	588-0023-3	O-Ring 4"	1

## Spool Assembly



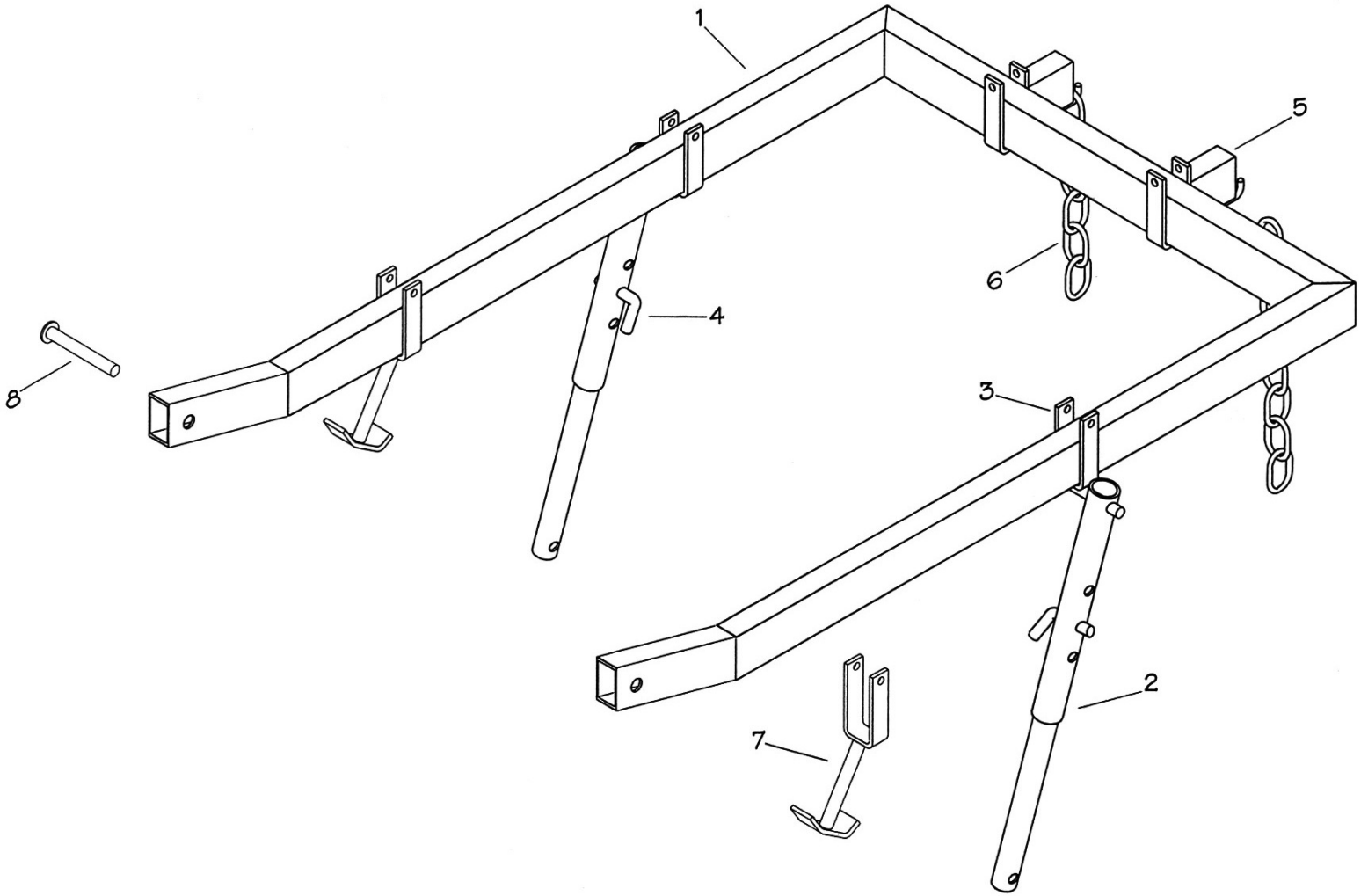
28	588-0266-0	Hose End Inlet 4"		1
29	588-0256-1	Hose End Outlet 4" Ball		1
30	588-0284-0	Hose, Supply Complete Assembly		1
31	030-1924-0	Clamp, Supra 104mm -112mm		4
32	020-0114-0	Chain 1/2" 315 Rollers	Ft.	13.3

### Levelwind Assembly



No.	Part Number	Description	Qty.
1	022-0902-0	Frame, Levelwind (Base ST7)	1
3	022-0906-0	Support	1
4	020-0015-4-	Angle Drive Gearbox	1
5	022-0903-0	Sprocket, 1/2 x 33 Tooth	1
6	022-0841-0	Hub Sprocket	1
7	022-0788-0	Key 8mm x 7mm x 25mm	1
8	022-0904-0	Sprocket, 10 Tooth Driver	1
9	022-0905-1	Guide Link	1
10	020-0486-5	Chain, 1.0" (Metric) x 99 Rollers (Base ST7)	8.25
11	022-0907-0	Sprocket, 10 Tooth 1" w/bronze	1
12	022-0908-0	Fork Support	1
13	022-0909-0	Fork for Hose	1
14	022-0910-0	Fork Guide	1
15	022-0911-0	Roller L685	2
16	022-0912-0	Shield	1

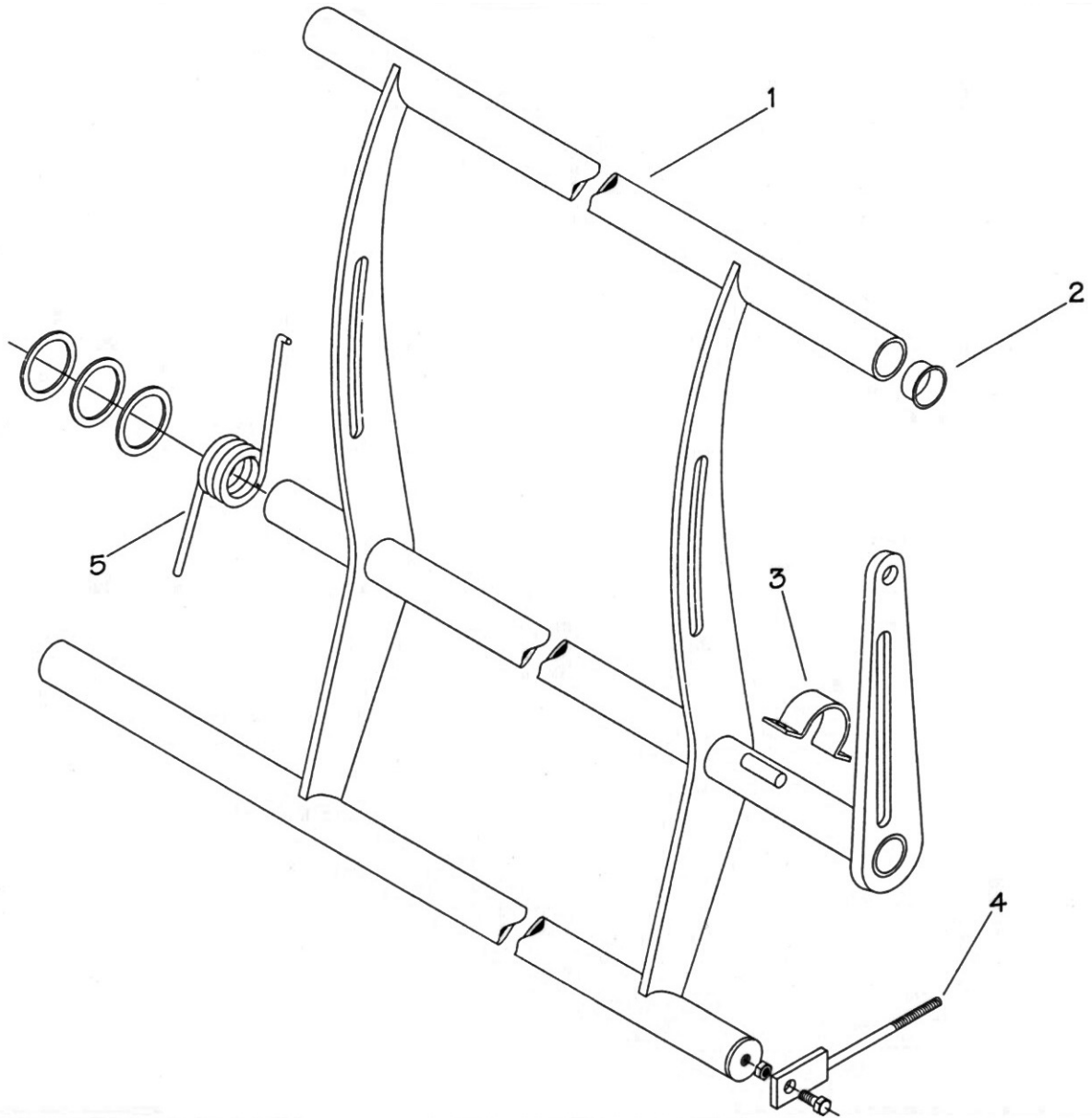
## Boom Assembly



No.	Part Number	Description	Qty.
1	022-0917-0	Lifting Frame	1
2	022-0918-0	Lifting Prop	2
3	022-0919-0	Frame Support	2
4	022-0929-0	Pin	2
5	022-0921-0	Trolley Fork	2
6	022-0922-0	Chain G30	2
7	022-0923-0	Stop Rod	2
8	022-0924-0	Pin	2

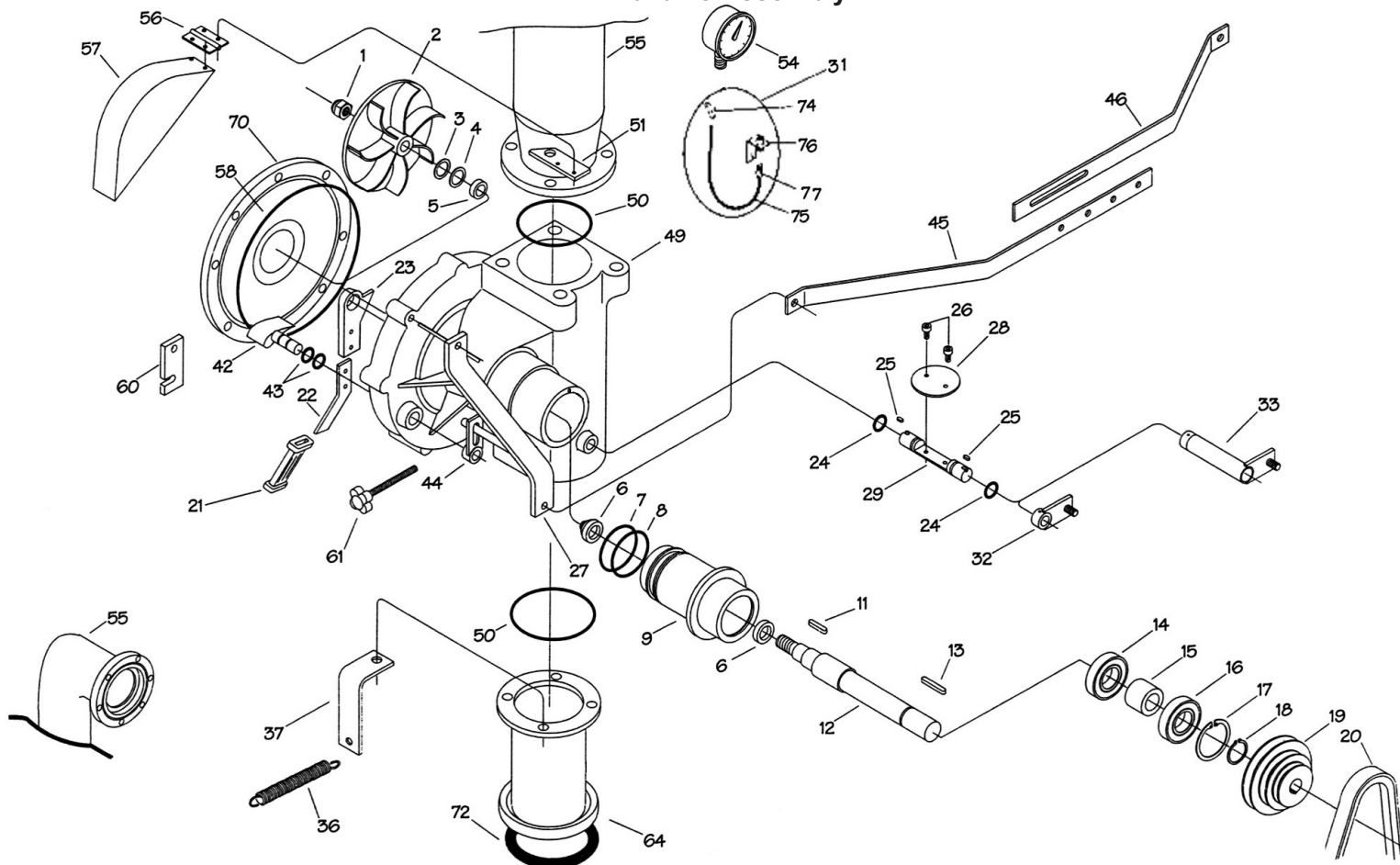


Shut Off



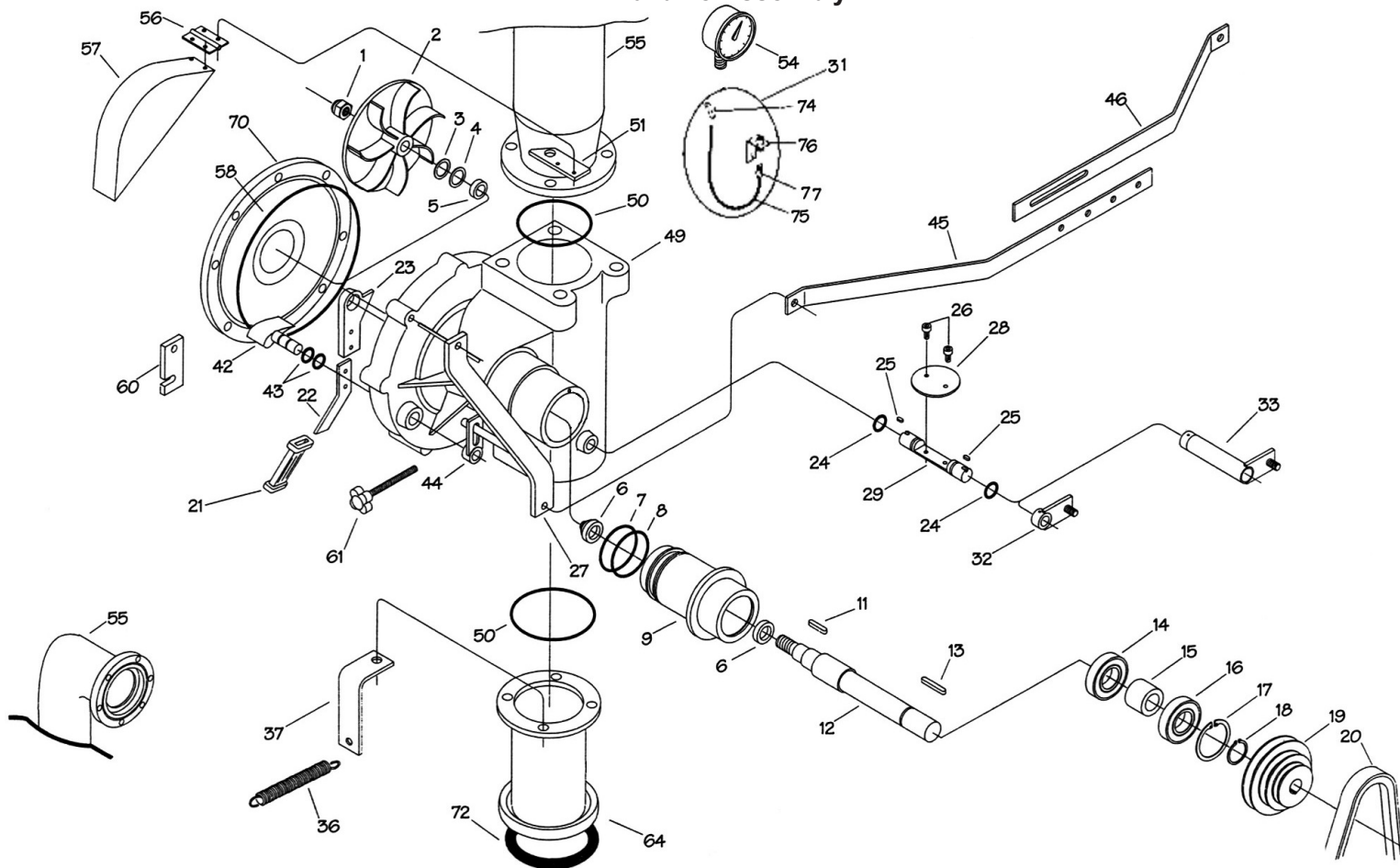
No.	Part Number	Description	Qty.
1	022-0913-0	Shut Off Bar	1
2	022-0914-0	Plug	3
3	020-0016-1	Retainer	1
4	022-0915-0	Eye Bolt	1
5	022-0916-0	Spring dia 9	1

## Turbine Assembly



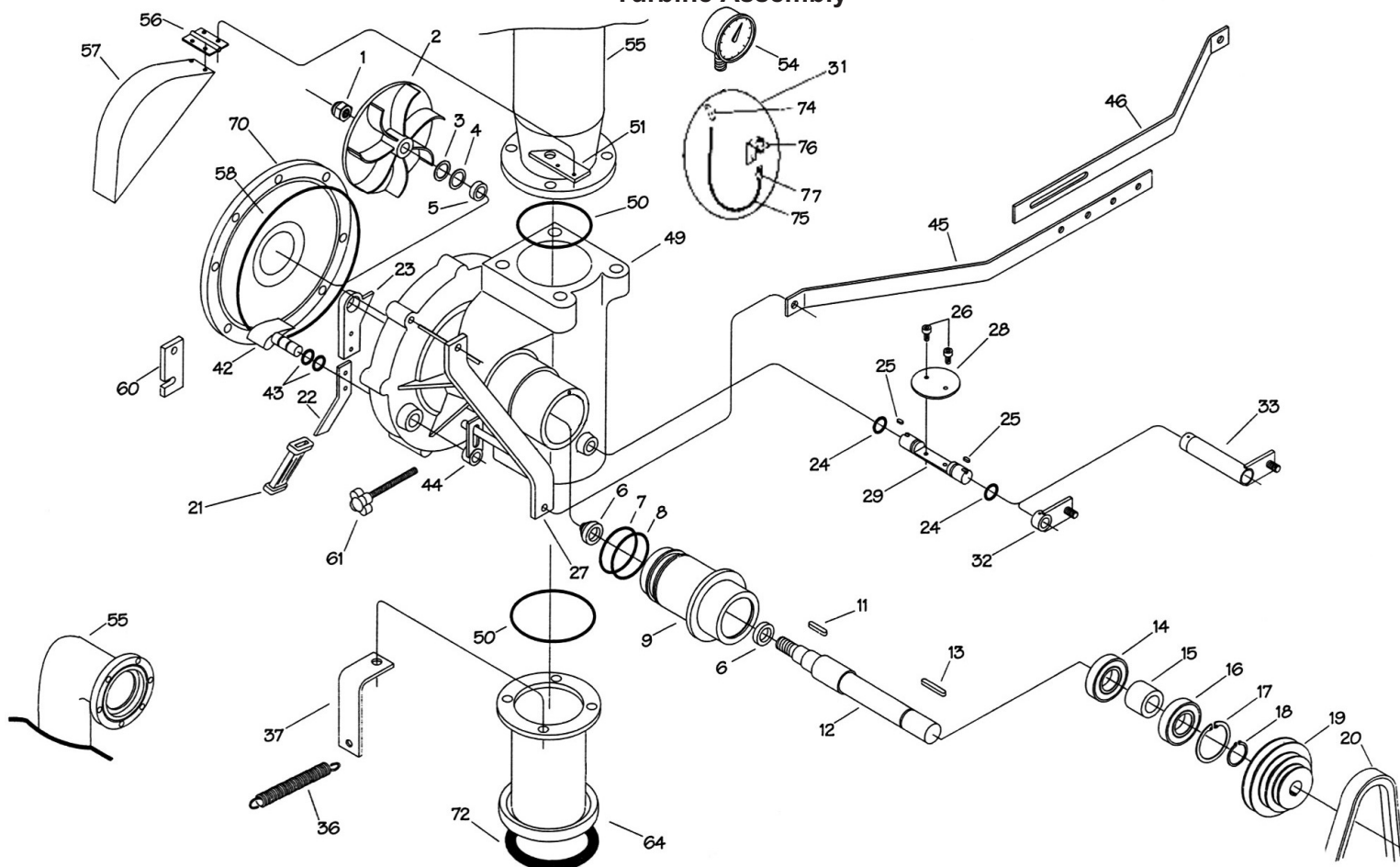
No.	Part Number	Description	Qty.
1	022-0198-0	Nut, Self Locking Thin 14 x 1.5mm	1
2	022-0199-3	Impeller 6.77 OD x .87 Vane Height	1
3	022-0543-0	Spacer Mylar .039" Thick	3
4	022-0300-2	Spacer, 15mm (.6"Long)	1
5	022-0544-0	Spacer, .984" OD x .787" ID x .197" Thick	1
6	022-0545-0	Seal 20 x 6	1
7	022-0546-0	O-Ring 2.30" ID x .103" C/S	1
8	022-0546-1	O-Ring 2.363" ID x .103" C/S	1
9	022-0548-0	Turbine Housing T200	1
11	022-0337-0	Key, 5mm x 5mm x 10mm Long	1
12	022-0550-0	Impeller Shaft	1
13	022-0551-0	Key 6mm x 50mm	1
14	022-0167-0	Bearing, 6204 2RS	1
15	022-0552-1	Spacer 1/8" Long	1
16	022-0167-1	Bearing	1
17	022-0324-0	Retaining Ring I47	1
18	022-0323-0	Retaining Ring E20	1
19	022-0592-0	Pulley, Three Step	1
20	500-0154-0	Belt, A89	1
21	022-0414-0	Hand Grip	1
22	022-0557-0	By-Pass Lever	1

## Turbine Assembly

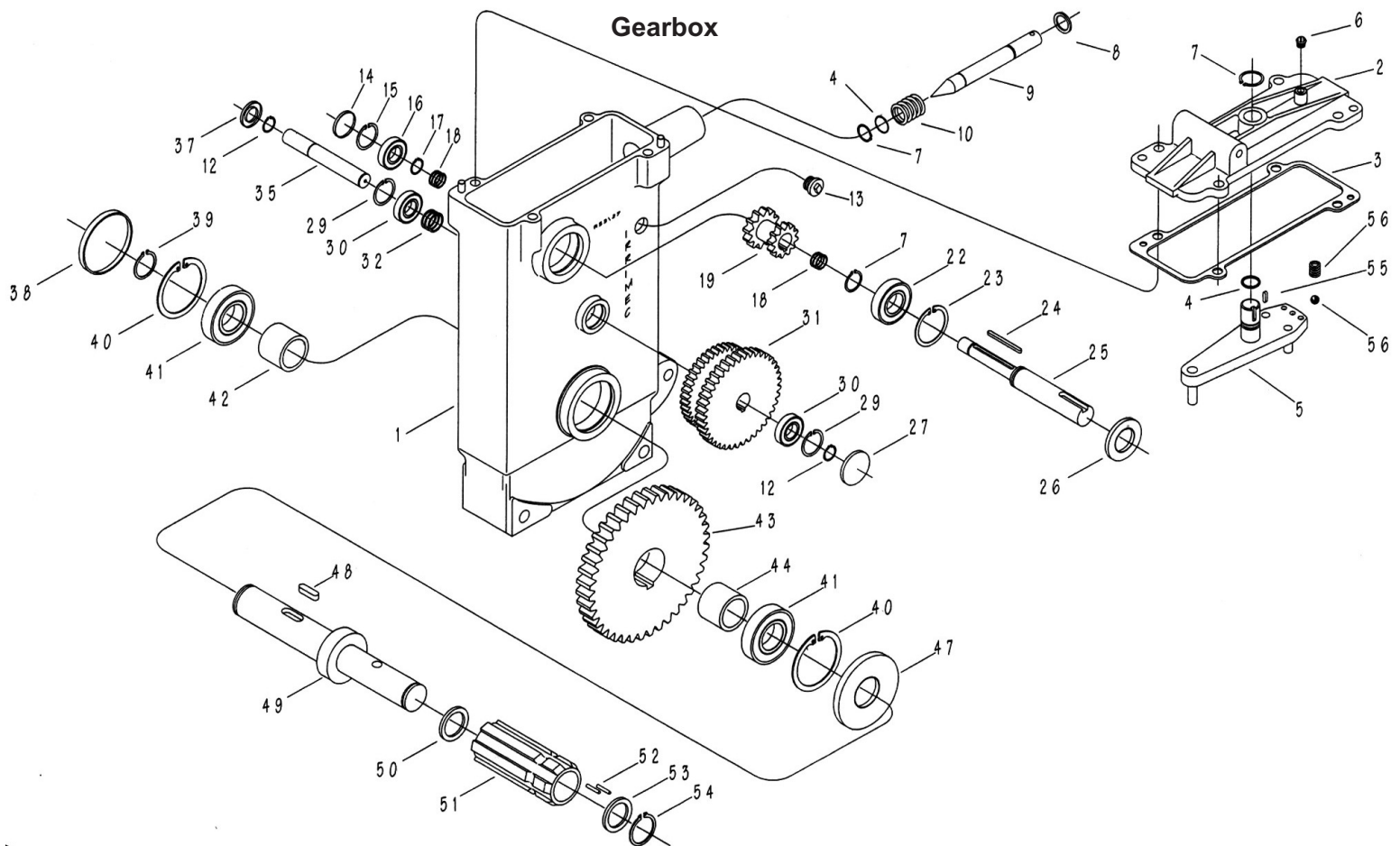


23	022-0558-0	Lever		1
24	022-0559-0	O-Ring 120 x 15.54 x 2.62		1
25	022-0319-0	Key 6mm x 6mm x 10mm Long		2
26	022-0305-0	Screw, 6 x 16 Inox		2
27	022-0648-0	Arm Comp. 25/120 Turb		1
28	022-0564-0	Disc, By-Pass		1
29	022-0564-0	By-Pass Shaft		1
31	596-0041-0	Gauge Protector		1
32	022-0564-0	By-Pass Lever		1
33	022-0978-0	By-Pass Extension Lever		1
36	022-0746-0	Spring		1
37	022-0979-0	Spring Support		1
42	022-0566-0	Regulator Flap with Pin		1
43	022-0331-0	O-Ring		2
44	022-0650-0	Loop, Comp 25/120 Turb.		1
45	022-0980-0	Rod Dia 8		1
46	022-0981-0	By-Pass Rod		1
49	022-0302-1	Turbine Body		1
50	022-0484-0	O-Ring		1
51	022-0571-0	Support		1
54	022-0675-0	Gauge 0-300		1

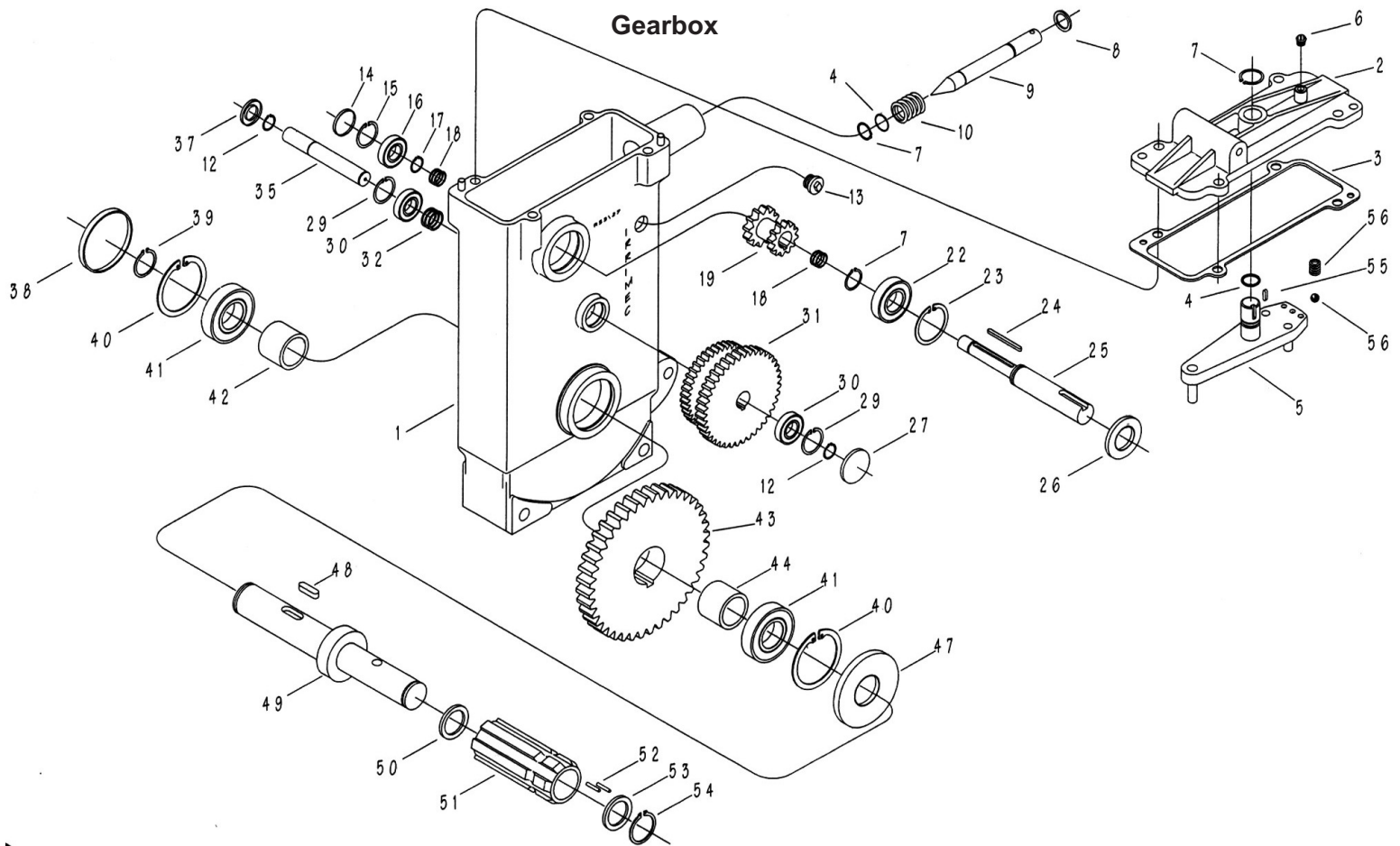
## Turbine Assembly



55	022-1041-0	Elbow, Upper 40		1
56	022-0389-0	Hinge		1
57	022-0388-0	Shield, Belt		1
58	022-0572-0	O-Ring i286 x 3.53		1
60	022-0573-0	Stop Plate		1
61	022-0391-0	Knob		1
64	022-0483-0	Lower Feeding Elbow		1
70	022-0834-0	Cover, Turbine		1
72	588-0023-3	Seal Ring, 4"		1
74	525-4915-2	Ftg. TB 90 Deg. 1/4" MNPT x 5/16" Tube		1
75	252-4939-2	Tube, Synflex 5/16"	Ft.	2
76	599-0148-0	Gauge Mount		1
77	525-4915-4	Ftg. TB Straight 1/4" MNPT x 5/16" Tube		1

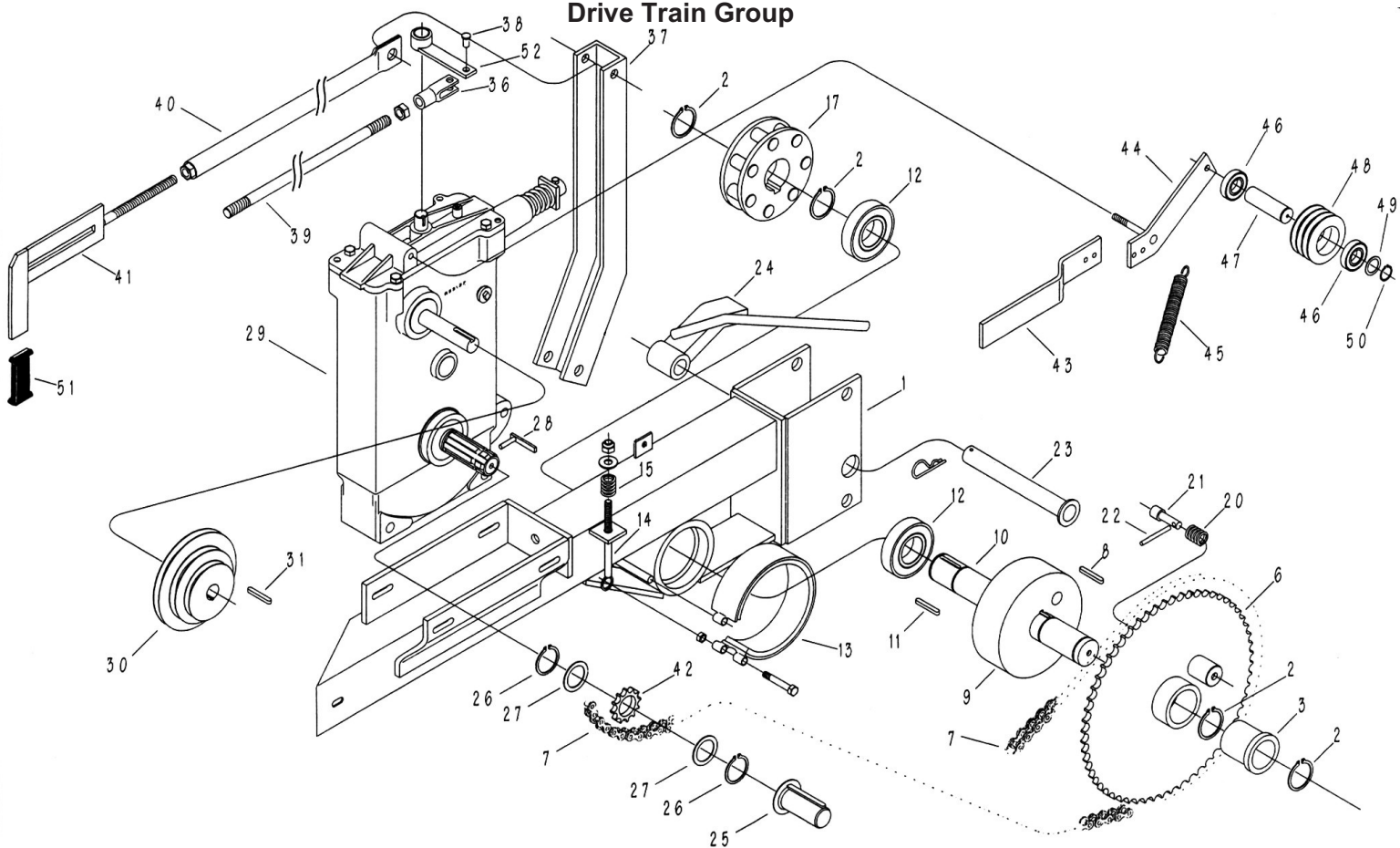


No.	Part Number	Description	Qty.
1	022-0765-0	Gearbox Body	1
2	022-0766-0	Gearbox Cover	1
3	022-0767-0	Gasket	1
4	022-0559-0	O-Ring, 20.78mm OD x 2.62mm	2
5	022-0768-0	Clutch Rod	1
6	022-0769-0	Breather	1
7	022-0168-0	Snap Ring E20	3
8		Washer	1
9	022-0770-0	Clutch Pin	1
10	022-0771-0	Spring f.2,5 L.34 Dia. 29,5	1
12	022-0131-0	Snap Ring E15	2
13		Plug 3/4"	1
14	022-0171-0	Plug 32 x 7	1
15	022-0170-0	Snap Ring I32	1
16	022-0169-0	Bearing 6201	1
17	022-0174-0	Snap Ring E12	1
18	022-0772-0	Shim	--
19	022-0773-0	Clutch Pinion, Z28 M1,5-Z16 M1,5	1
22	022-0167-0	Bearing, 6204-2RS	1
23	022-0343-0	Ring, Retaining I47	1
24	022-0774-0	Key 4x	1
25	022-0775-0	Shaft, Inlet	1
26	022-0165-0	Seal, 20mm x 47mm x 7mm	1



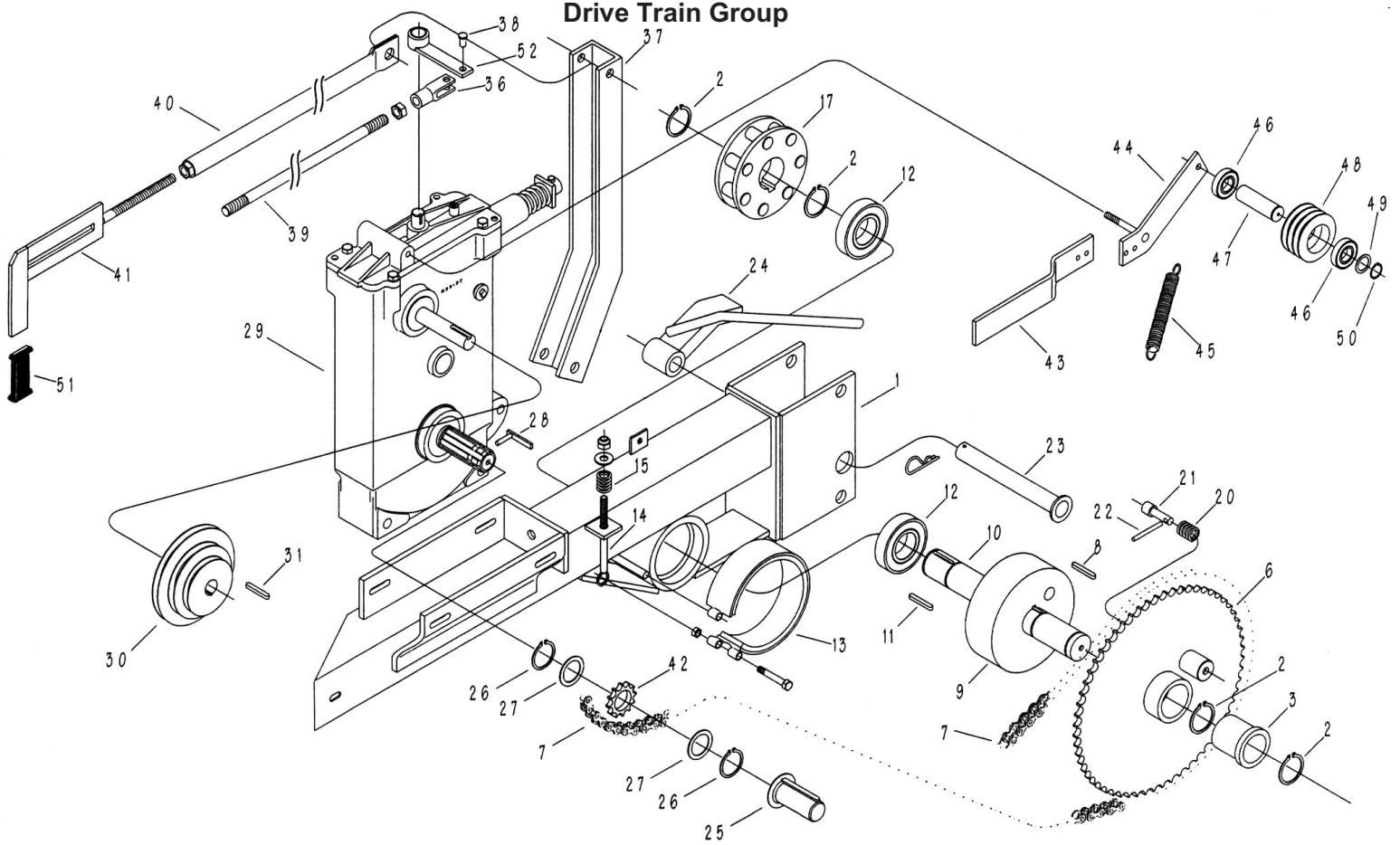
27	022-0776-0	Plug 35mm x 8mm	1
29	022-0777-0	Snap Ring I35	2
30	022-0778-0	Bearing, 6202	2
31	022-0779-0	Pinion Z118 M1,5-Z106 M1,5-Z13 M2	1
32	022-0780-0	Shim	--
35	022-0781-0	Middle Shaft	1
37	022-0782-0	Oil Seal 35mm x 15mm x 7mm	1
38	022-0624-0	Plug 62 x 10	1
39	022-0187-0	Snap Ring E30	1
40	022-0181-0	Snap Ring I62	2
41	022-0182-0	Bearing 6206 ( no seals )	2
42	022-0784-0	Spacer	--
43	022-0773-0	Clutch Pinion, Z28 M1,5-Z16 M1,5	1
44	022-0786-0	Spacer	--
47	022-0180-0	Oil Seal 35mm x 62mm x 7mm	1
48	022-0788-0	Key 8mm x 7mm x 25mm	1
49	022-0790-0	Shaft	1
50	022-0194-0	Spacer 22 x 3	1
51	022-0195-0	Pin, Splined	1
52	022-0193-0	Pins, Bearing 2 x 17.8	62
53	022-0190-0	Spacer, I18 x 2.8	1
54	022-0189-0	Snap Ring E18	1
55	022-0549-0	Key 6 x 6 x 25	1
56	022-0791-0	Ball	1

## Drive Train Group



No.	Part Number	Description	Qty.
1	022-0925-0	Mechanism Support	1
2	022-0619-0	Snap Ring E40	4
3	022-0814-0	Bushing Bronze 50 x 40 x 40	1
6	022-0926-0	Sprocket Z60 3/4"	1
7	875-4847-2	Chain 3/4" 77 Rollers	4.8
8	022-2010-0	KEY, 12MM X 8MM X 20MM ROUND ENDS	1
9	022-0761-1	Brake Drum	1
10	022-0804-2	Shaft, Pinion 40mm Dia, Brake-M/ST7	1
11	022-0805-0	Key 12mm x 50mm	1
12	022-0462-0	Bearing, 6208-2RS	2
13	022-0762-0	Brake Band	1
14	022-0927-0	Brake Rod	1
15	022-0928-0	Spring	1
17	022-0808-0	Pinion	1
20	022-0347-0	Spring	1
21	022-0349-0	Pin	1
22	022-0348-0	Pin Dia. 8	1
23	022-0872-0	Pin Dia. 30	1
24	022-0521-0	Non Return Pawl	1
25	022-0438-0	Cover, PTO	1
26	022-0534-0	Snap Ring E35	2
27	022-0510-0	Shim 35 x 45 x 1	1

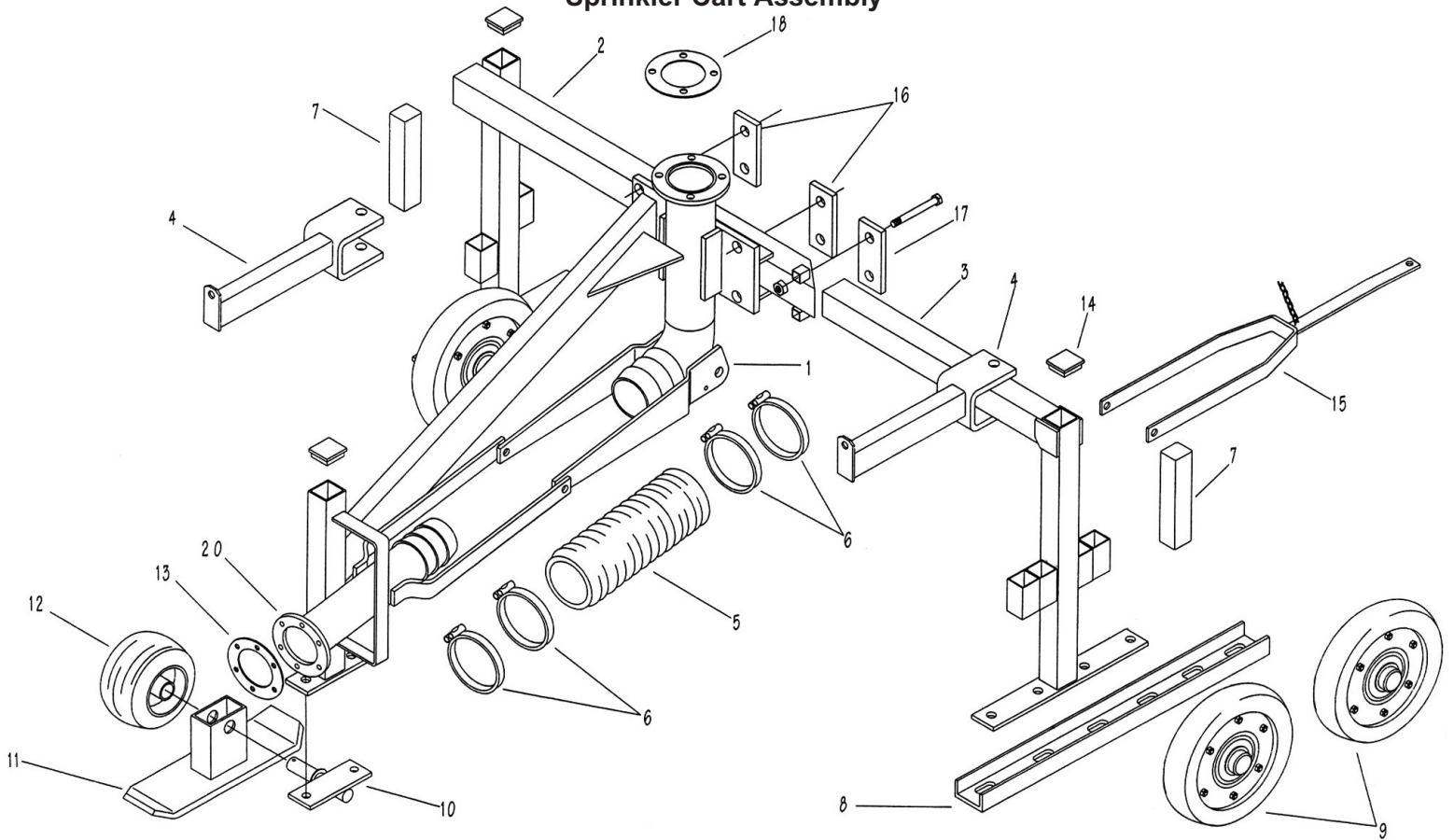
## Drive Train Group



28	022-0191-0	Key with Pin	1
29	022-0800-0	Gearbox, 2 Speed	1
30	022-0593-1	Pulley, Three Step	1
31	022-0370-0	Key, 6mm x 50mm	1
36	022-0933-0	Fork M10 x 40	1
37	022-0797-0	Arm Clutch Disengage	1
38	022-0934-0	Pin	1
39	022-0935-0	Speed Rod Change	1
40	022-0936-0	Stop Rod	1
41	022-0316-2	Tie Rod 14mm Thread	1
42	022-0937-0	Sprocket, Z10	1
43	022-0940-0	Arm for Belt Tightener	1
44	022-0802-0	Lever for Belt Tightener	1
45	022-0746-0	Spring	1
46	022-0344-0	Bearing, 6005-2RS	2
47	022-0653-0	Shaft, Belt Idler	1
48	022-0654-0	Pulley, Belt Idler 3 Groove	1
49	022-0703-0	Spacer, 1mm	1
50	022-0342-0	Snap Ring E25	1
51	022-0414-0	Hand Grip	1
52	022-0939-0	Gearbox Lever	1

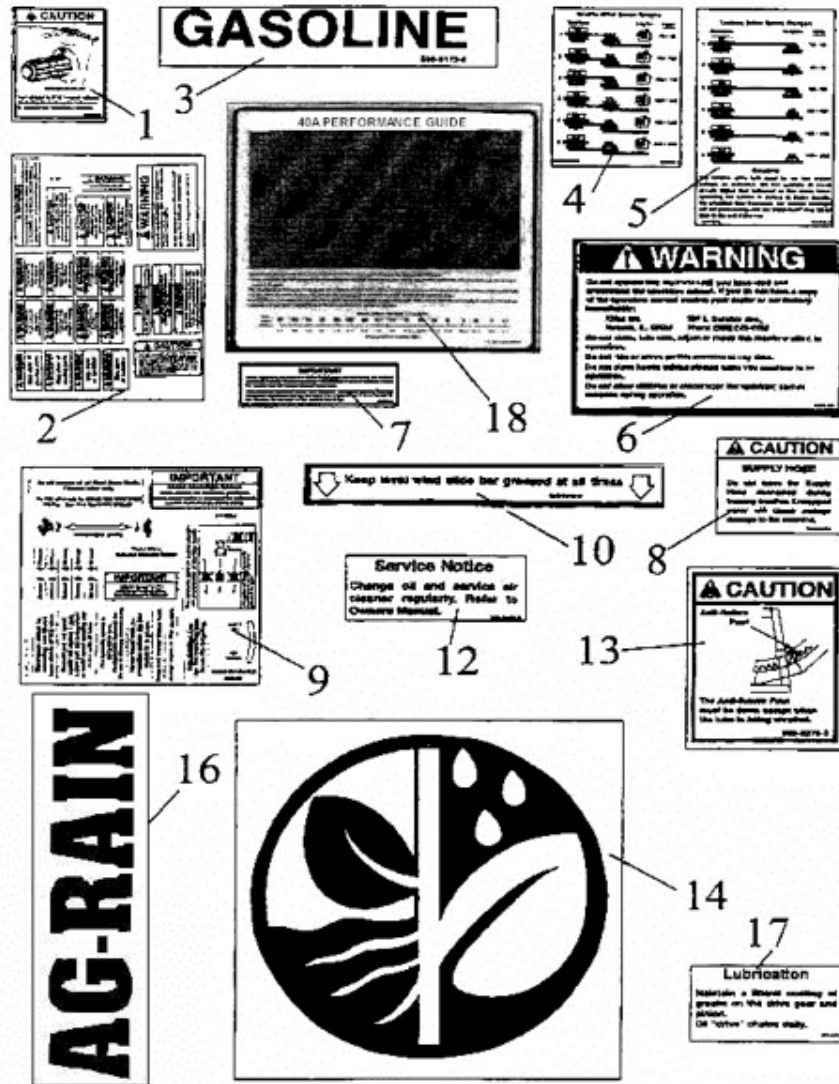


### Sprinkler Cart Assembly



No.	Part Number	Description	Qty.
1	022-1867-0	FLEX CARTMAIN FRAME CS ST5-6-7 Turbine Side	1
2	022-0986-0	Small Leg	1
3	022-0987-0	Length Leg	1
4	022-0988-0	Stirrup Trolley Coupler	2
5	022-0657-0	Hose	1
6	030-1976-8	Clamp 130 -140	4
7	02-0715-0	Ballast	4
8	02-0989-0	Tandem Channel	2
9	022-0990-0	Wheel 500 x 100 with Plate	4
10	022-0991-0	Slide Support	1
11	022-0992-0	Slide	1
12	022-0993-0	Center Wheel	1
13	022-9920-4	Gasket	1
14	022-0995-0	Plug 70x 70	3
15	022-0996-0	Draw Bar	1
16	022-0997-0	Big Plate	2
17	022-0998-0	Small Plate	1
18	020-0018-5	Gasket	1
20	022-1001-0	Main Frame Part	1
21	599-0182-0	Adapter, Nelson to cart (Not Shown)	1
	599-0395-0	Flotation Tire Kit (wheel, tire, hub asm, spindle) (Not Shown)	

## Decal Group



No.	Part Number	Description	Qty.
1	595-0275-1	Decal, Caution PTO Rewind	1
2	594-0565-1	Decal, Instructions	1
3	590-0113-0	Decal, Gasoline	1
4	599-0361-1	Decal, Engine Speed Range	1
5	599-0361-7	Decal, Turbine Speed Range	1
6	597-0124-0	Decal, Warning	1
7	595-0501-0	Decal, Important Choke Full Open	1
8	596-0017-0	Decal, Supply Hose	1
9	594-0565-0	Decal, Instructions	1
10	590-0013-0	Decal, Grease Levelwind	1
12	596-0426-0	Decal, Change Oil	1
13	595-0275-2	Decal, Anti-Return Pawl	1
14	585-0299-3	Decal, 10" Round Logo	1
16a	596-0177-0	Decal, AG-RAIN	3
16B	585-0404-0	Decal, 6" AG-RAIN	6
17	596-0428-0	Decal, Lubrication	1
18	599-0372-0	Decal 40 Performance Chart	1