



Water-Reel® Irrigation

700 S. Schrader Ave.
P.O. Box 290
Havana, IL 62644
USA
Phone: 309.543.4425
Fax: 309.543.4945

PARTS MANUAL

Turbine/Engine Driven 30/33A

S/N 350,000 to 359,999

Updated page #22 1/25/05 Rc

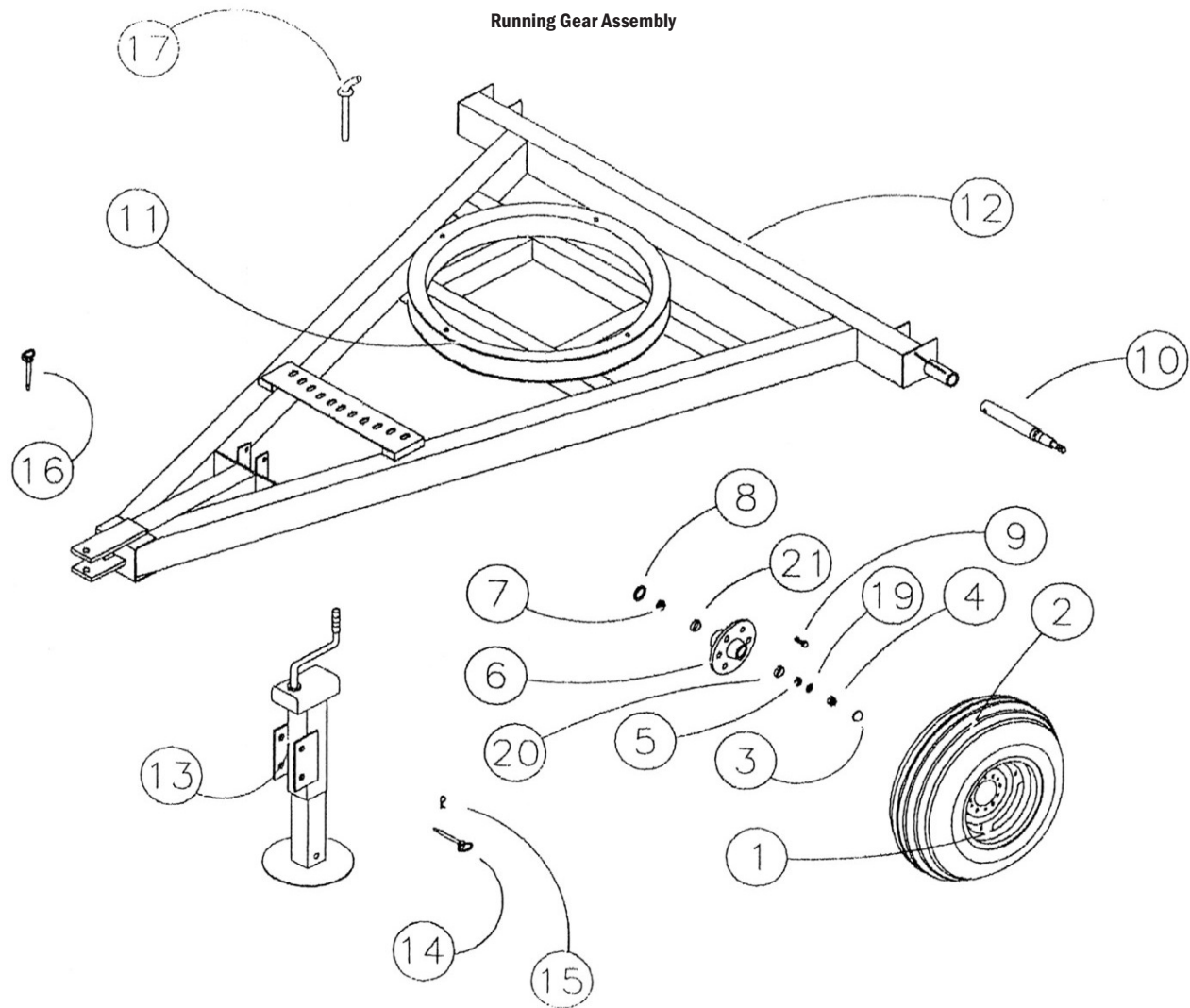
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Notes:

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

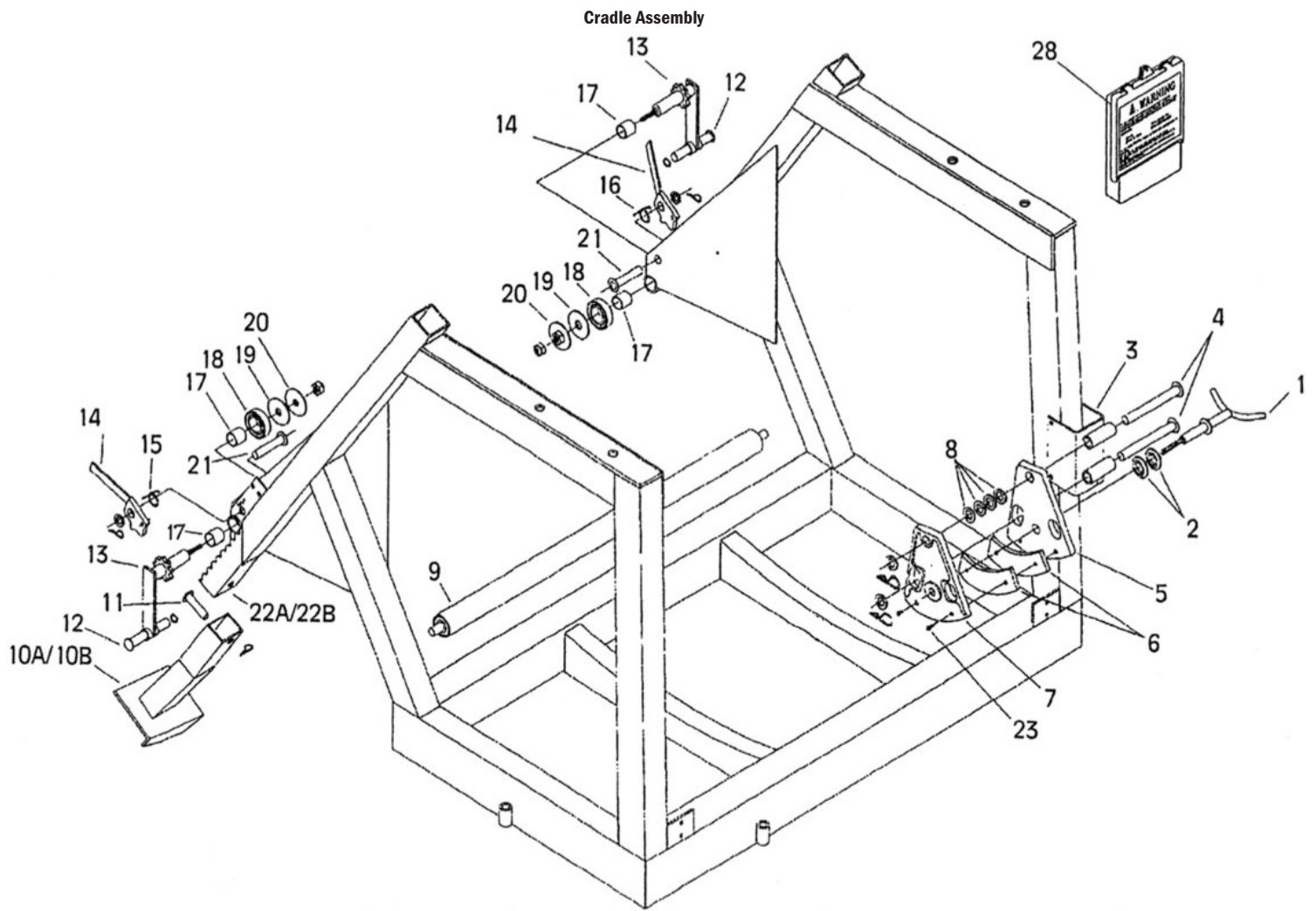
Items Such As Common Fasteners, Grease Fitting, And Other Small Parts Easy To Acquire Locally Are Not listed.

Running Gear Assembly



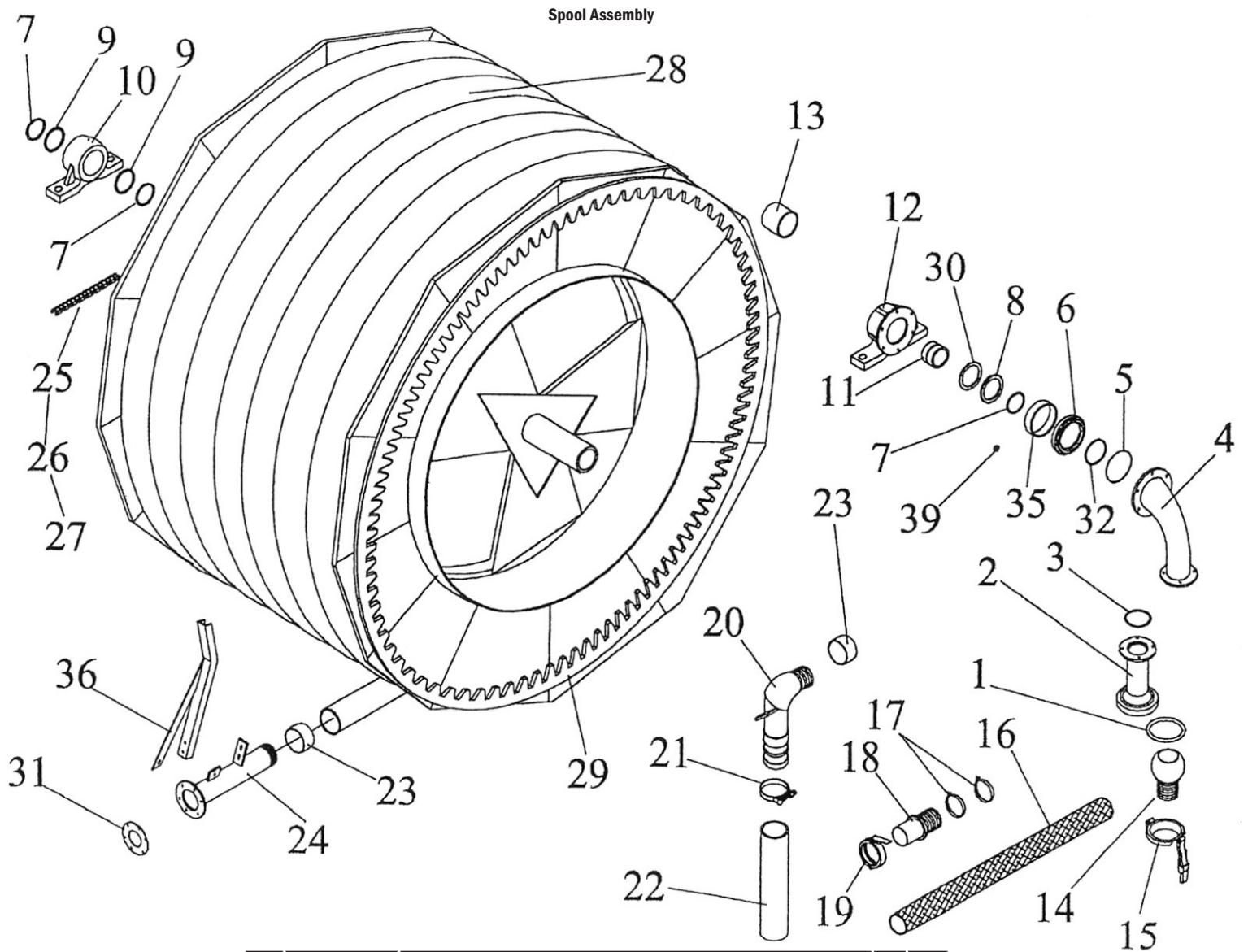
No.	Part Number	Description	Qty.
		Running Gear Assembly	
1	526-5138-1	Wheel, 6 Bolt 15" x 10KB	2
2	526-5531-0	Tire, 11L x 15 12 Ply	2
3	588-0355-0	Cap, Wilton 909902 Hub	2
3a	589-0206-0	Hub Cap Wilton 90903	2
4	589-0207-0	Nut, 7/8-14"NF Slotted Wilton 912952	2
5	515-0939-0	Bearing, Outer LM67048	2
5a	589-0204-0	Bearing, Outer LM25877	2
6a	588-0250-3	Hub, With Races Only, Wilton 280511	2
6b	588-0250-2	Hub Assembly (Hub, Bearing & Races)	2
6c	589-0199-0	Hub, With Races Only, Wilton 280581	2
6d	226-1598-2	Hub Assembly (Hub, Bearing & Races)	2
7	588-0355-4	Bearing, Inner LM48548	2
7b	589-0203-0	Bearing, Inner LM25590	2
8	588-0355-3	Seal, Grease CR15190	2
8b	589-0205-0	Seal, Grease CR20148	2
9	588-0355-5	Bolt, Lug 1/2-NF	12
9b	589-0202-0	Bolt, Lug 9/16 Wilton 9135381	12
10	500-0038-0	Spindle	2
10b	500-0566-0	Spindle	2
10c	500-0081-0	Spindle	2

11	020-9963-6	Bearing, Turntable	1
12	500-0046-0	Chassis	1
12b	500-0046-1	Chassis	1
13	500-0023-1	Jack Assembly	1
14	558-3281-1	Pin, 3/4 x 4 1/8 Hitch	2
15	561-0204-0	Hair Pin	2
16	523-5866-0	Pin, 3/4 x 6 1/2 Hitch	1
17	595-0483-0	Pin, Hitch 5.75" x 3/4"	1
19	589-0208-0	Washer, Spindle Wilton 913607	2
20	510-0940-0	Race, Outer LM67010	2
20b	589-0201-0	Race, Outer LM25821	2
21	510-0940-1	Race, Inner LM48510	2
21b	589-0200-0	Race, Inner LM25520	2

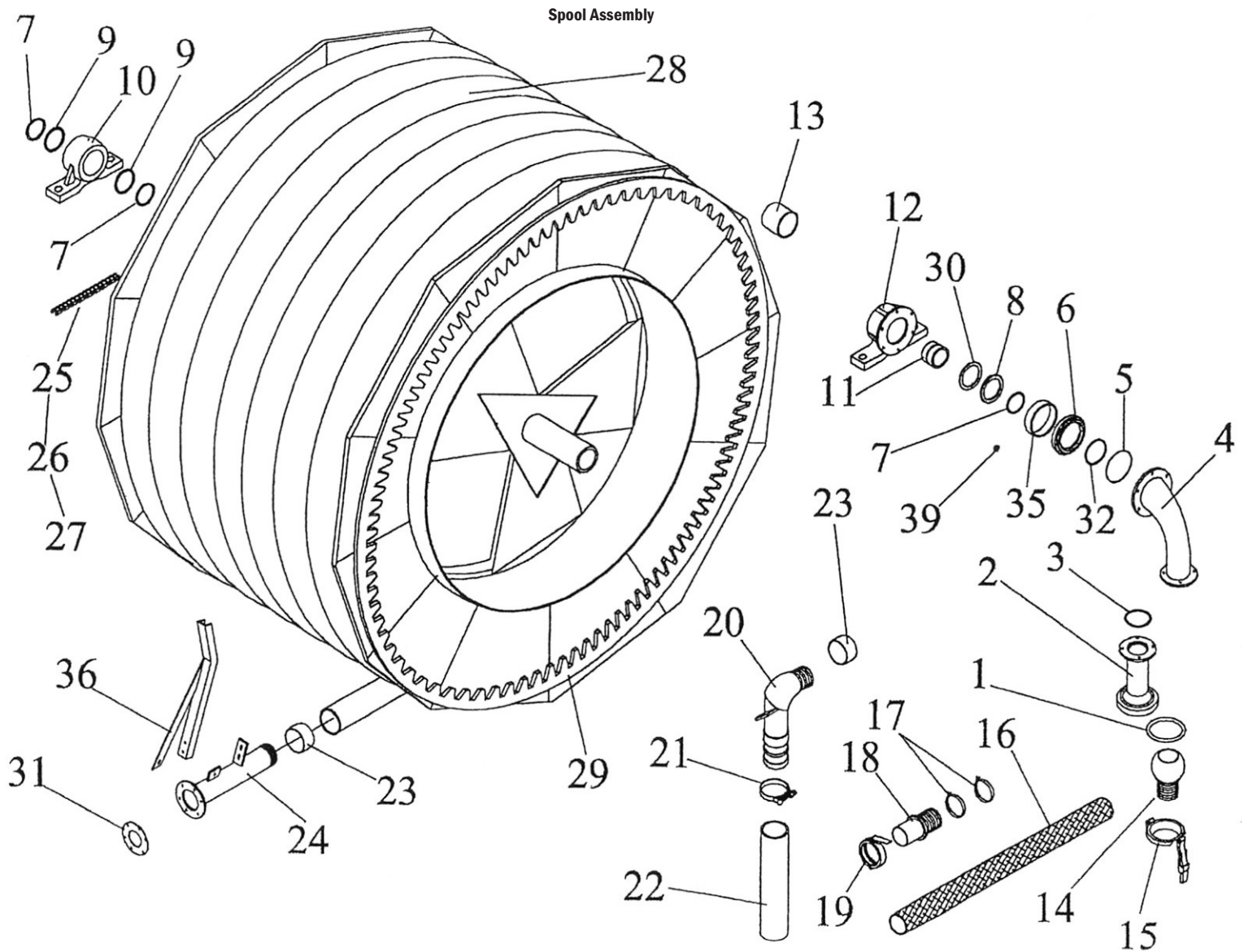


No.	Part Number	Description	Qty.
		Cradle Assembly	
1	022-0159-0	Brake Control Screw	1
2	022-0156-0	Hitrel Washer	2
3	022-0527-0	Brkt. Brake Mt.	1
4	022-0160-1	Pin, Brake	2
5	022-0158-1	Brake Plate	1
6	022-0454-0	Slide, (Brake Pad)	2
7	022-0157-1	Brake Plate, Threaded	1
8	553-2413-0	Washer, 3/4 Flat USS	4
9	020-1041-0	Roller, Horizontal (D2) & (A1)	1
10A	022-0027-0	Stabilizer Foot, Left	1
10B	022-0028-0	Stabilizer Foot, Right	1
11	022-0576-0	Pin,	2
12	020-9904-8	Handle	2
13	020-9957-8	Crank, 30	2
14	020-1012-7	Pawl	2

15	020-1012-8	Spring Right	1
16	020-1013-5	Spring Left	1
17	020-9905-6	Bushing	2
18	020-9905-9	Spring, Rubber	2
19	020-9904-9	Washer, Plastic	2
20	020-9905-8	Retainer Nut	2
21	020-1012-9	Pin	2
22A	022-0030-0	Stabilizer Leg, Left	1
22B	022-0029-0	Stabilizer Leg, Right	1
23	550-7010-0	Bolt, 8-1.25 X 20mm Brass (Brake Pad)	4
28	597-0119-1	Operator Manual Holder	1
28/A	599-0064-0	Operator Manual Bracket (Not Shown)	1
29	022-0479-0	PTO Rewind Crank (Not Shown)	1

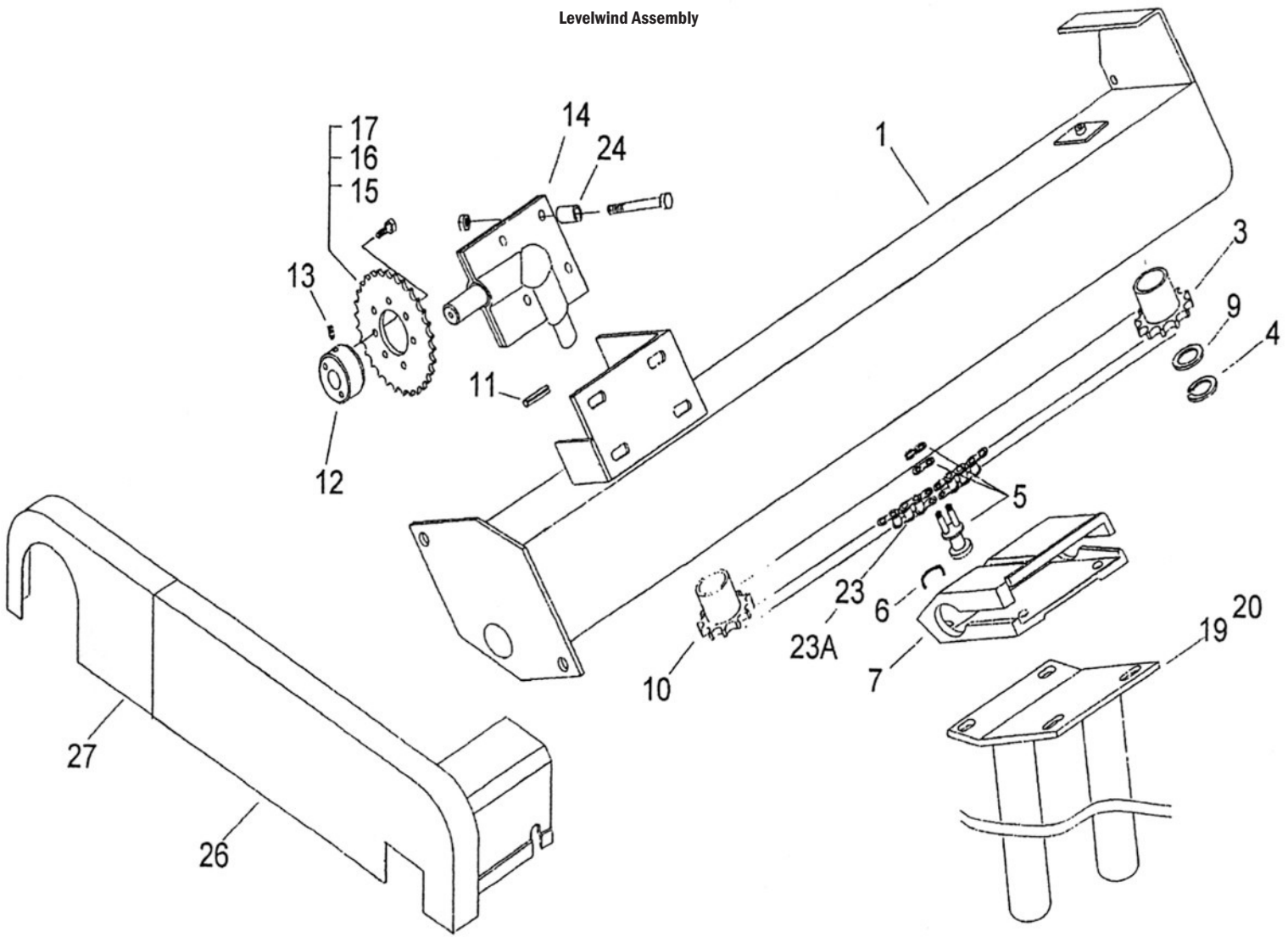


Spool Assembly				
No.	Part Number	Description		Qty.
1	588-0023-3	O-Ring 4"		1
2	022-0483-0	Lower Feeder Pipe 3-1/2"		1
3	022-0484-0	O-Ring 318mm OD x 3.53mm		2
4	022-0457-2	Elbow, Upper		1
5	022-0039-0	O-ring, 124mm x 3.53mm		1
6	022-0753-2	Seal, Housing		1
7	022-0037-0	Ring, Snap		3
8	022-0040-0	Washer, Thrust		1
9	022-0038-0	Spacer		2
10	020-9958-1	Bearing, Spool		1
11	593-0245-1	Ring Nut, Slip Joint		1
12	022-0032-0	Bearing		1
13	596-0014-0	Spacer		1
14	588-0256-1	Hose End Outlet 4"		1
15	588-0023-1	Lever Ring 4" 451 108mm		1
16	252-4962-0	Hose, Irr. Supply 4"	FT.	30
17A	030-1924-0	Clamp, Supra 104-112 (4" Hose)		4
18	588-0266-0	Hose End Inlet 4"		1
18b	593-0260-0	End, Ringlock 4"x6"		1
19	400-4927-0	Band, Ring 4"		1
19b	400-4927-2	Band, Ringlock 6"		1

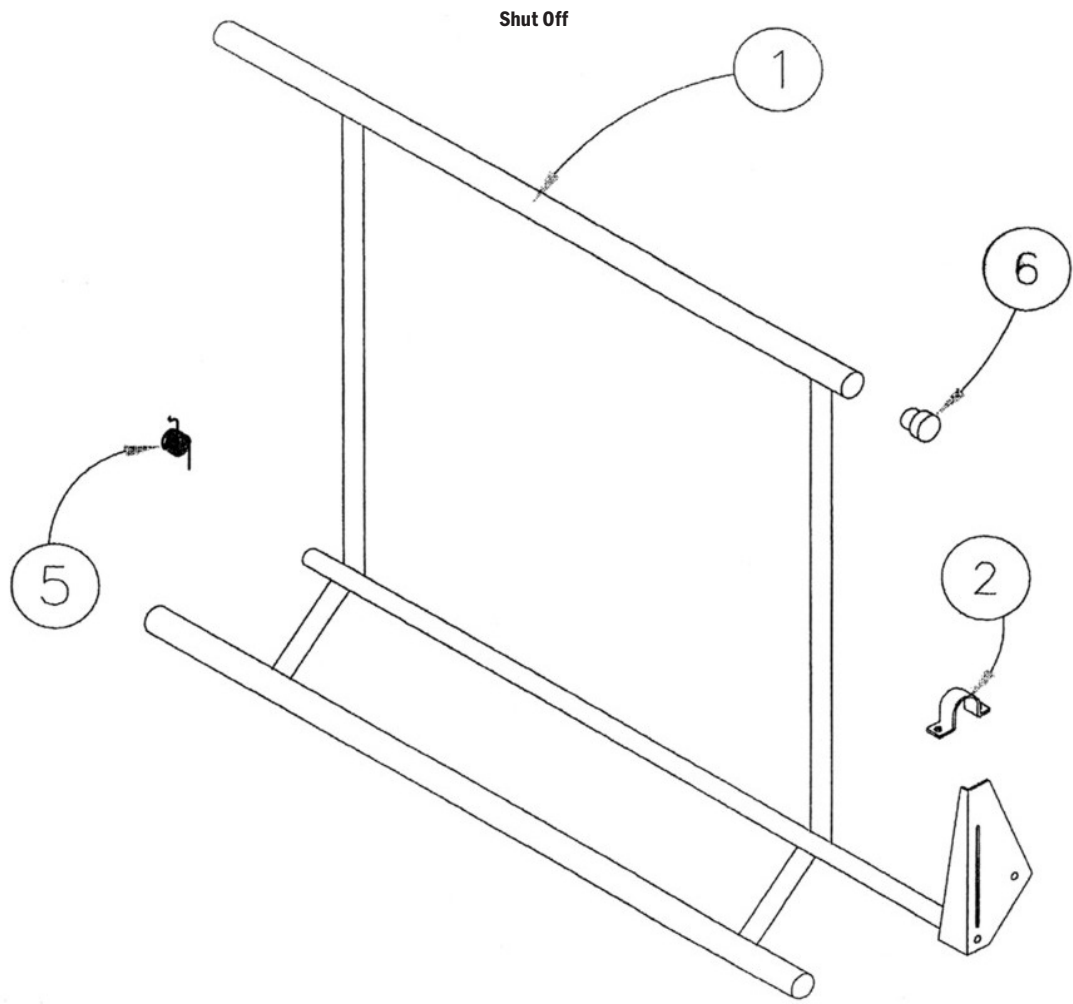


20A	022-0034-0	Elbow, PE Tube 90mm		1
20B	022-0127-0	Elbow, PE Tube 100mm		1
21	022-0682-0	Clamp, Hose Atlantic 86mm to 95mm		4
22	022-0031-0	Hose		1
23A	020-9911-3	Hose Band, 90mm		2
23B	020-9911-4	Hose Band, 100mm		2
24C	022-0740-3	Tube End, 90mm X Flange With Pipe and Shut off Mount.		1
24D	022-0740-2	Tube End, 100mm X Flange With Pipe and Shut off Mount.		1
25	020-0114-0	Chain, 1/2" Pitch	FT.	9.7
26	022-0111-0	Link, Connector 1/2" Pitch		1
27	022-0110-0	Link, Offset 1/2" Pitch		2
28A	584-0175-0	Tube, PE 90mm X 3.0" ID 1000 Ft.		1
28B	584-0175-2	Tube, PE 90mm X 3.0" ID 1100 Ft. (Optional)		1
28C	584-0174-0	Tube, PE 100mm X 3.3" ID 800 Ft. (Standard)		1
28D	584-0175-4	Tube, PE 90mm X 3.0" ID 1050 Ft. (Standard)		1
29	022-0458-0	Spool		1
30	022-0036-0	Washer , Wear		1
31	020-9920-2	Gasket		1
32	022-1037-0	O-Ring 3.35 x .210		1
35	022-0754-2	Spacer D2		1
36	022-0741-1	Stop		1

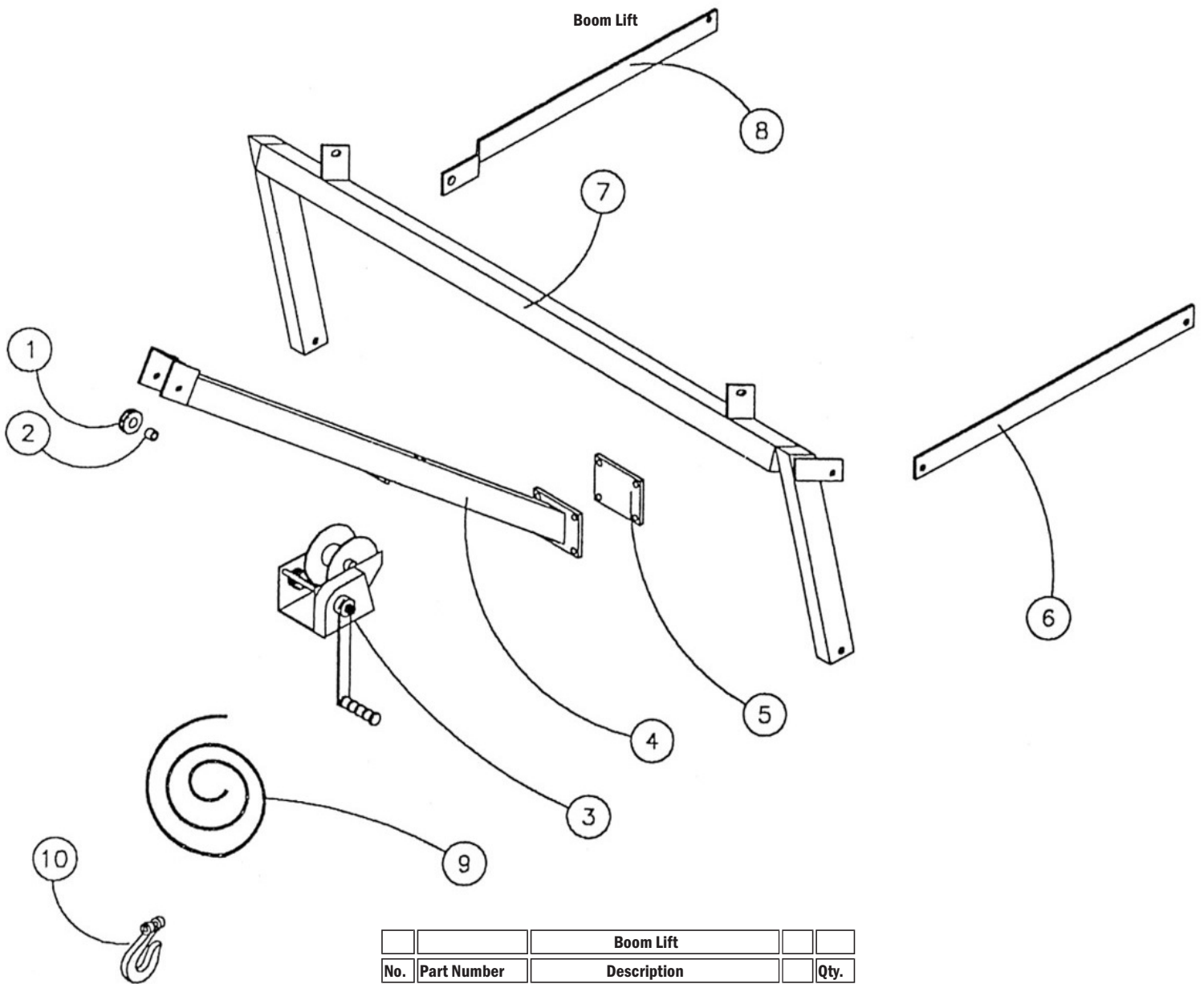
Levelwind Assembly



No.	Part Number	Description	Qty.
		Levelwind Assembly	
1A	021-9947-7	Frame, Levelwind (Base D2)	1
1B	022-0105-0	Levelwind Assembly Complete Less #19-20	1
3	020-0047-5	Sprocket, 13 Tooth Idler	1
4	526-6254-0	Snap Ring	1
5	020-0049-6	Guide Link	1
6	020-0077-6	Retaining Clip	1
7	020-0014-1	Fork Support	1
9	553-0628-0	Spacer, 1 1/2 X 1 X 18 Ga.	1
10	020-0047-9	Sprocket, 13 Tooth Driver	1
11	589-0214-0	Spring Pin, 7mm X 45mm	1
12	020-0015-3	Hub, Sprocket	1
13	020-0015-2	Set Screw	1
14	020-0108-5	Angle Drive Gearbox	1
15	022-0124-0	Sprocket, .5 X 29 Teeth (Model 30)	1
16	022-0125-0	Sprocket, .5 X 25 Teeth (Model 33)	1
17	022-0386-1	Sprocket, .5 X 32 Teeth (Model 27)	1
19	020-0460-7	Fork (30, 90mm)(27, 82mm)	1
20	022-0385-0	Fork (33, 100mm)	1
23	020-0114-1	Chain, 5/8 (Base D2) 150 Rollers	FT. 6.25
23A	302-1644-1	Link, 5/8	1
24	020-0108-4	Bushing	4
26	022-0122-0	Shield, Levelwind Chain	1
27	022-0123-2	Shield, Levelwind Chain	1

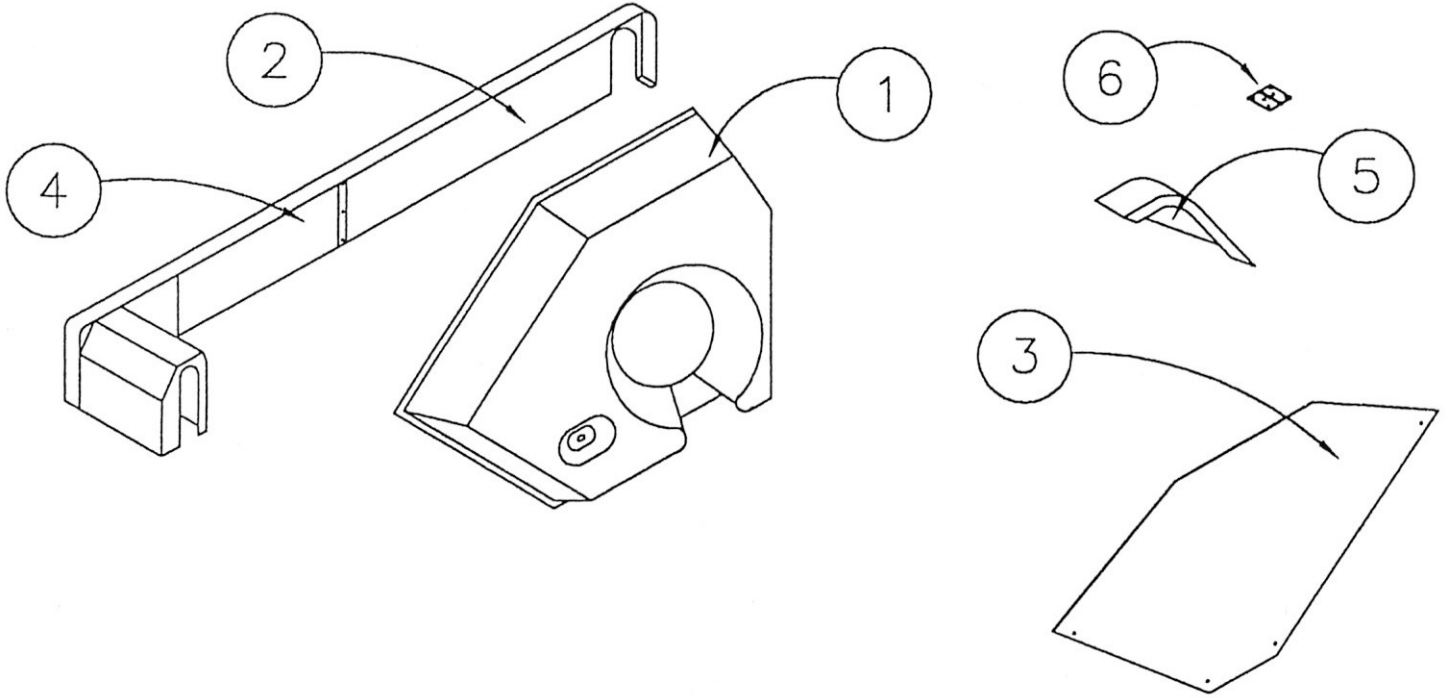


Shut Off			
No.	Part Number	Description	Qty.
1	022-0528-0	Compensator Bar	1
2	020-0016-4	Retainer	1
5	020-0016-6	Spring, Compensator Torsion	1
6	022-0163-0	Cap Plugs	4

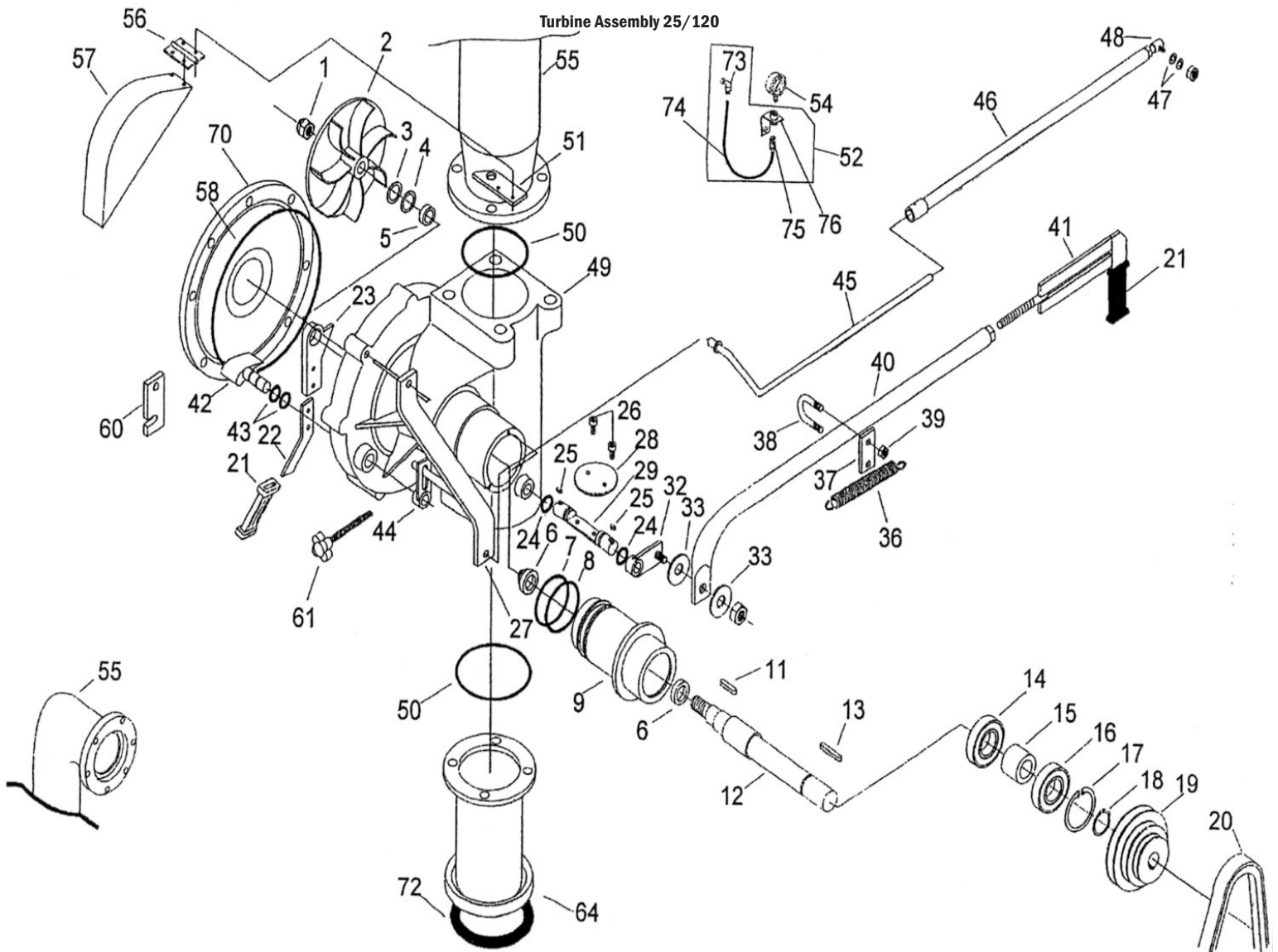


Boom Lift				
No.	Part Number	Description	Qty.	
1	402-4906-0	Pulley, 2 X 17/32 WRP		1
2	325-5191-0	Bushing, .56 X .843 X .62 Long		1
3	400-4855-1	Winch, Fulton K 1550		1
4	500-0031-0	Boom		1
5	500-0028-0	Clamp, Plate		1
6	594-0524-1	Brace, Boom		1
7	594-0522-0	Boom Lift		1
8	594-0524-2	Brace		1
9	750-4844-0	Cable, 1/4 - 7 X 19 Galv.	FT.	10
10	523-5565-0	Hook Slip By Clevis 3/8"		1

Shield Group



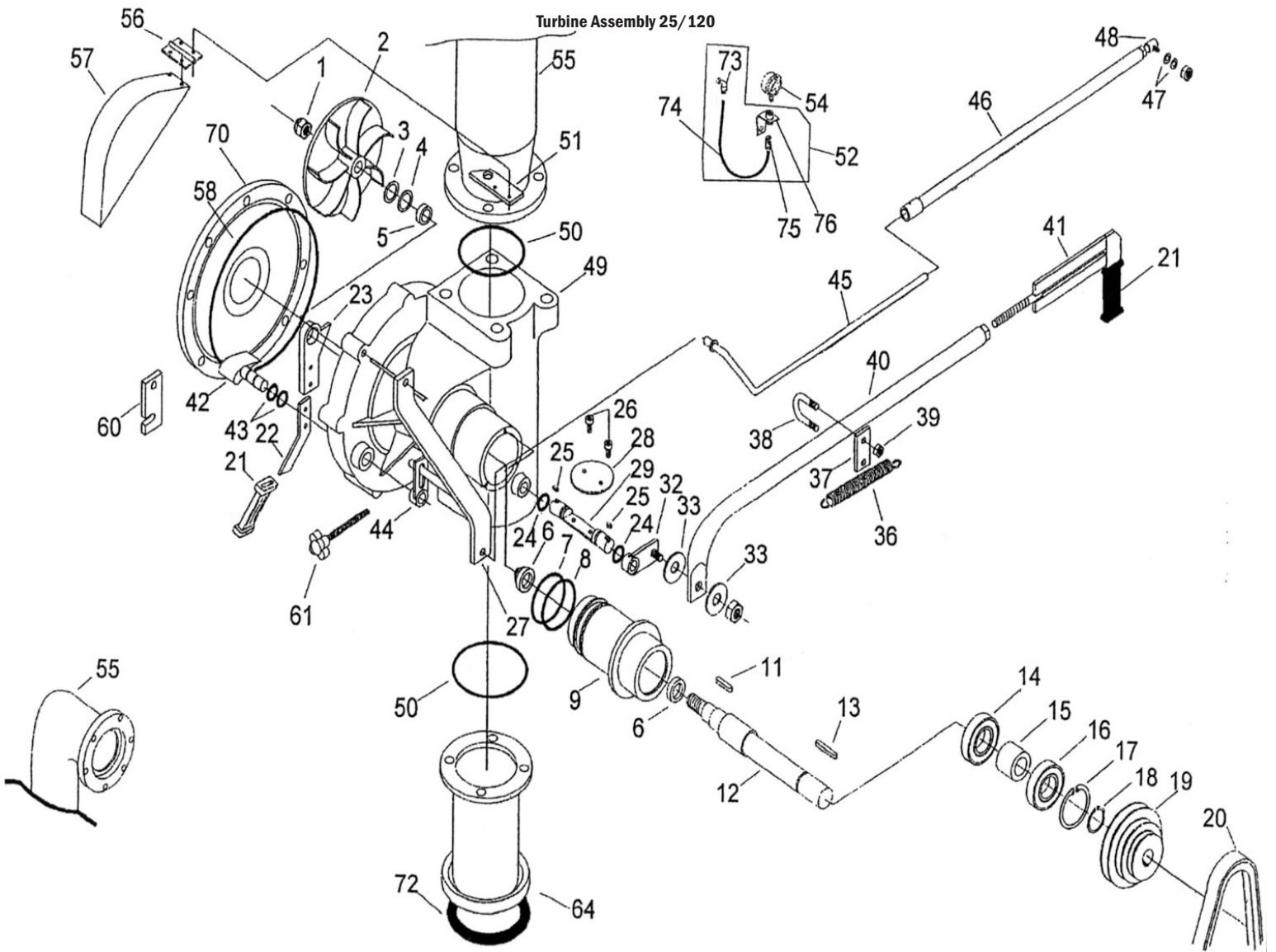
Shield Group			
No.	Part Number	Description	Qty.
1	022-0481-0	Hood	1
2	022-0123-2	Shield, Levelwind Chain	1
3	593-0039-0	Shield Spool	6
4	022-0122-0	Shield, Levelwind Chain	1
5	022-0388-0	Shield, Belt	1
6	022-0389-0	Hinge	1



Turbine Assembly 25/120

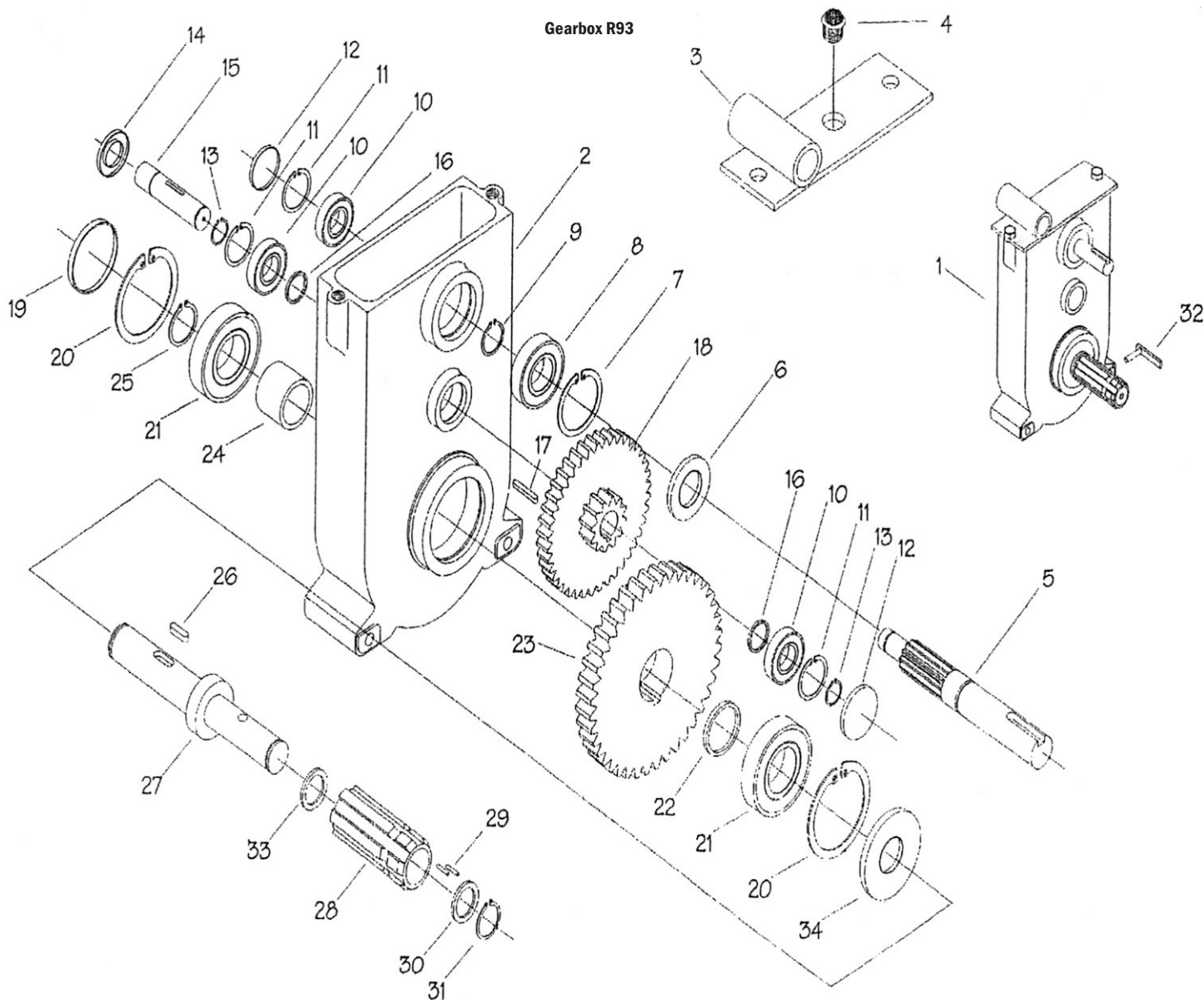
No.	Part Number	Description	Qty.
		Turbine Assembly 25/120	
1	022-0198-0	Nut, Self Locking Thin 14 X 1.5mm	1
2	022-0199-4	Impeller 6.77 OD X .51 Vane Height	1
3	022-0543-0	Spacer Mylar, .039" Thick	2
4	022-0300-0	Spacer, .28" Thick X .64" ID X 1.0" OD	1
5	022-0544-0	Spacer, Dia 25mm x 20mm x 5mm	1
6	022-0545-0	Seal 20 X 6	1
7	022-0546-0	O-ring 2.30" id x .103" c/s	2
8	022-0546-1	O-ring 2.362" id x .103" c/s	1
9	022-0548-0	Turbine Housing T200	1
11	022-0337-0	Key 5mm X 5mm X 10mm	1
12	022-0550-0	Impeller Shaft	1
13	022-0551-0	Key 6 X 50	1
14	022-0167-0	Bearing, 6204 2RS	1
15	022-0552-1	Spacer 1.8" long	1
16	022-0167-1	Bearing, 5204 2RS	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	022-0594-0	Belt AX-67	1
21	022-0414-0	Hand Grip	1
22	022-0557-0	Plate By-Pass Lever	1
23	022-0558-0	Lever	1
24	022-0559-0	O-ring 120 15,54 X 2.62	2

25	022-0319-0	Key, 6mm x 6mm x 10mm	2
26	022-0305-0	Screw, 6 X 16	2
27	022-0648-0	Arm, Comp	1
28	022-0562-0	Disc, By-Pass	1
29	022-0563-2	By-Pass Shaft	1
32	022-0564-0	By-Pass Lever	1
33	022-0565-0	Washer 10 X 30	2
35		Nut, M10	1
36	022-0318-0	Spring	1
37	022-0317-0	Spring Support	1
38	022-0312-0	U-bolt Dia 8	1
39		Nut, 8mm	1
40	022-0574-0	By-Pass Rod	1
41	022-0316-2	Tie Rod	1
42	022-0566-0	Regulator Flap With Pin	1
43	022-0331-0	O-ring 1/2"ODX3/8"IDX1/16"CS	2
44	022-0650-0	Loop, Comp.	1
45	022-0649-0	Link, Comp.	1
46	022-0569-0	By-Pass Rod	1
47		Nut, 8mm Flat	2
48	022-0341-0	Rod End	1



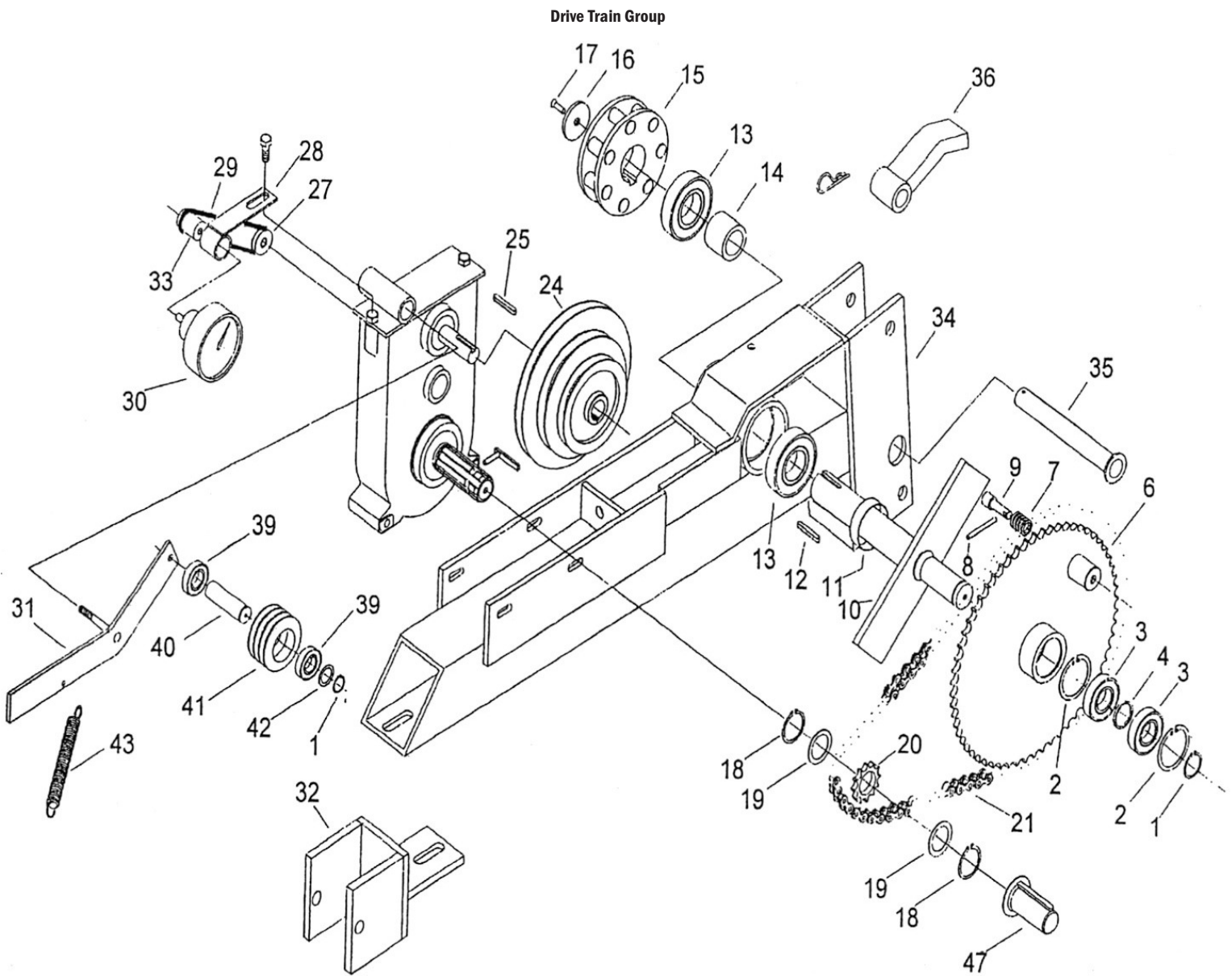
49	022-0302-1	Turbine Body 25/120		1
50	022-0484-0	O-ring 4.109" ID X .139" CS		2
51	022-0571-0	Support		1
52	599-0146-0	Gauge Protector		1
54	586-0675-0	Gauge 0-300		1
55	022-0457-2	Elbow, Upper 25/120 Turbine		1
56	022-0389-0	Hinge		1
57	022-0388-0	Shield, Belt		1
58	022-0572-0	O-ring i 286 X 3.53		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 25/120		1
72	588-0023-3	O-ring 4"		1
73	525-4915-2	Ftg, TB 90 Deg. 1/4"MNPT x 5/16" Tube		1
74	252-4939-2	Tube, Synflex 5/16"	FT.	2
75	599-0148-0	Gauge Mount		1
76	525-4915-4	Ftg, TB Straight 1/4"MNPT x 5/16" Tube		1
77	022-0695-0	Complete Turbine		1

Gearbox R93



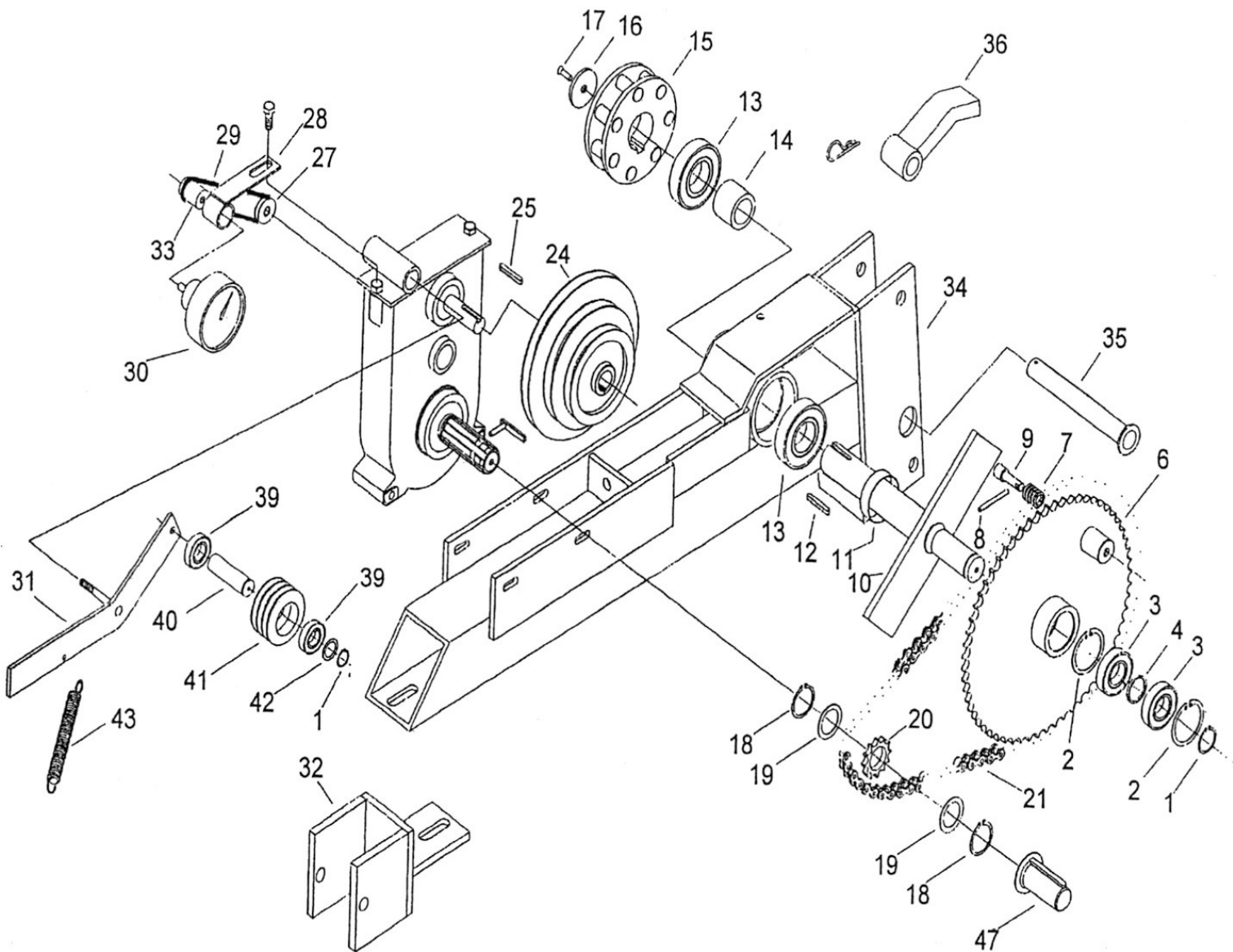
No.	Part Number	Description	Qty.
		Gearbox R93	
1	022-0816-0	Gearbox M1 93-1 (Complete)	1
2	022-0706-0	Gearbox Housing 93-1	1
3	022-0197-1	Gearbox Cover	1
4	022-0641-0	Breather	1
5	022-0164-1	SHAFT, GEARBOX INPUT - 93-1 BOX Shaft	1
6	022-0165-0	Oil Retainer 20 x 17 x 7	1
7	022-0166-0	Snap Ring i47	1
8	022-0167-0	Bearing, 6204 2RS	1
9	022-0168-0	Snap Ring E20	1
10	022-0169-0	Bearing, 6201	3
11	022-0170-0	Snap Ring i32	3
12	022-0171-0	Plug, Dia. 32	2
13	022-0174-0	Snap Ring E12	3
14	022-0172-0	Oil Retainer 12 x 32	1
15	022-0173-0	Shaft	1
16	022-0175-0	Shim Dia. 12. x 0.5	2
17	022-0176-0	Key 4mm x 10mm	1
18	022-0710-0	Double, Pinion Z15 M1.5/Z150 M1	1
19	022-0624-0	Plug, Dia. 62	1
20	022-0181-0	Snap Ring i62	2

21	022-0182-0	Bearing 6206 (no seals)	2
22	022-0183-0	Shim sp:3	1
23	022-0712-0	Gear, Z111 M1,5	1
24	022-0711-0	Spacer, sp:19.5	1
25	022-0187-0	Snap Ring E30	1
26	022-0709-0	Key, 8x20	1
27	022-0179-0	Shaft, Output	1
	022-1026-0	Shaft, Output Asm. (w/pins, etc.)	
28	022-0195-0	Shaft, Splined	1
29	022-0193-0	Pin, Bearing 1,9 x 17,5	62
30	022-0190-0	Spacer, i18x2.8	1
31	022-0189-0	Snap Ring E18	1
32	022-0191-0	Key, Safety With Pin	1
33	022-0194-0	Spacer, i22x2.8	1
34	022-0180-0	Oil Seal 35mmx62mmx7mm	1



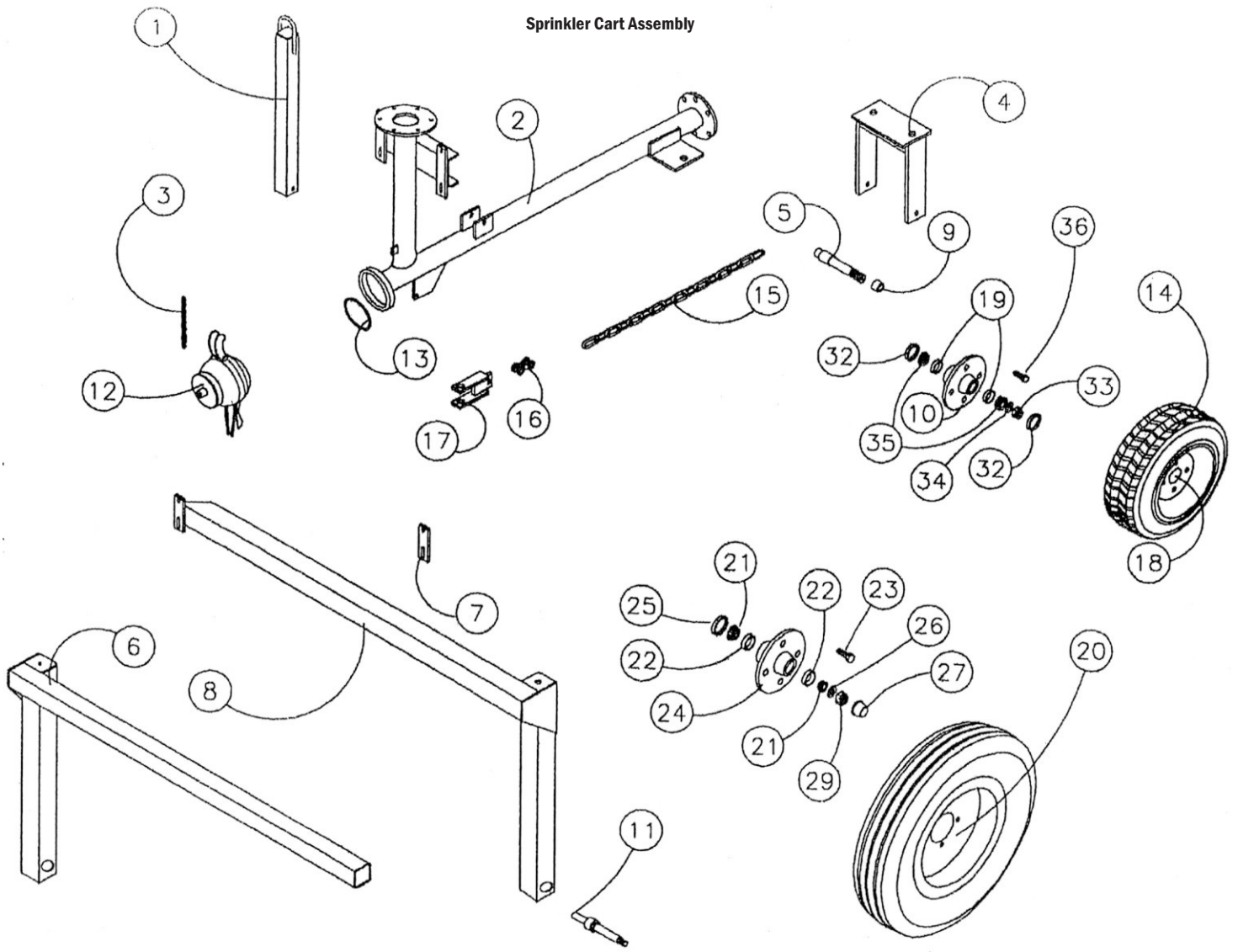
Drive Train Group				
No.	Part Number	Description		Qty.
1	022-0342-0	Snap Ring E25		1
2	022-0343-0	Snap Ring		2
3	022-0344-0	Bearing, 6005 2RS		2
4	022-0345-0	Spacer Dia. 26		2
6	022-0346-1	Sprocket 5/8" Z75		1
7	022-0347-0	Spring		1
8	022-0348-0	Pin		1
9	022-0349-0	Pin		1
10	022-0459-0	Shaft, Dia40mm(D2)7.3"Long On40mm End		1
11	022-0837-0	Spacer		1
12	022-0460-0	Key, 8mm X 12mm X 40mm		1
13	022-0462-0	Bearing, 6208 2RS		2
14	022-0463-0	Spacer		1
15	022-0532-0	Pinion DIA. 40xZ7		1
16	022-0359-0	Washer Special		1
17	550-7011-0	Screw 10mm x 25mm Allen Flat Head		1
18	022-0534-0	Snap Ring E35		2
19	022-0535-0	Spacer Dia. 35 X 1		2
20	022-0362-0	Sprocket 5/8" Z12		1

Drive Train Group



21	020-0114-1	Chain 5/8" 93 Rollers	FT.	4.8
24	022-0593-0	Pulley, 100mm x 125mm x 147mm (Pulley OD's)		1
25	022-0370-0	Key 6 X 50		1
27	595-0482-1	Tach Pulley 1.64		1
28	022-0367-0	Meter Counter Support		1
29	022-0366-1	Belt, Dia. 3.5mm X 590mm		1
30	022-0120-0	Tach		1
31	022-0651-0	Lever, For Belt		1
32	022-0372-0	End Support		1
33	594-0441-1	Pulley, Tach .966		1
34	022-0838-0	Turbine Mechanism Support		1
35	022-0371-0	Pin, Non Return Key		1
36	022-0356-0	Antireverse Key		1
39	022-0344-0	Bearing 6005 2RS		2
40	022-0653-0	Shaft, Belt Idler		1
41	022-0654-0	Pulley Idler 3 Groove		1
42	022-0703-0	Spacer, 1mm x 25mm x 35mm		1
43	022-0318-0	Spring		1
46	022-0816-0	Gearbox M1 93-1 (Complete) (Not Shown)		1
47	022-0438-0	Cover, PTO		1

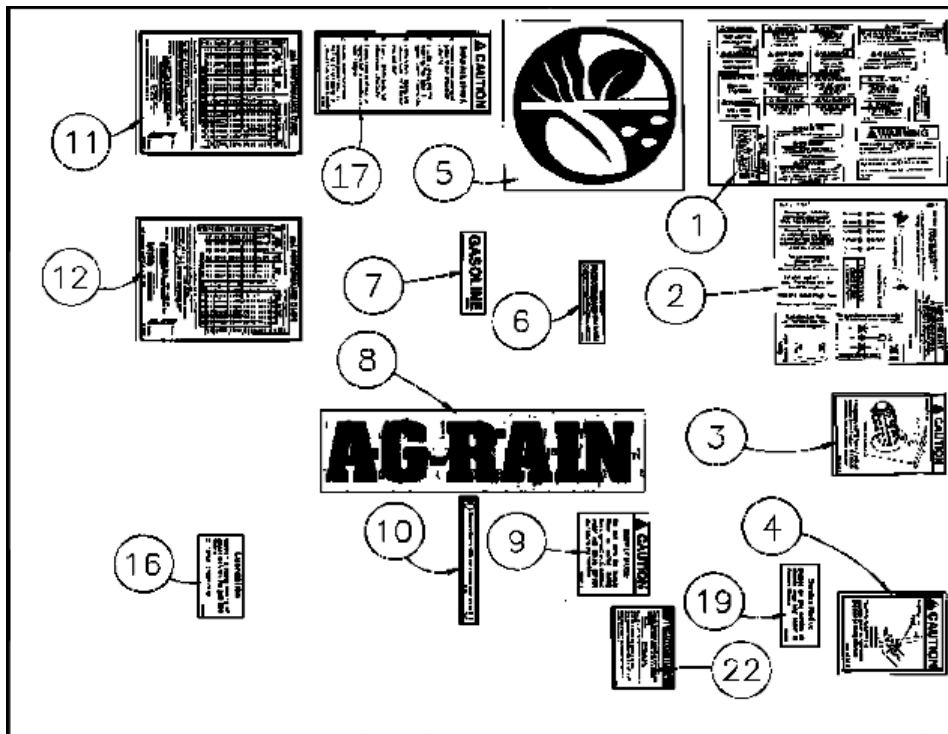
Sprinkler Cart Assembly



No.	Part Number	Description	Qty.
Sprinkler Cart Assembly			
1	500-0371-0	Lift Bail	1
2	599-0417-0	Body, Guncart Without Shut Off Bar	1
3	850-4059-0	Chain 3/16" Proof Coil (Per Foot) (10 Links)	FT
4	595-0003-0	Yoke, Front Guncart	1
5	060-1019-9	Axle, Front	1
6	500-0021-0	Leg, Inner 30 Cart	1
7	594-0603-0	Strap	3
8	500-0020-0	Leg, Outer 30	1
9	060-0245-0	Sleeve	1
10A	588-0495-0	Hub W/Race, Wilton 280301	1
10B	595-0382-0	Hub & Axle Assy. Complete (Not Shown)	1
11	596-0137-0	Spindle	2
12	597-0312-0	Cap, Guncart	1
13	588-0023-3	O-ring 4"	1
14A	593-0265-0	Tire, 16 X 6.5 X 8 4 Ply	1
14B	593-0265-1	Tube, Inner 16 X 3.5 X 8	1
15	850-4060-0	Chain 3/8 Proof Coil	FT. 3
16	523-5394-1	Clevis, Double	2
17	523-5421-0	Hitch, Chain	1

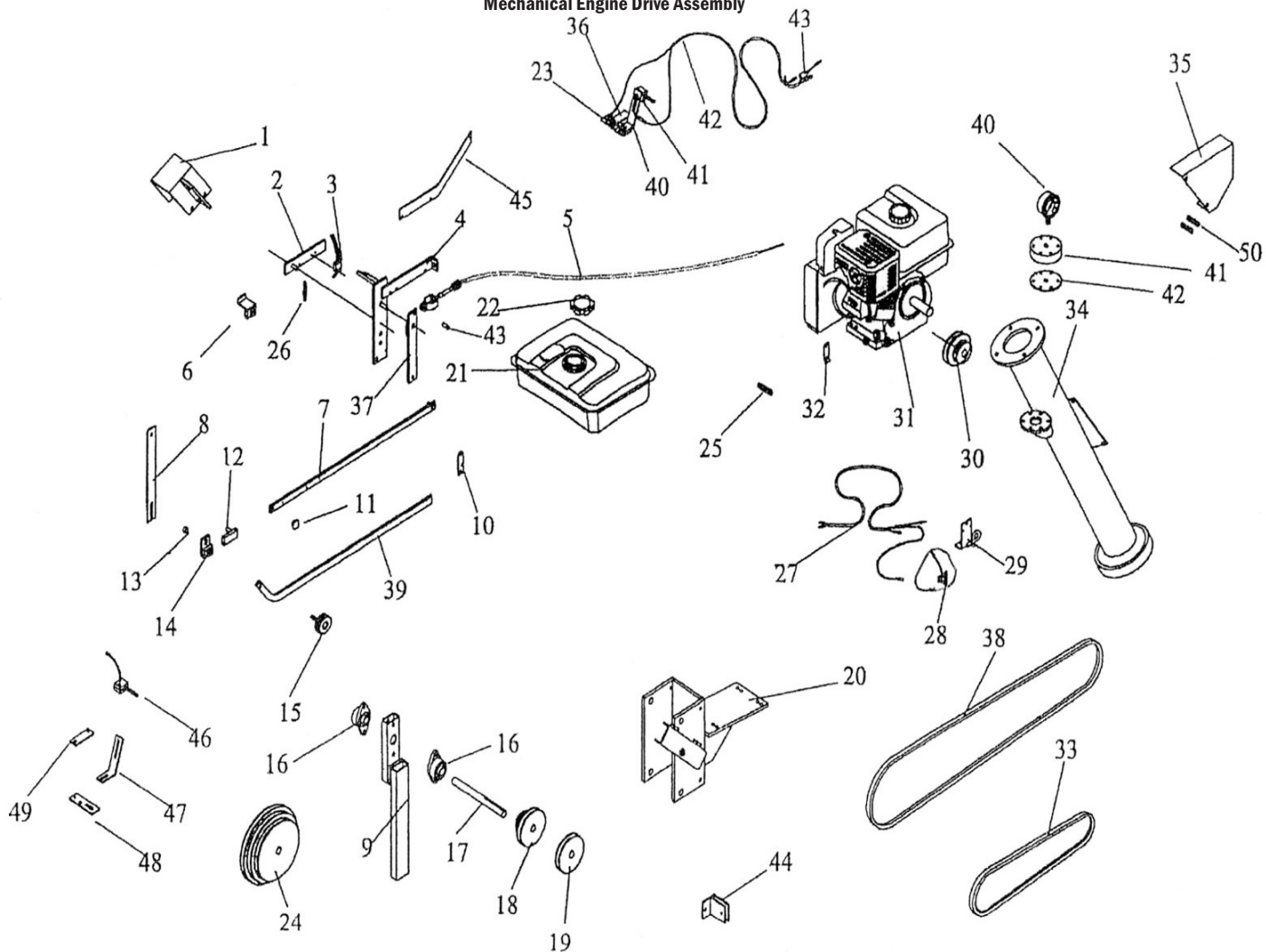
18	593-0264-0	Wheel, 8 X 5.75 4 Bolt 4 BCD	1
18B	595-0606-0	Wheel & Tire Assembly	1
19	588-0356-6	Race, L44610	2
20	586-0229-4	Wheel & Tire, 4:80 x 12 x 4 Bolt Galv.	2
21	588-0356-8	Bearing, Timken L-44649	4
22	588-0356-6	Race, L44610	4
23	588-0356-0	Bolt, Hub Wilton 913535	8
24	588-0356-4	Hub	2
25	588-0356-5	Seal, Grease Wilton 906282	2
26	588-0356-7	Washer, Spindle Wilton 913608	2
27	588-0356-1	Cap, Hub Wilton 909981	8
29	588-0356-2	Nut, Wilson 912953	2
32	588-0356-5	SealCR 12437	2
33	551-1602-0	Nut, 1" NF Slotted	1
34	588-0357-7	Washer, Wilton 913535	2
35	588-0356-3	Bearing L 44643	2
36	588-0356-0	Bolt, Lug	4

Decal Group



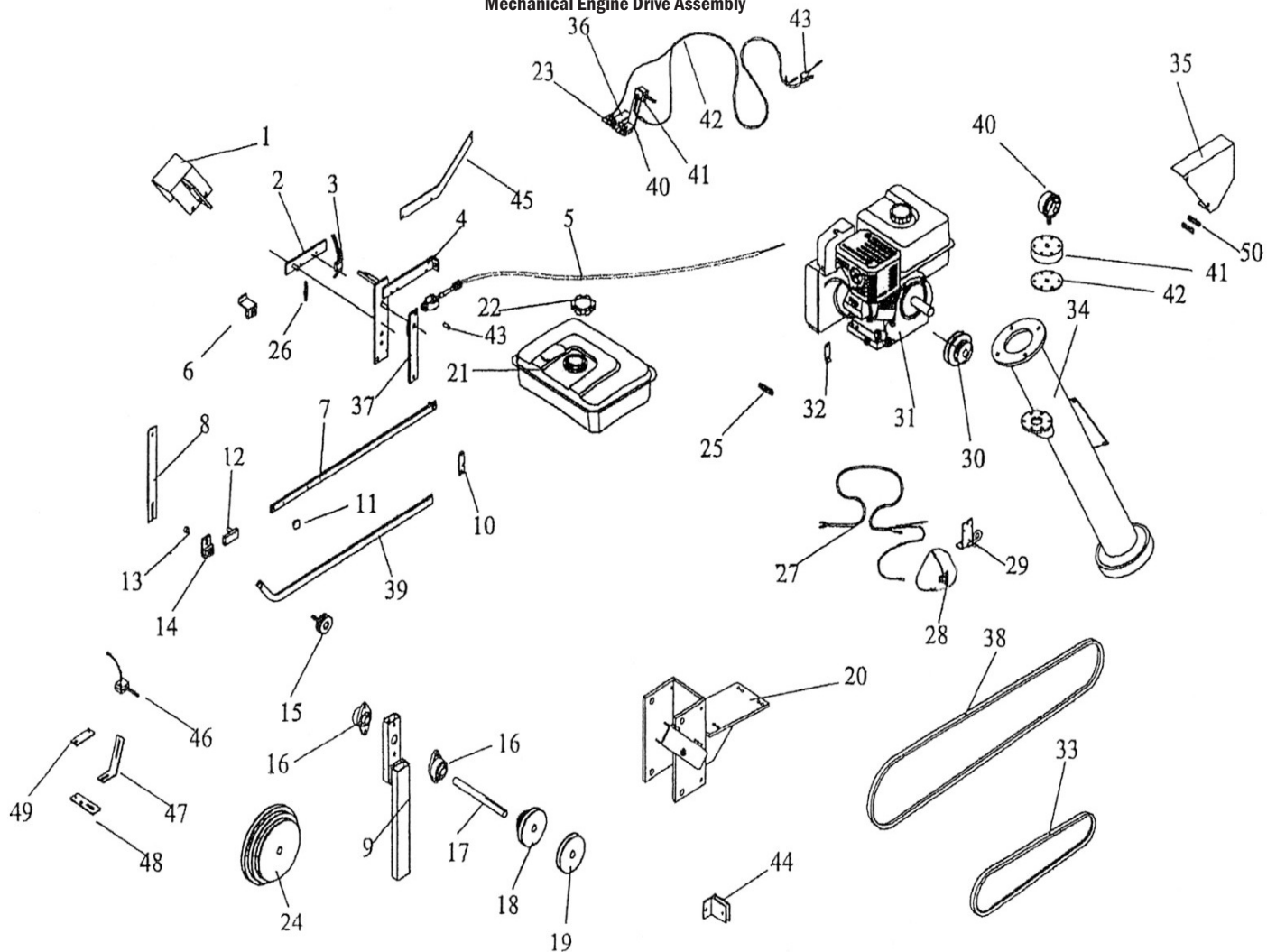
No.	Part Number	Description	Qty.
		Decal Group	
1	594-0565-1	Decal, Warning & Caution	1
2	594-0565-0	Decal, Instructions	1
3	595-0275-1	Decal, PTO Rewind	1
4	595-0275-2	Decal, Anti-Return Pawl	1
5	585-0299-2	Decal, 6" Round Logo	6
6	595-0501-0	Decal, Important (Engine)	1
7	590-0113-0	Decal, Gasoline	1
8	585-0404-2	Decal, Ag-Rain 3" Letters	3
9	596-0017-0	Decal, Supply Hose	1
10	590-0013-0	Decal, Keep Levelwind Slide Bar Grease	1
11	599-0369-0	Decal, Performance Guide 30A	1
12	599-0370-0	Decal, Performance Guide 33A	1
16	596-0428-0	Decal, Lub. (Not Shown)	1
17	596-0309-0	Decal, Brake Adj. (Not Shown)	1
19	596-0426-0	Decal, Change Oil	1
22	597-0055-0	Decal, Warning Read Operator Manual	1

Mechanical Engine Drive Assembly



No.	Part Number	Description	Qty.
		Mechanical Engine Drive Assembly	
1	599-0194-0	Cradle Plate	1
2	599-0041-0	Switch Arm 30A	1
3	586-0075-0	Switch, Chery E/72-40H	1
4	599-0039-0	Throttle Brkt. 30A	1
5	599-0132-0	Throttle Control Cable	1
6	599-0043-0	Switch Ramp	1
7	599-0028-0	Throttle Link	1
8	599-0026-1	Backing Plate	1
9	599-0253-0	Jackshaft Mount	1
10	599-0066-0	Throttle Mount	1
11	302-4915-0	Ball KNOB	1
12	599-0042-0	Slide, Switch	1
13	512-4847-0	Bushing, Stl .56 x .40 x .32L	1
14	599-0027-0	Swivel	1
15	526-5670-0	Knob, 3/8 x 1.0 Stud	1
16	599-0338-0	Bearing, 2 Hole Flange (Cast Iron Housing)	2
17	599-0277-0	Jack Shaft	1
18	599-0084-0	Pulley, 3 Step 2"-3"-4" 3/4" Bore	1
19	599-0341-0	Pulley, 3" x 3/4" Bore	2
20	599-0255-2	Engine Mount 30A	1
21A	599-0219-1	Fuel Tank 4 HP Robin	1
21B	599-0443-0	Fuel Tank 8 HP Honda	1
22A	599-0221-0	Cap, Robin	1
22B	599-0221-1	Cap, Honda	1

Mechanical Engine Drive Assembly



23	599-0432-0	Plate	1
24	022-0593-0	Pulley, 100mm x 125mm x 147mm	1
25	450-4858-2	Spring, .5 OD x 2 x .47	1
26	599-0422-0	Spring, .045"w x .38 OD x 2.5" Long	1
27	599-0324-0	Wire Harness A Series	1
28	599-0279-0	Switch, Robin Shut Off	1
29	599-0344-0	Switch Holder	1
30A	599-0293-0	Pulley 2" 3/4" Bore	1
31A	598-0141-1	Engine, Robin 4HP	1
31B	584-0701-7	Engine, Honda 4HP	1
32	599-0265-0	Spring Holder	1
33	022-0322-0	Belt, AX36	1
34a	599-0075-2	Entry Fitting 33A	1
34b	599-0075-1	Entry Fitting 30A (Not as shown has 3 bolt flange)	1
35	599-0323-0	Shield	1
36	599-0429-0	Strap	1
37	599-0035-0	Throttle Pivot Arm	1
38	599-0343-0	Belt, AX 42	1
39	599-0034-0	Link Shut Off	1
40	599-0424-0	Strap	1
41	599-0430-0	Switch Contact	1
42	599-0324-0	Wire Harness	1
43	599-0325-0	Connector	1
44	586-0675-0	Gauge, 0-300	1
45	586-0690-1	Gauge Protector Top	1
46	587-0046-0	Diaphragm	1
47	599-0485-0	Bracket Throttle Cable	1