

Demco manufacturing

Dethmers Manufacturing Company

DOING OUR BEST TO PROVIDE YOU THE BEST

HT/HTH SERIES

750 AND 1000 GALLON

OWNER/OPERATOR MANUAL

ASSEMBLY
CALIBRATION
OPERATION
REPLACEMENT PARTS

READ complete manual CAREFULLY
BEFORE attempting operation.



DEMCO • Dethmers Mfg. Co. • P.O. Box 189 • 4010 320th Street • Boyden, IA 51234
PH: (712) 725-2311 or (712) 725-2302 • Toll Free: 1-800-543-3626 • FAX: (712) 725-2380
www.demco-products.com

Introduction

Thank you for purchasing a Demco sprayer. We feel you have made a wise choice and hope you are completely satisfied with your new piece of equipment.

If you have any questions regarding the applications of certain solutions or chemicals, contact your chemical supplier and follow chemical manufacturer recommendations as well as all licensing and use restrictions or regulations.



WARNING: TO AVOID PERSONAL INJURY OR PROPERTY DAMAGE, OBSERVE THE FOLLOWING INSTRUCTIONS:

Chemicals are dangerous. Know exactly what you're going to do and what is going to happen before attempting to work with these products. Improper selection or use can injure people, animals, plants and soil.

Always wear protective clothing such as coveralls, goggles and gloves when working with chemicals or the sprayer.

Be sure to dispose of all unused chemicals or solutions in a proper and ecologically sound manner.

GENERAL INFORMATION

1. Unless otherwise specified, high-strength (grade5) (3 radial-line head markings) hex head bolts are used throughout assembly of this piece of equipment.
2. Whenever the terms "**LEFT**" and "**RIGHT**" are used in this manual it means from a position behind the sprayer and facing forward.
3. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION**.
4. All reference numbers used in the assembly instructions of the sprayer main frame correspond with the reference numbers in the trailer main list.

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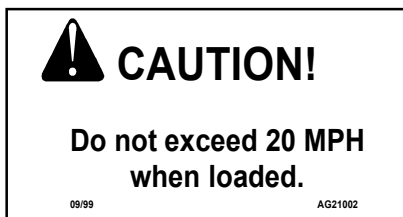
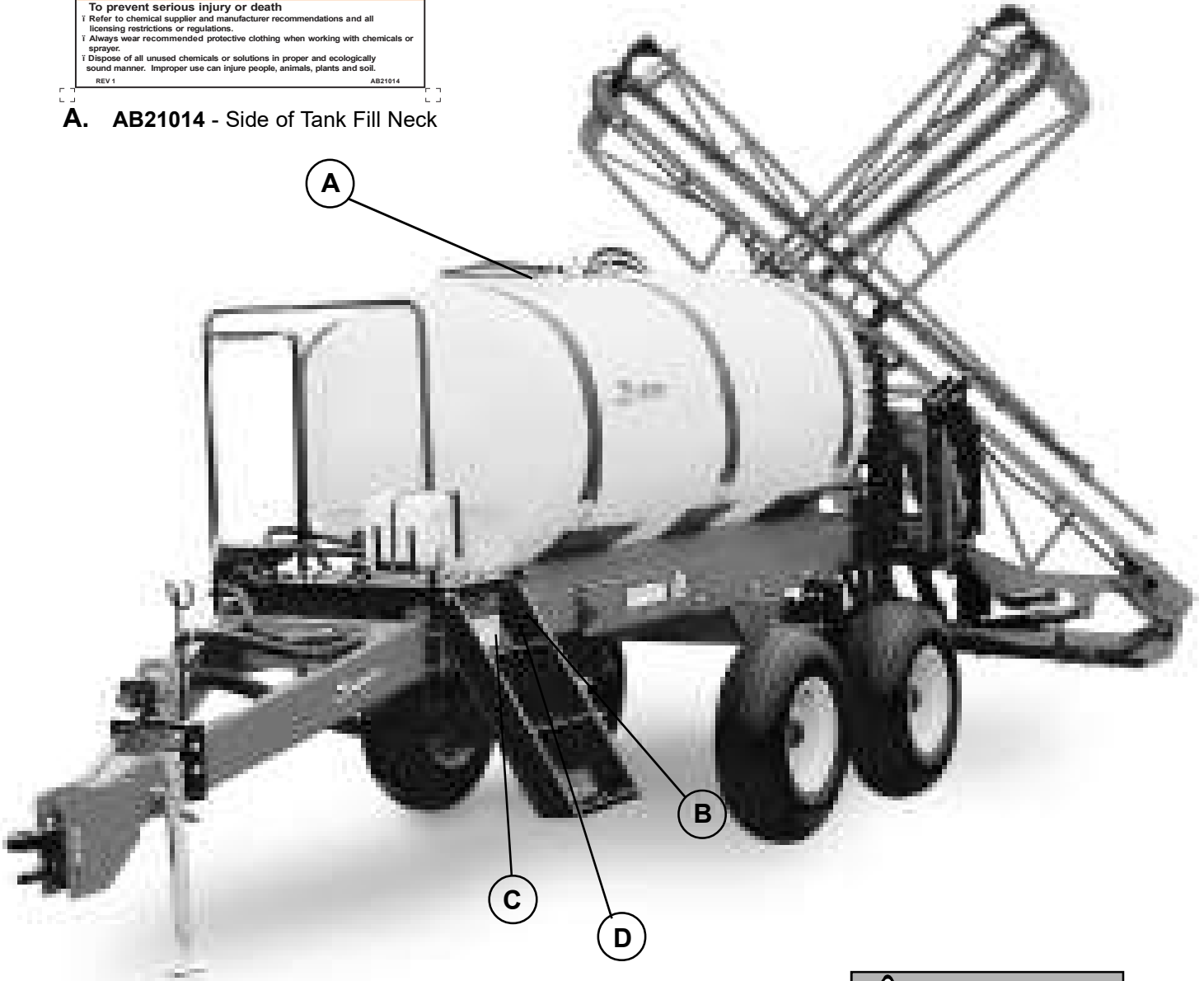


SAFETY SIGN LOCATIONS

Types of safety sign and locations on equipment are shown in illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and area or particular function related to that area, that requires your SAFETY AWARENESS.



A. AB21014 - Side of Tank Fill Neck

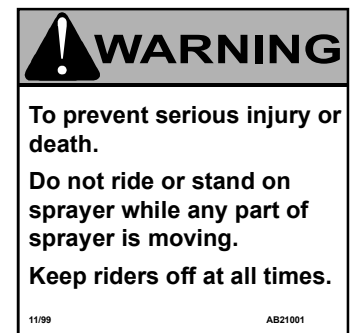


B. AG21002 - Side of Frame

NOTICE!			
Keep wheel lug nuts or bolts tightened to specified torque			
Recommendations for proper load rating and tire pressure at 10 MPH.			
TIRE SIZE	PLY	LOAD RATING	PRESSURE
9.5L x 15	6	2320 lbs	32 psi
11L x 15	8	2930 lbs	36 psi
12.5L x 15	8	3460 lbs	36 psi
12.5L x 15	10	3840 lbs	44 psi
12.5 x 15	12	4380 lbs	52 psi
12.5 x 16	12	4580 lbs	52 psi
14L x 16.1	12	5420 lbs	44 psi
16.5L x 16.1	10	6040 lbs	36 psi
19L x 16.1	10	6980 lbs	32 psi
21.5L x 16.1	14	9020 lbs	36 psi

All truck tires are limited to a maximum inflation of 40 PSI.
For speeds above 10 MPH reduce load rating by 15%.
CAUTION: Units with rear hitches are not to be towed in tandem when loaded.
11/99 AG21001

C. AG21001 - Side of Frame



D. AB21001 - Side of Frame

BOLT TORQUE

TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.



Torque Specifications

Bolt Torque for Standard bolts *

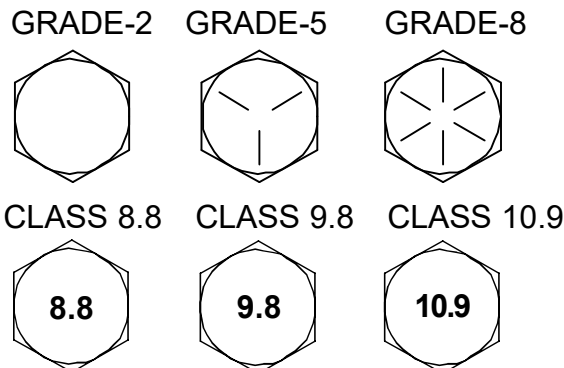
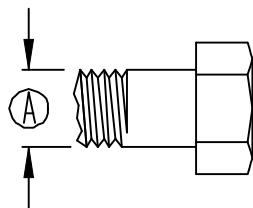
"A"	GRADE 2		GRADE 5		GRADE 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

Bolt Torque for Metric bolts *

"A"	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)

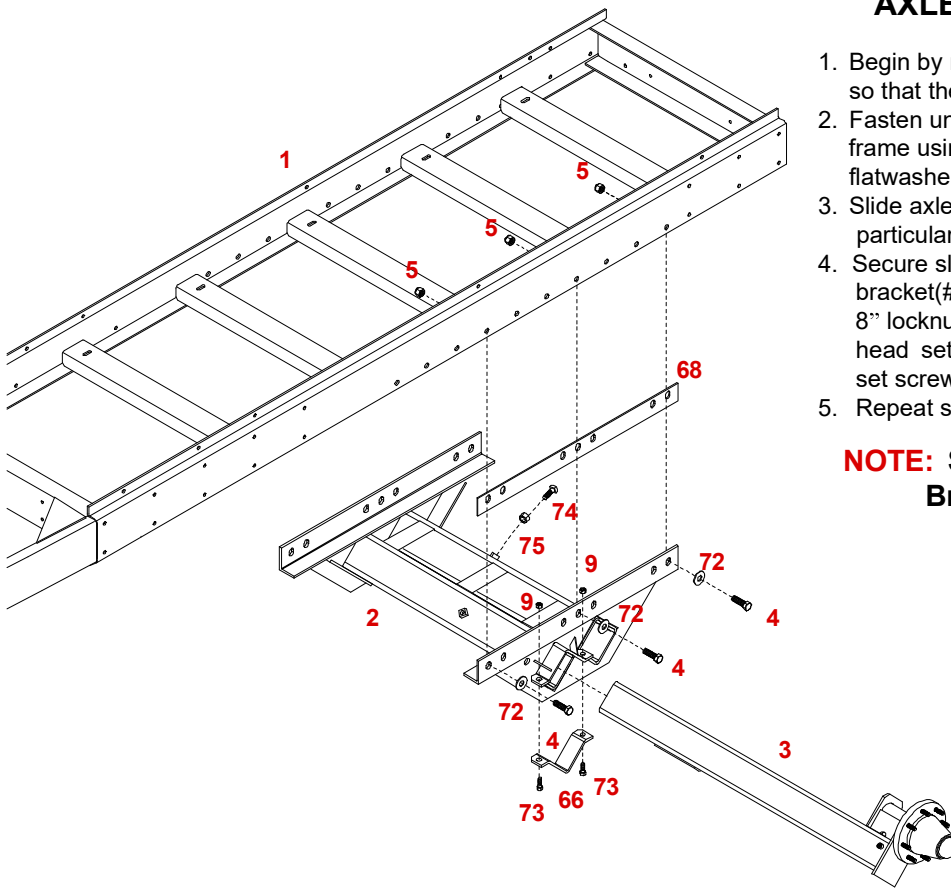
Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* GRADE or CLASS value for bolts and capscrews are identified by their head markings.



HTH AXLE ASSEMBLY

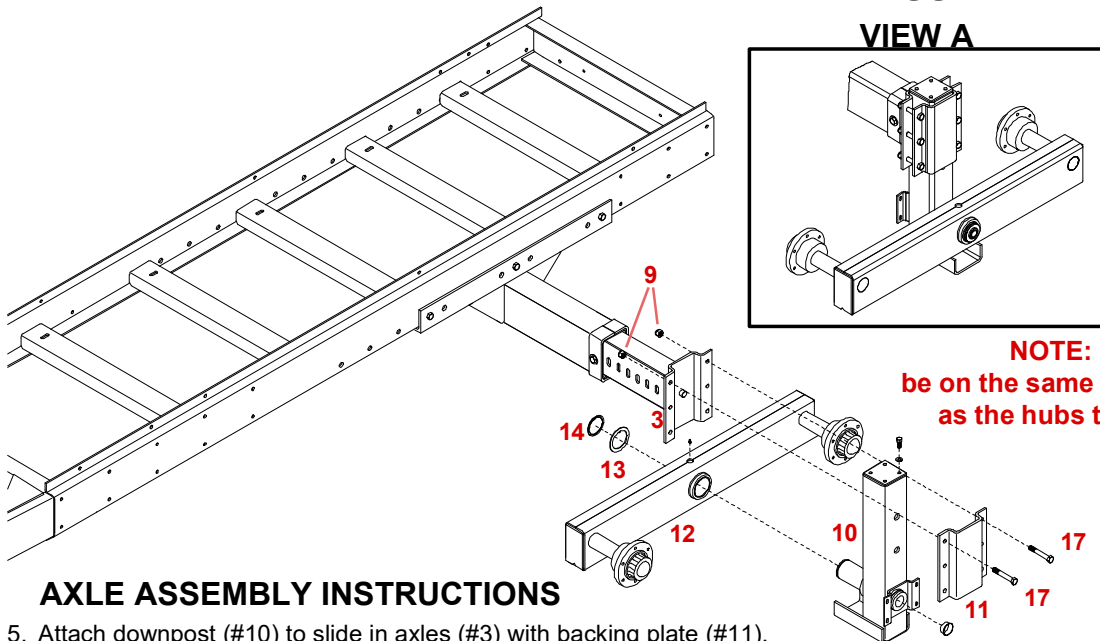
AXLE ASSEMBLY INSTRUCTIONS



1. Begin by resting frame (#1) on sawhorses or solid object so that the frame is about 36" off the ground.
2. Fasten undercarriage (#2) and undercarriage shims (#68) to frame using six 3/4" x 2" hex head bolts (#4), six 3/4" flatwashers(#72), and six 3/4" nylon insert locknuts (#5).
3. Slide axle (#3) into position on each side for your particular row spacing (i.e.120" spacing).
4. Secure slide-in axle (#3) into position using the axle mount bracket(#66), two 5/8" x 2" hex head bolt (#73), and two 5/8" locknuts (#9). Then, tighten the bottom two 5/8" x 2 sq. head set screws (#74) and jam nuts(#75). Tighten the top set screw so that it is snug and then tighten the jam nut.
5. Repeat steps 3 &4 for the other side.

NOTE: See Page 11-12 for complete Parts Breakdown and Part Numbers

TANDEM WHEEL CARRIER ASSEMBLY



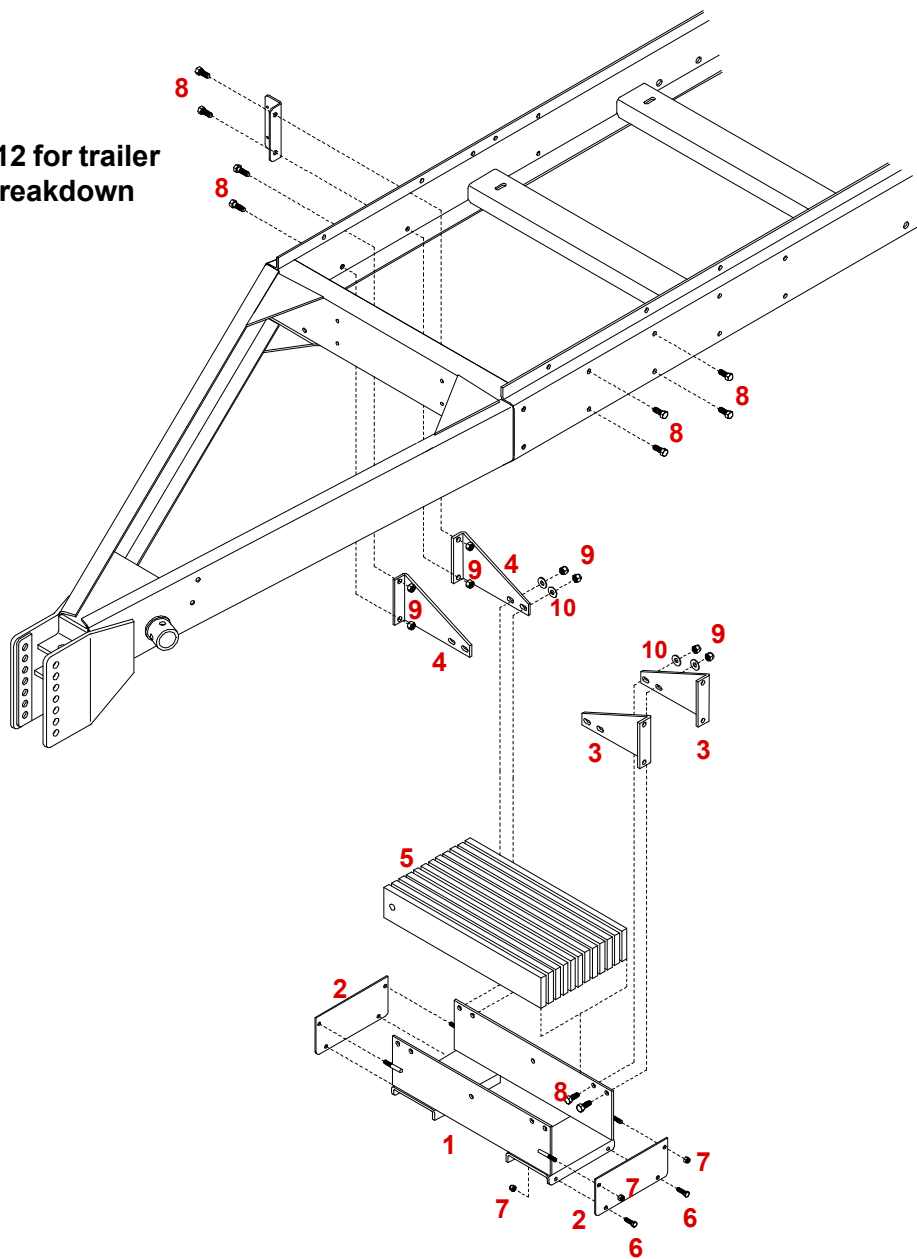
NOTE: Downpost (10) must be on the same side of the walking beam (12) as the hubs to prevent excessive strain

AXLE ASSEMBLY INSTRUCTIONS

5. Attach downpost (#10) to slide in axles (#3) with backing plate (#11), six 5/8" x 4" hex head bolts (#17), and six 5/8" locknuts (#9).
NOTE: Reverse downpost (#10) and walking beam (#12) for 80" wheel spacing. 60" same as 80" except use optional 50-3/4" undercarriage and 25" slide-ins. See VIEW A and above note.
6. Slide tandem wheel carriers (#12) into position and secure with 3" inverted tab washer (#13) and 3" spiral snap ring (#14).
NOTE: For 120" wheel spacing hubs should be facing out, for 80" spacing hubs should face in. See above illustrations.
7. Grease the pivot shaft through hole in top of walking beam.
8. Bolt the four rims (with tires mounted) to the hubs with 1/2" lug bolts provided.
9. Repeat steps 5 through 8 for the other side.

WEIGHT BOX ASSEMBLY PARTS BREAKDOWN

Refer to Page 11-12 for trailer parts and breakdown



WEIGHT BOX ASSEMBLY INSTRUCTIONS

1. Attach left and right mounting brackets (#3 & 4) to main frame, using eight 1/2" x 1-1/2" hex head bolts (#8).
2. Mount weight box (#1) to mounting brackets (#3 & 4), using eight 1/2" x 1-1/2" hex head bolts (#8) and 1/2" flat washers (#10).
3. Put the twelve weight blocks (#5) into the weight box (#1).
4. Attach the two end covers (#2) on each end of the weight box (#1), using four 3/8" x 1-1/2" hex head bolts (#6) and eight 3/8" nylon insert lock nuts(#7).

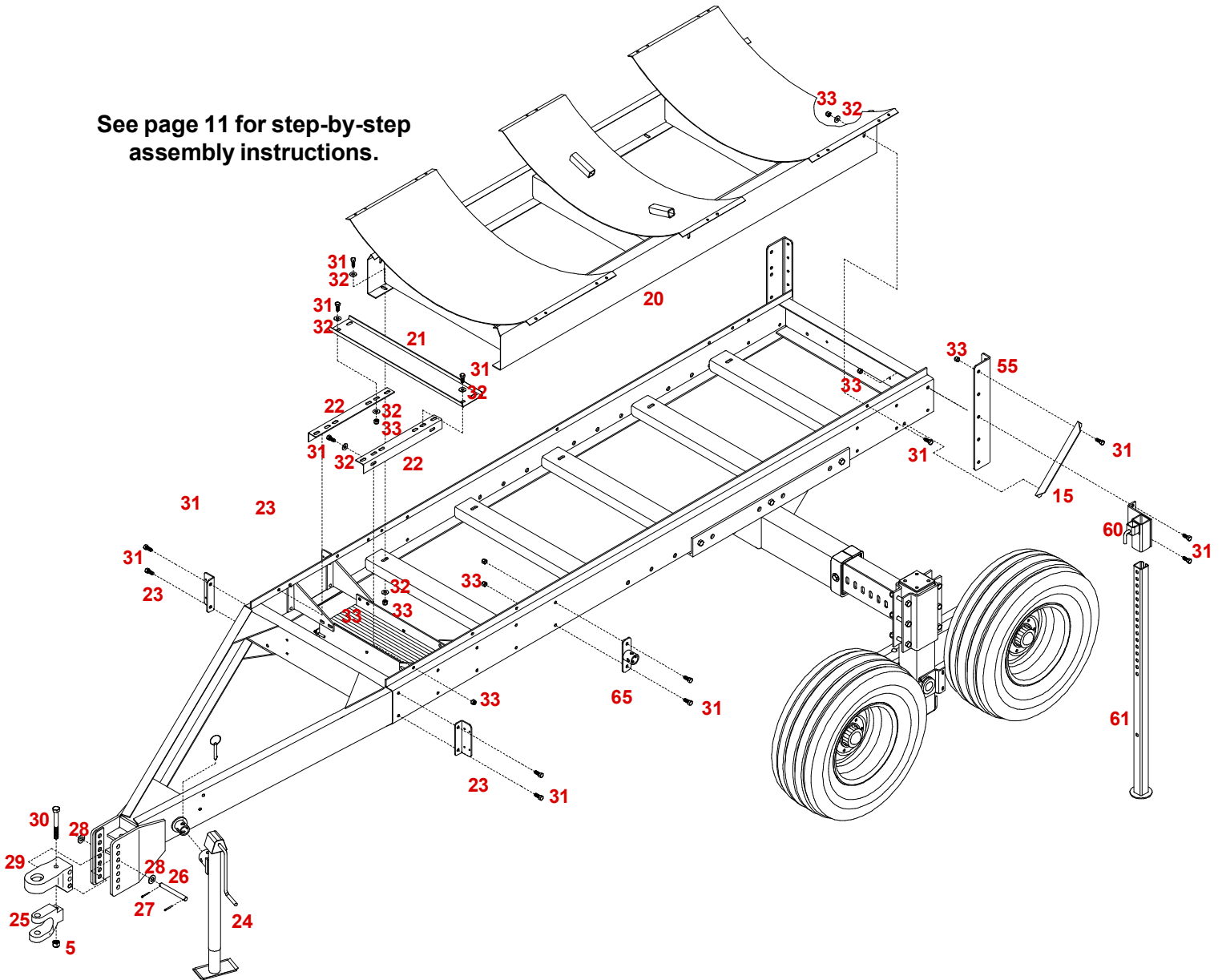
PARTS LIST FOR WEIGHT BOX ASSEMBLY

REF. NO.	PART NO.	QTY.	DESCRIPTION
-	5498	1	Weight Box Kit
1.	07635-30	1	Weight Box
2.	07636-30	2	Weight Box End Cover
3.	07637-30	2	Left Mounting Bracket
4.	07638-30	2	Right Mounting Bracket
5.	07641-30	12	Weight Block
6.	00523	4	3/8"-16 UNC x 1-1/4" Hex Head Bolt
7.	02592	8	3/8"-16 UNC Nylon Insert Lock Nut
8.	01254	16	1/2"-13 UNC x 1-1/2" Hex Head Bolt
9.	02178	16	1/2"-13 UNC Nylon Insert Lock Nut
10.	00085	8	1/2" Flat Washer

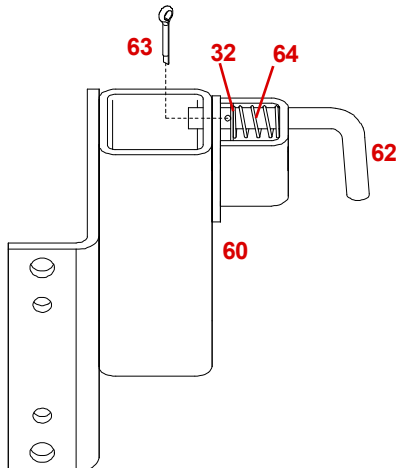
Please order replacement parts by **PART NO.** and **DESCRIPTION.**

TANK SKID AND SAFETY STAND PARTS BREAKDOWN

See page 11 for step-by-step assembly instructions.



SAFETY STAND AND LOCK ASSEMBLY



SAFETY STAND LOCK PIN ASSEMBLY INSTRUCTIONS

1. Install lock spring (#64) and 1/2" flatwasher (#32) into small tube on safety stand holder (#60) as shown.
2. Insert pin (#62) through tube into spring and lock washer.
3. Place 5/32" x 1" cotter pin (#63) between flatwasher (#32) and wall of tube into lockpin.

TANK SKID AND JACK ASSEMBLY INSTRUCTIONS

1. Place tank skid (#20) on frame and fasten with twelve 1/2" x 1-1/4" hex head bolts (#31), eighteen 1/2" flat washers (#32), and 1/2" lock nuts (#33).
2. Attach platform mounting brackets (#22) to frame using four 1/2" x 1-1/4" hex head bolts (#31), 1/2" flat washers (#32), and 1/2" lock nuts (#33).
3. Fasten safety plate (#21) to platform mounting brackets (#22) using four 1/2" x 1-1/4" hex head bolts (#31), 1/2" flatwashers (#32), and 1/2" lock nuts (#33).
4. Fasten three handrail mounting brackets (#23) onto frame using six 1/2" x 1-1/4" hex head bolts (#31) and six lock nuts (#33).
5. Fasten the hitch (No.25) to the hitch ring (#29) using one 3/4" x 5" hex head bolt (#30) and one 3/4" lock nut (#5). Attach to tongue using three 3/4" x 6-3/84" pins (#26) secured with 3/4" washers(#28) and 1/8" x 1-1/2" cotter pins (#27).

NOTE: Final hitch adjustment should be made when the sprayer is assembled and ready to be towed by the tractor. (Tank and frame should be level).

6. Attach jack (#24) to tongue using jack pin on jack
7. Turn jack to down position and remove the frame assembly from the saw horses, allowing it to rest on the tires and jack.
8. Mount jack storage bracket (#65) on side of frame.



CAUTION To Prevent Personal Injury or Property Damage

Block tires to prevent sprayer from rolling during rest of assembly.

MOUNTING BOOM CARRIER

1. Bolt the boom mounting brackets (#55) to the rear of the frame as shown using four 1/2" x 1-1/4" Gr. 5 bolts(#31) and nylon locknuts(#33).

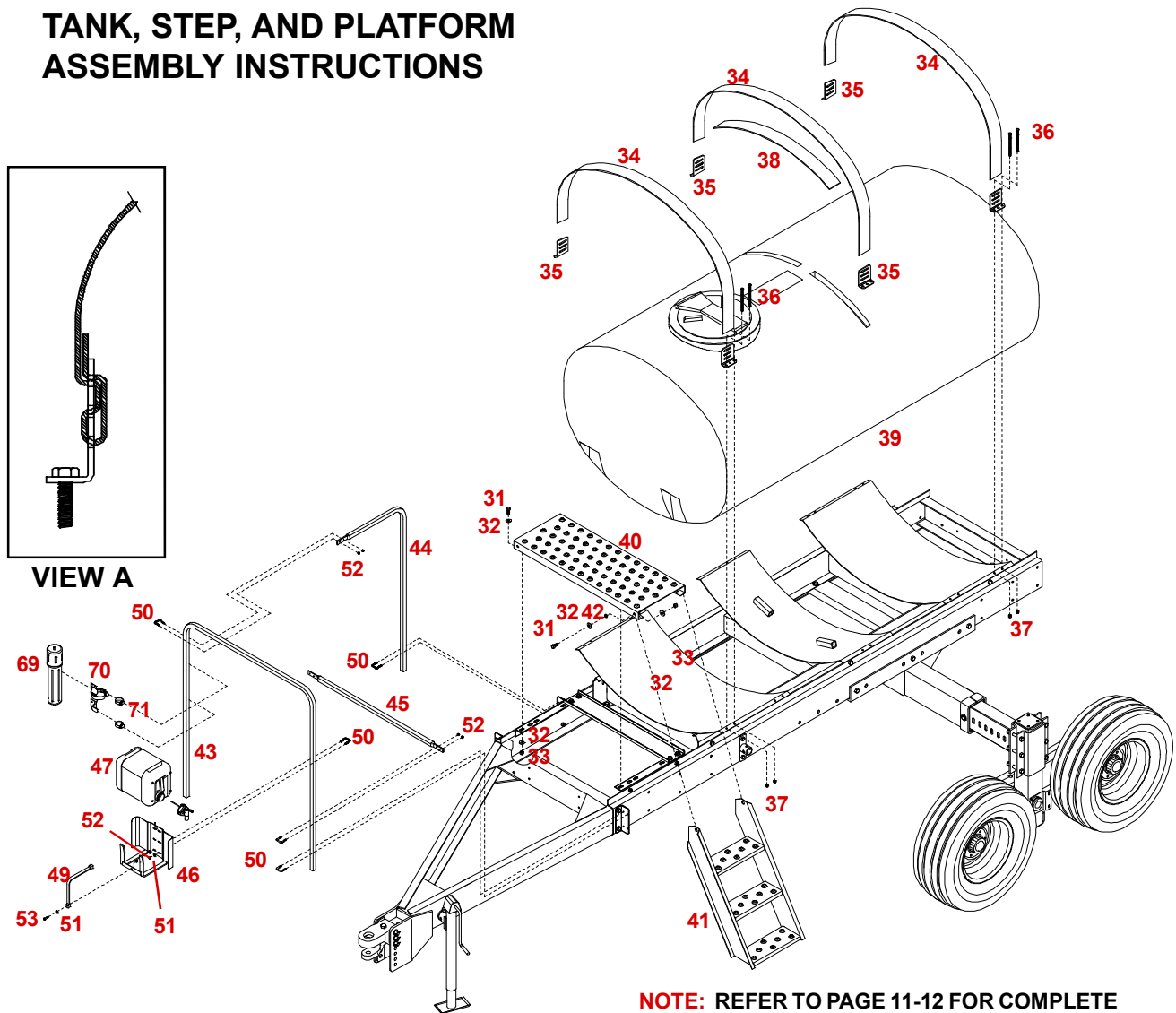
NOTE: The boom mounting brackets may be mounted using any set of two holes depending on boom height desired.

2. Bolt the boom mount brace angles (#15) to the frame and the boom mounting brackets using four 1/2" x 1-1/4" bolts(#31) and nylon locknuts(#33).

SAFETY STAND ASSEMBLY

1. Insert safety stand (#61) through holder (#60) before mounting onto sprayer frame.
2. Attach safety stand holder (#60) to boom bracket using two 1/2" x 1-1/2" bolts (#31) and two 1/2" nylon insert lock nuts (#33).

TANK, STEP, AND PLATFORM ASSEMBLY INSTRUCTIONS

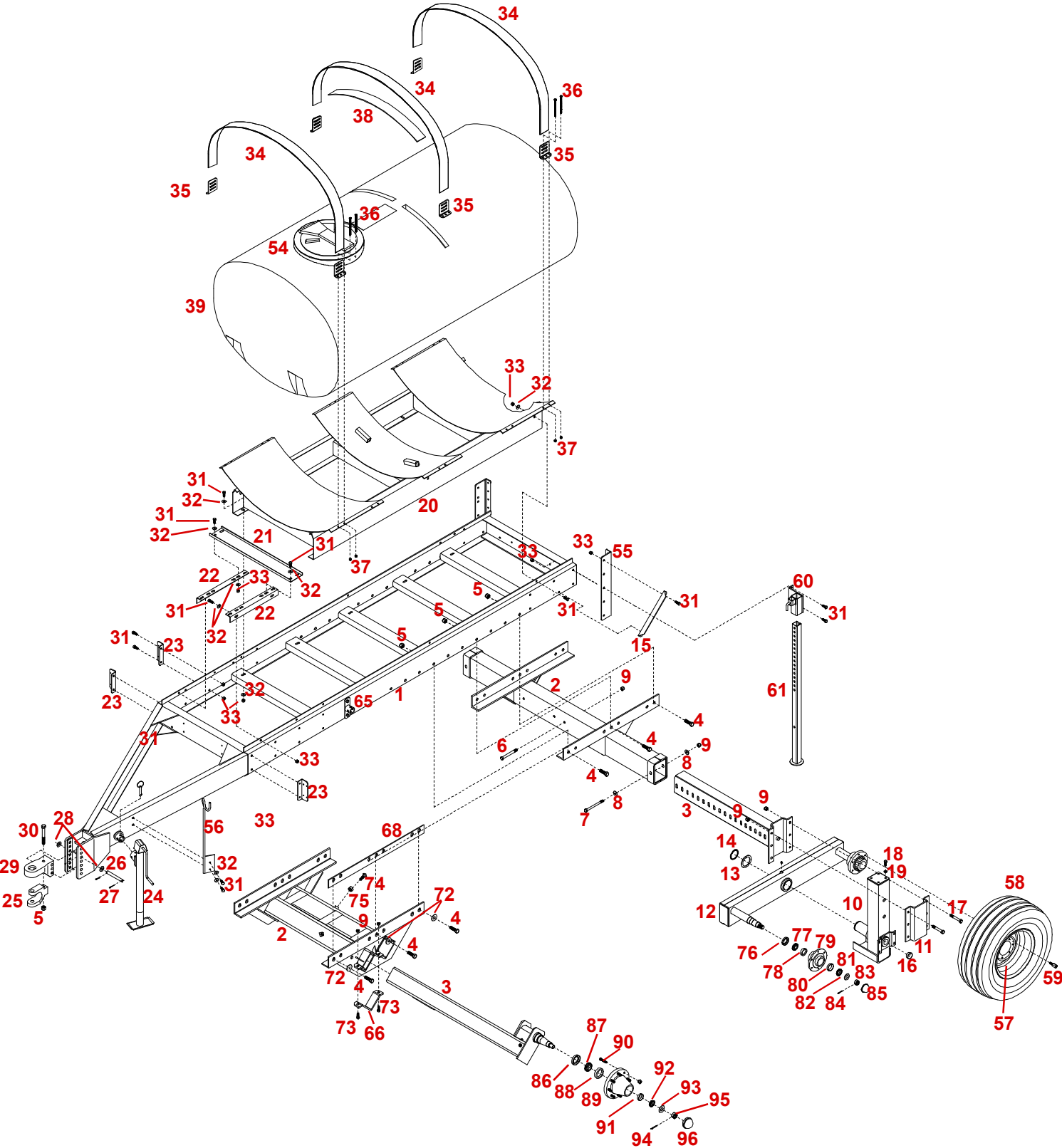


NOTE: REFER TO PAGE 11-12 FOR COMPLETE PARTS BREAKDOWN AND PART NUMBERS

TANK ASSEMBLY INSTRUCTIONS

1. Place tank (#39) in skid frame. The square tubes in the center of the tank skid fit into a recess on the bottom of the tank, this is to prevent the tank from slipping.
2. Secure the tank using three nylon straps (#34) fastened to the tank skid using six strap anchors (#35), see view A, twelve 3/8" x 6" full thread bolts (#36) and twelve 3/8" lock nuts (#37). Place one plastic band (#38) under the center strap only. **NOTE: Before tightening center strap, be sure baffle is installed properly.**
1. Mount platform (#40) onto bracket using four 1/2" x 1-1/4" hex head bolts (#31), eight 1/2" flat washers (#32), and four 1/2" lock nuts (#33).
2. Attach step (#41) to platform using two 1/2" x 1-1/4" hex head bolts (#31), two flat washers (#32), two bushings 3/4" O.D. x 1/2" I.D. x 11/32" (#42) and two 1/2" lock nuts (#33).
3. Bolt the front handrail (#43) to mounting brackets using four 1/4" x 1" square U-bolts (#50) and eight 1/4" lock nuts (#52).
4. Attach side hand rail (#44) to rear mounting brackets and front hand rail (#43) using three 1/4" x 1" square U-bolts (#50) and six 1/4" lock nuts (#52).
5. Attach safety rail (#45) to front handrail (#43) approximately 8"-12" above frame, using two 1/4" x 1" square U-bolts (#50) and four 1/4" lock nuts (#52).
6. Mount wash tank bracket (#46) to front handrail (#43) using two 1/4" x 1" square U-bolts (#50), four 1/4" flat washers (#51), and four 1/4" lock nuts (#52). Attach tarp strap (#49) to wash tank bracket (#46) with 1/4" x 1" carriage bolt (#53) and 1/4" lock nut (#52). Place tank (#47) in bracket (#46) and secure with strap (#49) onto peg of tank bracket (#46).
7. Mount the manual cannister bracket (#70) to the front hand rail (#43) using two 3/4" hose clamps (#71). Securely fasten the manual cannister (#69) to the cannister bracket (#70).

HTH TRAILER MAIN PARTS BREAKDOWN



HS AND HTH MAIN PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05620-*	1	Main Frame
2.	07904-30	1	79-3/4" Undercarriage (Standard) ***
-	03610-30	1	98-1/4" Undercarriage ***
-	07882--30	1	50-3/4" Undercarriage ***
-	09595-30	1	Undercarriage *
3.	07905-30	2	40-3/8" Slide-In Axle Tube (Standard) ***
-	03611-30	2	49-1/2" Slide-In Axle Tube ***
-	07881-30	2	25" Slide-In Axle Tube ***
-	10698-30	2	Axle For 60-120" Spacing *
-	10699-30	2	Axle For 94-144" Spacing *
4.	01235	6	3/4"-10 UNC x 2" Hex Head Bolt (Gr.5)
5.	02961	6	3/4"-10 UNC Nylon Insert Lock Nut
6.	01962	2	5/8"-11 UNC 6" Hex Head Bolt (Gr.5)
7.	04836	2	5/8"-11 UNC 7" Hex Head Bolt (Gr.5)
8.	00477	6	5/8" Flat Washer
9.	02587	16	5/8"-11 UNC Nylon Insert Lock Nut
10.	05633-30	1	Left Down Post
-	05634-30	1	Right Down Post
11.	05625-30	2	Slide-In Back-Up Plate
12.	05624-30	2	Walking Beam
13.	05671	2	3" Inverted Tab Washer
14.	05628	2	3" Spiral Snap Ring
15.	02693-30	2	Boom Mounting Brace
16.	05645	2	1-3/4" Cap Plug
17.	02496	12	5/8"-11 UNC x 4" Hex Hd. Bolt (Gr.5)
18.	01254	5	1/2"-13 UNC x 1-1/2" Hex Hd. Bolt (Gr.5)
19.	00084	5	1/2" Lock Washer
20.	05630-*	1	1000 Gallon Skid Frame
-	05631-*	1	750 Gallon Skid Frame
21.	05637-30	1	Rear Safety Plate
22.	05636-30	2	Platform Mounting Bracket
23.	05640-30	3	Handrail Mounting Bracket
24.	07806	1	5000# Jack With Pin
25.	07888-30	1	Hitch Clevis
26.	01159-95	3	3/4" x 6-3/8" Pin
27.	01929	6	1/8" x 1-1/2" Cotter Pin
28.	02534	6	14 GA. x 3/4" I.D. NR Machine Washer
29.	07887-30	1	Hitch Ring
30.	02389	1	3/4"-10 UNC x 5" Hex Hd. Bolt (Gr.5)
31.	00967	32	1/2"-13 UNC x 1-1/4" Hex Hd. Bolt (Gr.5)
32.	00085	49	1/2" Flat Washer
33.	02178	66	1/2"-13 UNC Nylon Insert Lock Nut
34.	09830	3	4" x 112" Polyester Strap
35.	05784-95	6	5-1/4" Strap Anchor
36.	01885	12	3/8"-16 UNC x 5" Full Thrd. Bolt (750 Gal)
-	02157	12	3/8" x 6" Full Thrd. Bolt (1000 Gal)

REF. NO.	PART NO.	QTY.	DESCRIPTION
37.	02592	12	3/8"-16 UNC Nylon Insert Lock Nut
38.	05786	1	Plastic Strap Support
39.	PE750DA	1	750 Gallon Tank
-	PE1000DA	1	1000 Gallon Tank
40.	05635-30	1	Step Platform
41.	05638-30	1	Step
42.	02579-95	2	Pivot Bushing
43.	05641-30	1	Front Hand Rail
44.	05642-30	1	Side Rail
45.	05643-30	1	Safety Rail
46.	05615-30	1	Wash Tank Mounting Bracket
47.	05616	1	2-1/2 Gallon Wash Tank
48.	PL2S	1	Cap and Spout
49.	04742	1	Tarp Strap
50.	04822	11	1/4"-20 UNC x 1" Square U-Bolt
51.	00214	5	1/4" Flat Washer
52.	02772	23	1/4"-20 UNC Nylon Insert Lock Nut
53.	04177	1	1/4"-20 UNC x 1" Carriage Bolt
54.	5470R	1	16" Fillwell Lid Assembly
55.	01792-30	2	Boom Mounting Bracket
56.	05669-30	1	Hydraulic Hose Holder
57.	00265-15	-	15" x 10" 6-Bolt Rim
58.	T12.5L	-	12.5L. 8PLY Tubeless Tire
59.	00120	24	1/2"-20 UNF x 1" Lug Bolt
60.	05558-30	1	Safety Stand Holder
61.	05559-30	1	Square Safety Stand
62.	02187-95	1	Safety Stand Locking Pin
63.	00185	1	5/32" x 1" Cotter Pin
64.	02208	1	Lock Spring
65.	07966-30	1	Jack Storage Mount
66.	09596-30	2	Axle Mount Bracket *
67.	00523	4	3/8NC X 1-1/4" GR5 Hex Bolt
68.	10700-30	2	Undercarriage Shim*
69.	10241	1	Manual Holder Cannister
70.	10242	1	Manual Cannister Bracket
71.	B16H	2	3/4" Hose Clamp
72.	00492	6	3/4" Flatwasher*
73.	00290	4	5/8" x 2" GR5 Hex Bolt*
74.	09946	6	5/8" x 2" Sq. Hd Set Screw*
75.	00489	6	5/8" Jam Nut*

***** 5181 - 8Bolt Hub Assembly Contains Items (86-96 ONLY)			
86.	01944	1	Oil Seal (906486)
87.	01943	1	Inner Cup(JL M506810)
88.	01942	1	Inner Cone Bearing(JLM506849)
89.	-	1	8 Bolt Hub (W 80-8)(Assembly only)
90.	09240	8	5/8"-18UNF x 1-1/2" Lug Bolt
-	10304	8	5/8"-18UNF x 2-1/2" Lug Bolt
91.	01938	1	Outer Cap (LM501310)
92.	01937	1	Outer Cone Bearing (LM501349)
93.	01936	1	1-1/16" I.D. x 2-1/8" O.D. Flatwasher
94.	01935	1	3/16" x 2-1/2" Lg. Cotter Pin
95.	01934	1	1"-14UNF Castle Nut
96.	01933	1	Hub Cap (909912)

***** 5157 - 6 Bolt Hub Assembly Contains Items (76-85 ONLY)			
76.	00110	1	Oil Seal (16289)
77.	01464	1	Inner Cup(JL 69310)
78.	00111	1	Inner Cone Bearing(JL69349)
79.	-	1	6 Bolt Hub (888)(Assembly only)
80.	01465	1	Outer Cup (LM 67010)
81.	00113	1	Outer Cone Bearing (LM67048)
82.	00114	1	Washer
83.	00115	1	Castle Nut
84.	00116	1	5/32" x 1-1/2" Cotter Pin
85.	00117	1	Dust Cap

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

** Specify color with -10 red and -20 green.

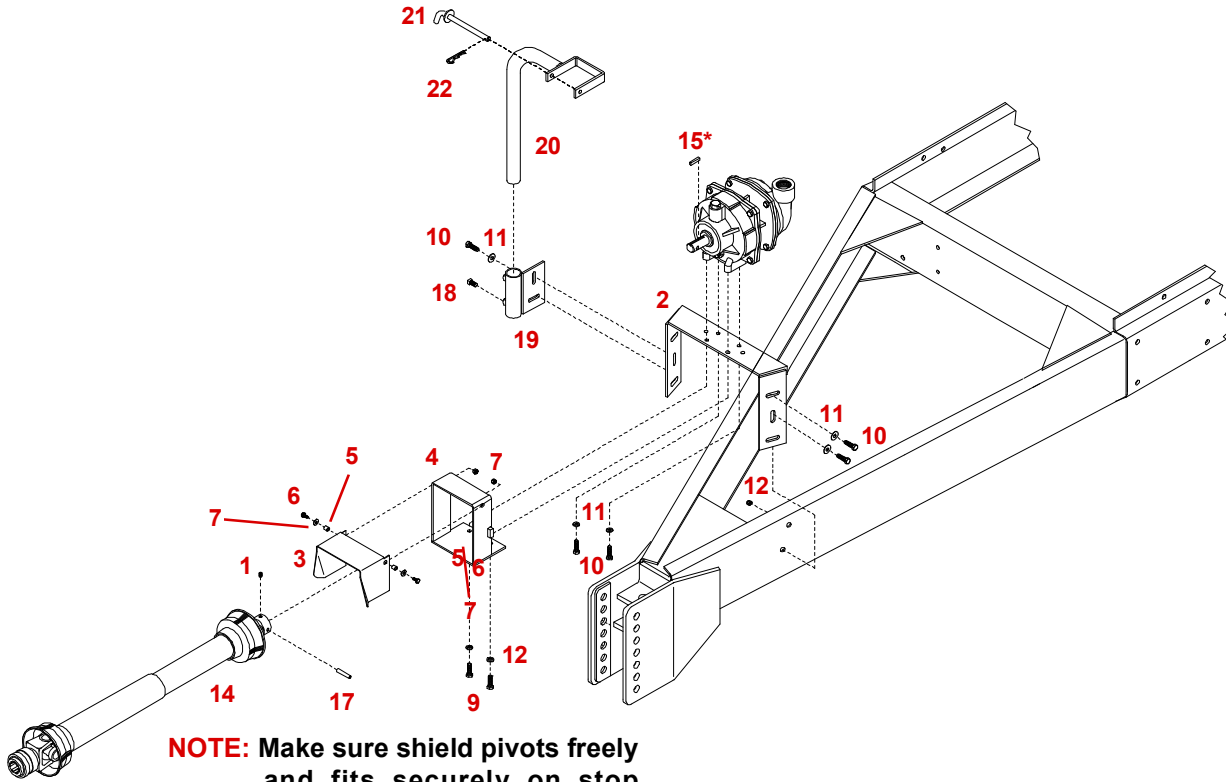
*These parts are for the Big Wheel sprayers ONLY.

***These parts are for the Tandem Axle sprayers ONLY.

***** This assembly contains parts for one 6-bolt hub (Sub-Assembly No. 5157) Tandem Axle requires 4 hubs per sprayer.

***** This assembly contains parts for one 8-bolt hub (Sub-Assembly No. 5181), Big Wheel Axles ONLY(2 per Sprayer)

HYPRO GEAR DRIVE PUMP MOUNT PARTS BREAKDOWN



NOTE: Make sure shield pivots freely and fits securely on stop blocks. Inspect for proper shield action frequently.

INSTALLATION INSTRUCTIONS

1. Begin by bolting the Pump Mount Channel (#2) to the tongue of the sprayer using four 3/8" x 1-1/4" hex head bolts(#10), four 3/8" flatwashers (#11), and four 3/8" lock-nuts(#13).
2. Bolt the Hypro pump on through the front set of holes in Pump Mount Channel (#2), then into rear mounting holes in pump using two 3/8" x 1-1/4" hex head bolts (#10) and two 3/8" lockwashers (#12). Attach PTO shaft (#14) to pump using a 1/4" x 1/4" x 1-1/4" drive key (#15), 5/16" socket set screw, (#1) and 5/16" x 1-3/4" roll pin (#17).
3. Attach the PTO shield (#3) to the shield mount (#4) with two 1/4" x 1" bolts (#6), two 1/4" flatwashers (#7), two pivot bushings (#5) and two 1/4" nylon insert locknuts (#8), **make sure shield pivots freely**. Attach shield assembly to the front set of holes using two 3/8" x 1-1/4" hex head bolts (#10), two 3/8" flatwashers (#11) and two 3/8" lockwashers (#12).
4. Bolt the PTO holder mount (#19) to the sprayer tongue with 3/8" x 1" bolts (#9), flat washers and nylon locknuts as shown. Insert PTO shaft holder (#20) into mount and tighten with two 3/8" x 3/4" set screws. Place 1/4" x 5-3/4" PTO pin (#21) in holder and secure with small hairpin (#22).

HYPRO CENTRIFUGAL PUMP MOUNT PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00789	4	5/16"-18 UNC x 1/4" Socket Set Screw
2.	05670-30	1	Pump Mount Channel
3.	05093-30	1	PTO Shield
4.	05094-30	1	PTO Shield Mount
5.	05098-95	2	Pivot Bushing
6.	04055	2	1/4"-20 UNC x 1" Hex Hd. Bolt (Gr5)
7.	00214	2	1/4" Flatwasher
8.	02772	2	1/4"-20 UNC Nylon Insert Locknut
9.	00907	4	3/8"-16 UNC x 1" Hex Hd. Bolt (Gr5)
10.	00523	6	3/8"-16 UNC x 1-1/4" Hex Hd. Bolt (Gr5)
11.	00059	4	3/8" Flatwashers
12.	00060	4	3/8" Lockwashers
13.	02592	10	3/8"-16UNC Nylon Insert Locknut
14.	05654	-	540 RPM Constant Velocity PTO Shaft
-	05674	-	1000 RPM Constant Velocity PTO Shaft
-	03921	1	Replacement Inner PTO Shield
-	03920	1	Replacement Outer PTO Shield
15.	01989*	1	1/4" x 1/4" x 1" Drive Key
16.	00789	1	3/8"-16 UNC x 3/8" Socket Set Screw
17.	00662	1	5/16" x 1-3/4" Drive Pin
18.	00095	2	3/8"-16 UNC x 3/4" Sq. Hd. Set Screw
19.	02148-30	1	PTO Holder Mount
20.	04932-30	1	PTO Shaft Holder
21.	00183-95	1	1/4" x 5-3/4" PTO Pin
22.	00182	1	1/8" Small Hairpin

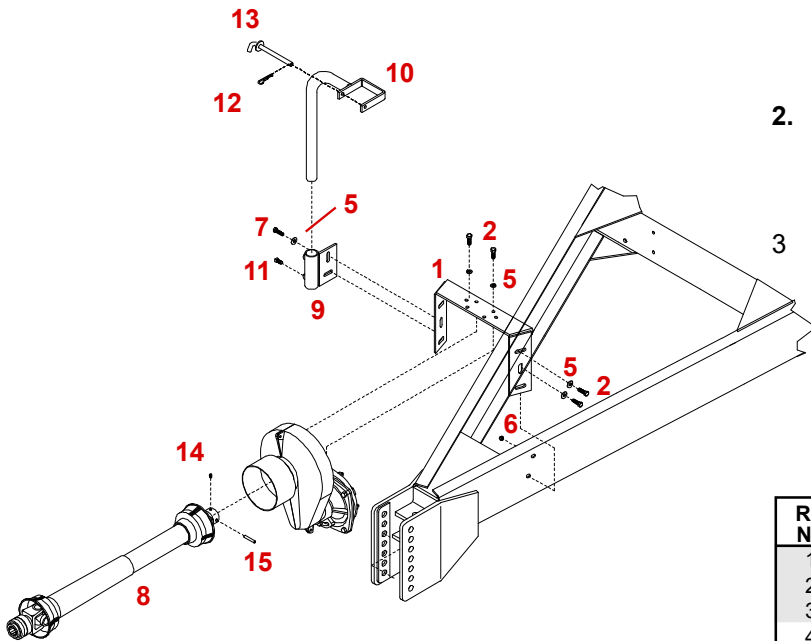
Please order replacement parts by **PART NO.** and **DESCRIPTION.**

* Included with the pump

HYPRO BELT/ ACE HYDRAULIC PUMP MOUNT PARTS BREAKDOWN

HYPRO BELT DRIVE PUMP MOUNTING

1. Begin by bolting the pump hanger (#1) to the sprayer tongue with 3/8" x 1-1/4" bolts(#2), flat washers (#5) and nylon insert locknuts (#6) as shown.
2. Next bolt pump (#3) to the bracket (#1) using two 3/8" x 1-1/2" bolts (#7), Flatwashers (#5) and nylon locknuts(#6).
3. Now attach the PTO holder mount(#9) to the Pump Hanger(#1) using two 3/8" x 1-1/2" hex head bolts(#7), two flatwashers(#5), and two 3/8" locknuts(#6). Insert the PTO Holder(#10) and secure using two 3/8" x 3/4" set screws(#11). Insert the PTO pin (#13) and secure using the Small Hair Pin(#12).



If pump is used with manual panel, stabilizer brace should be mounted to top hole on top left outside hole of pump hanger.

HYPRO BELT DRIVE PUMP PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05670-30	1	Pump Hanger
2.	00908	2	3/8" x 1-3/4" Hex Hd. Bolt (Gr.5)
3.	C9402 540S	1	Hypro Belt Drive Pump
4.	01899	1	3/8" x 3/4" Hex Hd. Bolt (Gr.5)
5.	00059	4	3/8" Flatwasher
6.	02592	8	3/8"-16 UNC Nylon Insert Locknut
7.	00914	7	3/8"-16 UNC x 1-1/2" Hex Hd. Bolt
8.	05654	-	540 RPM Constant Velocity PTO Shaft 32"
-	05674	-	1000 RPM Constant Velocity PTO Shaft 32"
9.	02148-30	1	PTO Holder Mount
10.	04932-30	1	PTO Holder Shaft
11.	00095	2	3/8"x 16 UNC x 3/4" Sq. Hd. Set Screw
12.	00182	1	1/8" Small Hairpin
13.	00183-95	1	1/4" x 5-3/4" PTO Pin
14.	00789	1	5/16"- 18 UNC x 1/4" Socket Set Screw
15.	00662	1	5/16" x 1-3/4" Roll Pin

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

INSTALLATION INSTRUCTIONS

1. Begin by bolting the pump hanger (#1) to the frame with four 3/8" x 1-1/4" bolts (#3), four flatwashers (#4) and four nylon locknuts (#5) as shown.
2. Bolt pump (#2) to hanger using two 7/16" x 1-1/2" bolts (#6), flatwashers (#7) and nylon locknuts (#8).

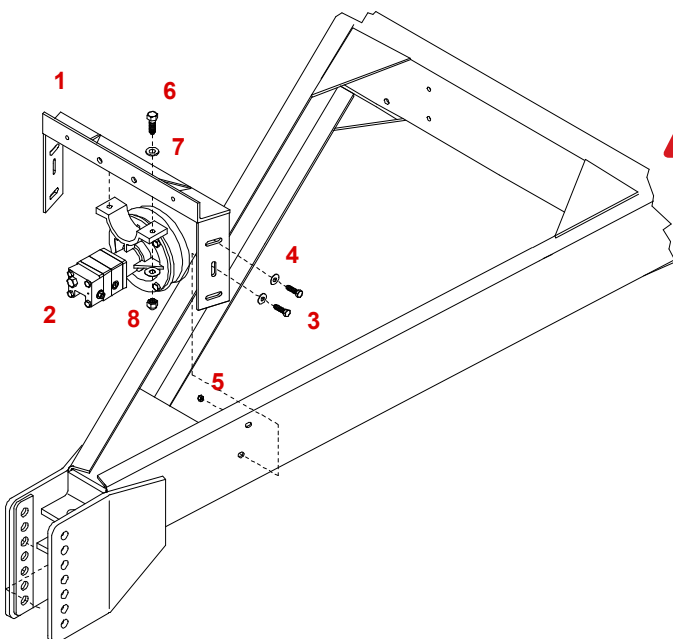


CAUTION: Be sure to match hydraulic motor driven pump capabilities to your tractors hydraulic system.

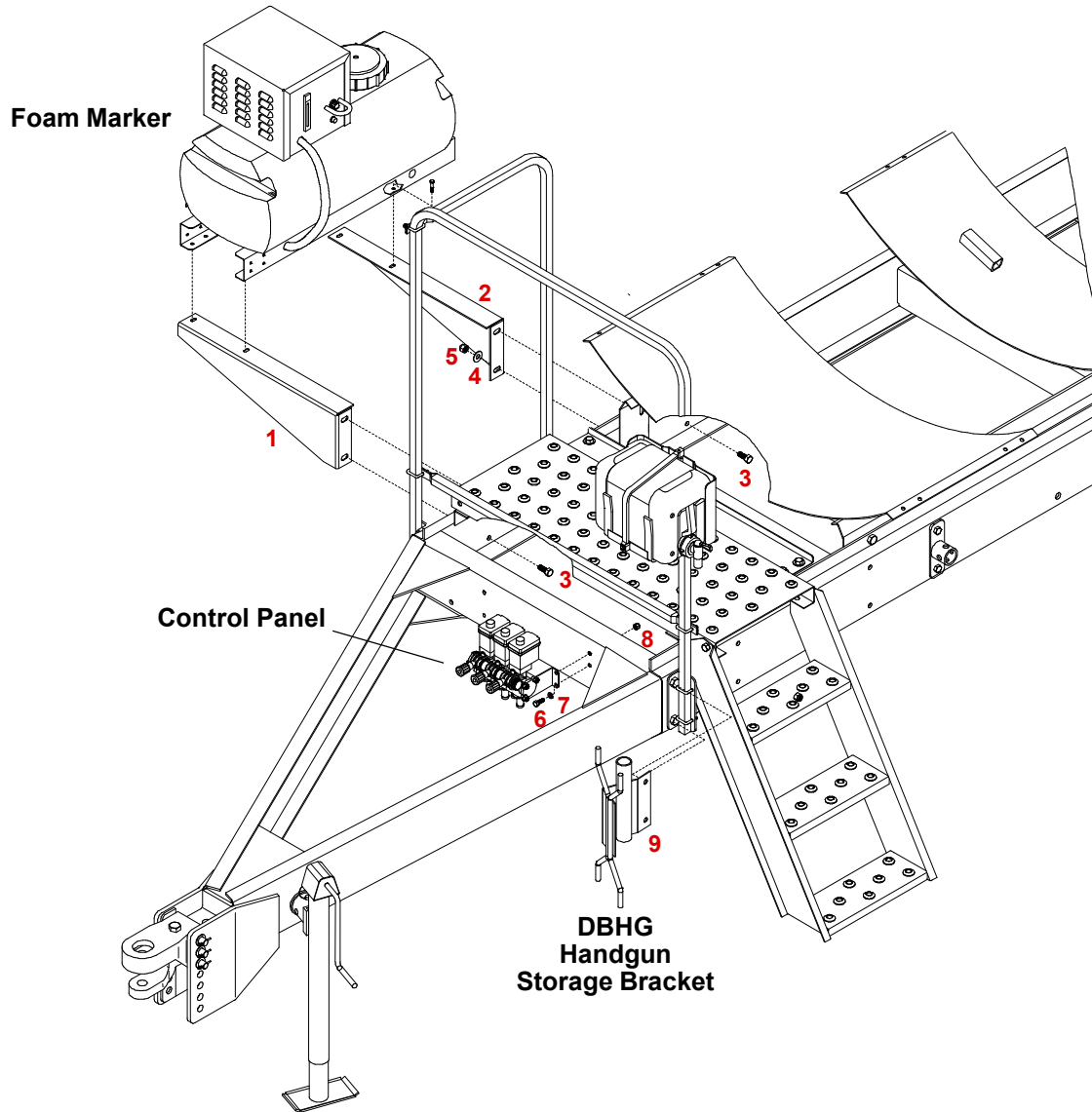
HYPRO/ACE HYDRAULIC PUMP PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05670-30	1	Pump Hanger
2.	FMC150HYD206	1	Ace Hydraulic Pump
-	C9303HM4	1	Hypro Hydraulic Pump
3.	00523	4	3/8"-16 UNC x 1-1/4" Hex Head Bolt
4.	00059	4	3/8" Flatwasher
5.	02592	4	3/8"-16 UNC Nylon Insert Locknut
6.	04050	2	7/16"-14 UNC x 1-1/2" Hex Head Bolt
7.	00205	2	7/16" Flatwasher
8.	02771	2	7/16"-14 UNC Nylon Insert Locknut

Please order replacement parts by **PART NO.** and **DESCRIPTION.**



FOAM MARKER, ELECTRIC CONTROL PANEL, AND HAND GUN STORAGE BRACKET MOUNTING LOCATIONS



PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05462-30	1	Left Foam Marker Mount
2.	05463-30	1	Right Foam Marker Mount
3.	01254	4	1/2"-13 UNC x 1-1/2" Hex Hd. Bolt
4.	00085	8	1/2" Flat Washer
5.	02178	4	1/2"-13 UNC Nylon Insert Lock Nut
6.	00907	4	3/8"-16 UNC x 1" Hex Hd. Bolt
7.	00059	4	3/8" Flat Washer
8.	02592	4	3/8"-16 UNC Nylon Insert Lock Nut
9.	04931-30	1	Hand Gun Bracket

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

MOUNTING INSTRUCTIONS

1. Mount the DFM60 mounting brackets (#1 & #2), using four 1/2" x 1-1/4" bolts (#3), flatwashers (#4) and nylon locknuts (#5), provided with DFM60.
2. Mount the control panel using four 3/8" x 1" bolts (#6), lockwashers (#7) and nuts (#8) provided with panel.
3. Mount handgun storage bracket (#9) using existing bolts already in tongue.

START-UP INSTRUCTIONS FOR CENTRIFUGAL PUMPS with MANUAL CONTROL PANEL

1. Run approximately 50 gallons of water in the tank.
2. Open the poly ball valve in the pump intake line.
3. Close the wedge valve on the front of the control panel.
4. Close the wedge agitation valve on the control panel back.
5. Make sure the ratchet valve on the control panel back is in the open position.
6. Open the three manual valves on the control panel.
7. Start the pump and run at 540 RPM.
8. Open the large wedge valve on the front of control panel until the gauge reads approx. 3 PSI over your desired spraying pressure with all three booms spraying.
9. Open the wedge agitation valve on the control panel until the gauge drops to your desired spraying pressure.
Example: If desired spraying pressure is 30 PSI open the wedge valve on the back of the control panel until the gauge reads 33 PSI. After this, open the wedge agitation valve on the control panel until the gauge drops back down to 30 PSI. (This is to ensure the recommended pressure to the tank jet agitators).
10. Check for leaks.
11. Make certain all bolts and clamps are tight.

START-UP INSTRUCTIONS FOR CENTRIFUGAL PUMPS with ELECTRIC CONTROL PANEL

1. Run approximately 50 gallons of water in the tank.
2. Open the poly ball valve in the pump intake line. **Important: Remove top plug on pump to bleed all air from the suction line to the pump or damage will result to the seals. (Pump cannot be run dry).**
3. Close the wedge valve on the front of the control panel.
4. See "Panel Mounting and Operation" in Electric Control Panel Instruction Manual.

PLUMBING PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	5044 1	4	Agitation Jet
2.	R1212	2	1/2" MPT Tee
3.	P034D	2	3/4" Double Threaded Outlet
4.	5077V*	2	Viton/E Grommet
5.	N5P*	2	Nut for Tank Outlets
6.	BEL1034	2	1" MPT x 3/4" HB Elbow Fitting (GFP)
7.	B12H	14	3/4" SS Gear Clamp
8.	340RB	-	3/4" Rubber Hose
9.	P200PAV	2	2" Anti-Vortex Outlet Fitting
10.	5078V**	3	Viton/E Grommet
11.	N8P**	4	Tank Outlet Nut
12.	EL114 112	1	1-1/4" MPT x 1-1/2" HB Elbow Fitting (GFP)
13.	B24H	8	1-1/4" SS Gear Clamp
14.	P114A	2	1-1/4" Outlet Fitting
15.	BEL114 1	3	1-1/4" MPT x 1" HB Elbow Fitting (GFP)
16.	T34	2	3/4" HB Insert Tee
17.	S2020	2	2" EPDM Wire Suction Hose
18.	P55 23F	1	55 Gallon poly tank w/ 1 1/4 AV Fitting
19.	UV200FP3	1	2" Single Union Poly Ball Valve
-	09925	-	Kit, Valve Repair for UV200FP3
20.	RVF100C	1	Line Strainer Cap
21.	RVF140	1	Mesh Screen
22.	LST150GV	1	Gasket for Line Strainer
23.	RVF114B	1	Bowl for Line Strainer
24.	B16H	8	1" SS Gear Clamp
25.	1010RB	-	1" Rubber Hose
26.	P100DA	2	1" Outlet Fitting
27.	03813	2	1" FPT Rinsing Spray Ball
28.	11067	2	1" MPT Nipple Fitting
29.	FC1000	2	1" FPT x 1" FPT Coupling
30.	633F2020	1	Adapter 2" MPT F/ Quick Coupler
31.	BTT100	1	1" FPT Tee (GFP)
32.	633B2020	1	Plug 2" F/ Quick Coupler

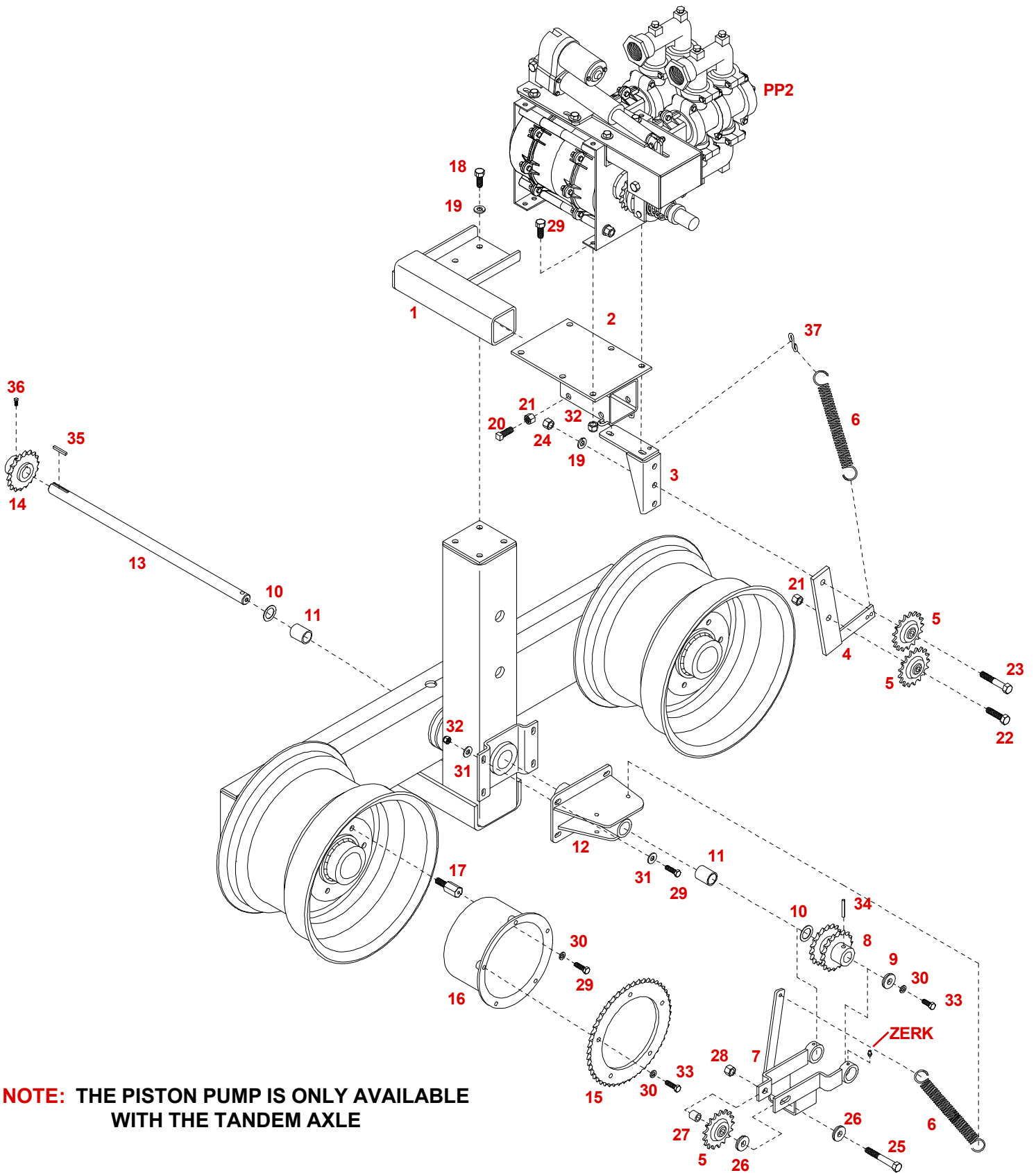
* Sold as a complete fitting (P034D). Shown here for clarity purposes

** Sold as a complete fitting (P200Pav). Shown here for clarity purposes

REF. NO.	PART NO.	QTY.	DESCRIPTION
33.	BRB114 1	1	1 1/4" MPT x 1" FPT Reducer BSHG
34.	PFVDEM-1VB-C	1	Control panel
35.	F1014	3	1 1/4" MPT Plug
36.	BA1010	2	1" MPT x 1" HB, GFP
37.	BA114	6	1 1/4" MPT x 1 1/4" HB
38.	BA112 200	1	1 1/2" MPT x 2" HB (GFP)
39.	BEL114	1	1 1/4" MPT x 1 1/4" HB Elbow (GFP)
40.	BEL1010	1	1" HPT x 1" HB Elbow (GFP)
41.	BTT114	2	1 1/4" FPT Poly Tee
42.	B44H	4	2" SS Gear Clamp
43.	BEL200	2	2" MPT x 2" HB Elbow
44.	BSE114	1	1 1/4" FPT x 1 1/4" MPT Elbow
45.	A200	1	2" MPT x 2" HB (GFP)
46.	BA200 112	1	2" MPT x 1 1/2" HB (GFP)
47.	BRB200 114	1	2" MPT x 1 1/4" FPT Reducer
48.	B32H	2	1 1/2" SS Gear Clamp
49.	C9016 540	1	Gear Drive Pump 540 RPM
50.	C9403 540S	1	Belt Drive Pump 600 RPM
51.	C9303HM4	1	Hypro Cent Pump
52.	1140RB	4	1 1/4" EPDM Hose
53.	1120RB	1	1 1/2" EPDM Hose
54.	UV100FP3	1	Ball valve 1" single union 3-way poly w/ EPDM O RING
-	09923	-	Kit, Valve Repair for UV100FP3
55.	UV125FP3	3	Ball valve 1.25" single union 3-way poly w/ EPDM O-RING
-	09924	-	Kit, Valve Repair for UV125FP3
56.	BEL1034	1	1" MPT x 3/4" HB Elbow
57.	EL114 34	1	1 1/4" MPT x 3/4" HB Fitting
58.	BM1140	3	1 1/4" MPT Nipple Fitting
-	G140	-	1/4" EVA Tubing for Bleeder Line
59.	BM1000	2	1" MPT Nipple Fitting

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

PISTON PUMP GROUND DRIVE PARTS BREAKDOWN



NOTE: THE PISTON PUMP IS ONLY AVAILABLE WITH THE TANDEM AXLE

PISTON PUMP GROUND DRIVE ASSEMBLY

1. Begin by mounting the 12" mounting bracket (#1) to the top of the left down post using four 1/2" x 1-1/2" bolts (#18) with lockwashers (#19). Slide the mounting plate (#2) over the 12" tube and secure with three 1/2" x 1-1/2" set screws (#20) and jam nuts (#21).
2. Mount the piston pump and top idler mounting bracket (#3) as shown with four 3/8" x 1-1/4" bolts (#29) and locknuts (#32). Next, mount the top idler assembly (#4) as shown with existing bolt (#23) and install idler spring (#6) and S-Hook (#37).
3. Attach jack shaft support (#12) to down post using four 3/8" x 1-1/4" bolts (#29), eight flatwashers(#31) and four nylon locknuts (#32). **NOTE: Bushings (#11) are pre-installed in shaft support (#12).**
4. Mount single sprocket (#14) using the 1/4" x 1-3/4" drive key (#35) securing the sprocket in place with the 1/4" x 1" sq.head set screw (#36) onto jack shaft (#13) as shown. Slide on a 3/4" machine washer (#10) then slide through walking beam into shaft support as shown.
5. NOTE: Four 1/2" flatwashers (#26) are provided as shims for aligning sprockets (#5 & #8). Install the single sprocket (#5) onto bottom chain tightener (#7) with a 1/2" x 3-1/2" hex head bolt (#25), 1/2" flatwasher (#26), and a 1/2" nylon insert locknut (#28). Then slide the double sprocket (#8) and bottom chain tightener (#7) over jack shaft and secure with 3/8" x 1" bolt (#33), special flatwasher (#9), and 3/8" lockwasher (#30). Insert a 1/4" x 1-3/4" roll pin (#34) through double sprocket (#8) into the hole on the jack shaft (#13). Install idler spring (#6) to bottom chain tightener (#7) and to jack shaft support (#12) as shown. Be sure to grease the zerks in the bottom chain tightener (#7).
6. Install 3 hub extension bolts (#17) by turning into hub. Bolt the hub adapter (#16) to the extension bolts with three 3/8" x 1-1/4" bolts (#29) and 3/8" lockwasher (#30). Install the sprocket (#15) to the hub adapter with five 3/8" x 1" bolts (#33) and 3/8" lockwasher (#30).

PISTON PUMP GROUND DRIVE PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05647-30	1	12"PPT Mtg. Bracket
	05720-30	-	20" PPT Mtg. Bracket
2.	01581-30	1	Slide On Piston Pump Mount
3.	05653-30	1	Top Idler Mtg. Brkt.
4.	01559-30	1	Top Idler Assembly
5.	05728	3	Bottom Tightener Sprocket
6.	01564	2	Idler Spring
7.	05649-30	1	Bottom Chain Tightener
8.	05652-30	1	Double Sprocket
9.	05724-95	1	Special Flatwasher
10.	05587	2	1" Machine Washer x 14ga. NR
11.	01732	-	Bushing (1-1/4" OD x 1" ID x 1-1/2" lg.)
12.	05648-30	1	Jack Shaft Support
13.	05650-95	1	1"DIA. x 25-1/8" Jack Shaft
14.	05651-30	1	Single Sprocket
15.	01187-30	1	50 Tooth Sprocket
16.	01386-30	1	6 Bolt Hub
17.	01382-95	3	1/2" Ext. Lug Bolt
18.	01254	4	1/2"-13 UNC x 1-1/2" Hex Hd. Bolt

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
19.	00084	5	1/2" Lock Washer
20.	00639	3	1/2"-13 UNC x 1-1/2"Sq. Set Screw
21.	00640	4	1/2"-13 UNC Jam Nut
22.	01253	1	1/2"-13 UNC X 2" Hex Head Bolt Gr.5
23.	04073	1	1/2"-13 UNC X 3" Hex Head Bolt Gr.5
24.	00083	1	1/2"-13 UNC Hex Nut
25.	01897	1	1/2"-13 UNC x 3-1/2" Hex Head Bolt
26.	00085	2	1/2" Flatwasher
27.	05723-95	1	3/4" OD x 1/2" ID x 3/4" Bushing
28.	02178	1	1/2-13 UNC Nylon Insert Locknut
29.	00523	8	3/8"-16 UNC x 1-1/4 Hex Head Bolt
30.	00060	9	3/8" Lockwasher
31.	00059	8	3/8" Flatwasher
32.	02592	4	3/8"-16 UNC Nylon Locknut
33.	00907	6	3/8"-16 UNC x 1" Hex Head Bolt
34.	05734	1	1/4" x 1-3/4" Roll Pin
35.	05737	1	3/16" x 1-3/4" Drive Key
36.	05733	2	1/4" x 1" Sq. Hd. Set Screw
37.	SB10555	1	S- Hook

Please order replacement parts by PART NO. and DESCRIPTION.

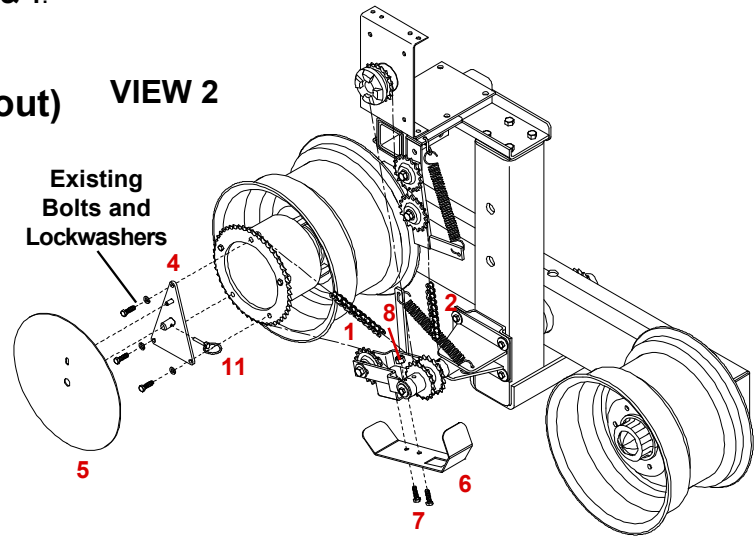
CHAIN GUARD AND ROUTING INSTRUCTIONS AND PARTS LIST

NOTE: DOWNPOST POSITION

For 60" and 70" Downpost should be in position shown in **VIEW 2**.
For 80" the Downpost must be reversed as in **VIEW 3 & 4**.

CHAIN GUARD MOUNTING FOR SHORT UNDERCARRIAGE (wheels out)

VIEW 2



CHAIN ROUTING PARTS LIST

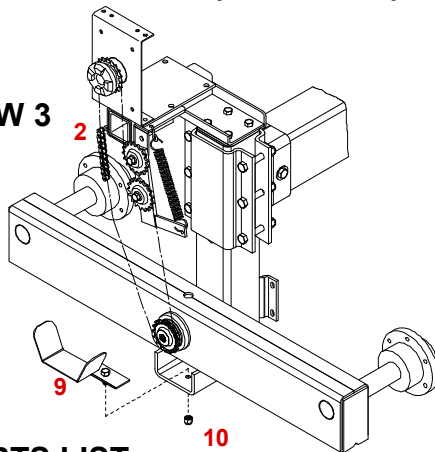
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	02488	1	66" #50 Roller Chain w/1/2 Link & Conn. Link
2.	05736	1	79" #50 Roller Chain w/1/2 Link & Conn. Link
3.	05738	1	87" #50 Roller Chain w/1/2 Link & Conn. Link

Please order replacement parts by **PART NO.** and **DESCRIPTION**.

NOTE: The Roller Chain must run straight and true. To align the sprockets you must loosen the three 1/2" x 1-1/2" set screws and jam nuts on the sliding piston pump mount. Now slide the mount in or out to align the sprockets and retighten the set screws and jam nuts.

CHAIN GUARD MOUNTING FOR LONG UNDERCARRIAGE (wheels in)

VIEW 3



PARTS LIST

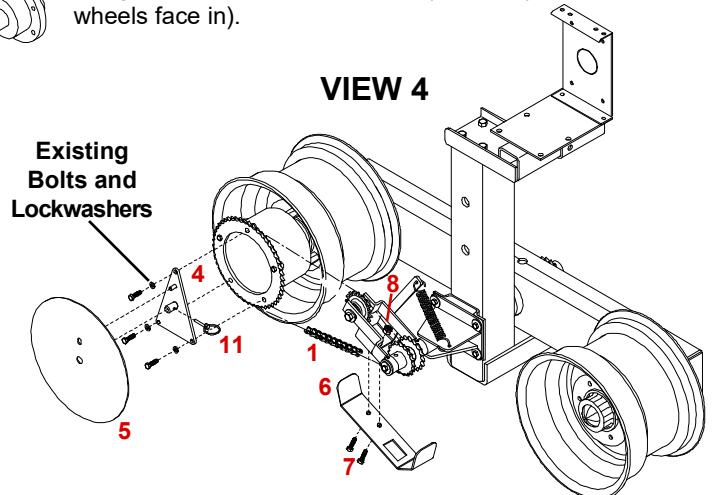
REF. NO.	PART NO.	QTY.	DESCRIPTION
4.	07103-30	1	Disc Mounting Plate
5.	07102-30	1	Chain Shield Disc
6.	07100-30	1	Chain/Sprocket Shield
7.	00523	2	3/8"-16 UNC x 1-1/4" Hex Hd. Bolt
8.	02592	2	3/8"-16 UNC Nylon Insert Locknut
9.	07101-30	1	HTH Chain/Sprocket Shield (outside)
10.	02178	1	1/2"-13 UNC Nylon Insert Locknut (used only when wheels face in)
11.	02397	1	1/4" Quick Pin

Please order replacement parts by **PART NO.** and **DESCRIPTION**

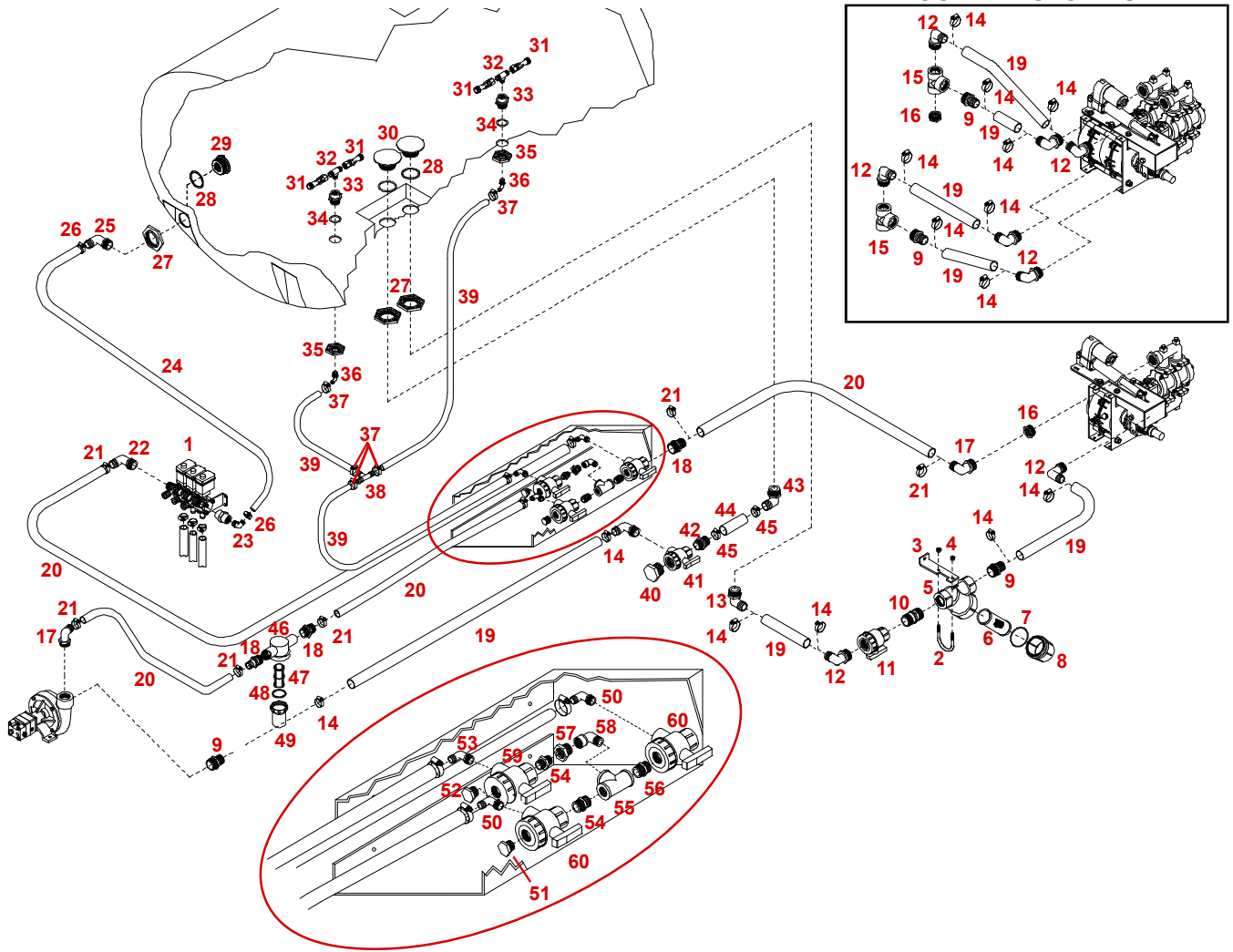
ASSEMBLY

1. Begin by attaching the disc mounting plate (#4) to the existing sprocket. Secure using three of the existing bolts and lockwashers used to mount the sprocket to the offset hub as shown.
2. Now place the chain shield disc (#5) onto the mounting plate (#4), and secure it using pin (#11).
3. Mount the chain/sprocket shield (#6) to the chain tightener assembly using two 3/8" x 1-1/4" bolts, and two 3/8" locknuts as shown. **Note : (run chain through the square hole only on long tandem undercarriage wheels in).**
4. Mount the chain/sprocket shield (#9) around the sprocket located on the outside of the tandem walking beam. Secure using one 1/2" locknut as shown (used only when tandem wheels face in).

VIEW 4



PISTON PUMP PLUMBING PARTS BREAKDOWN



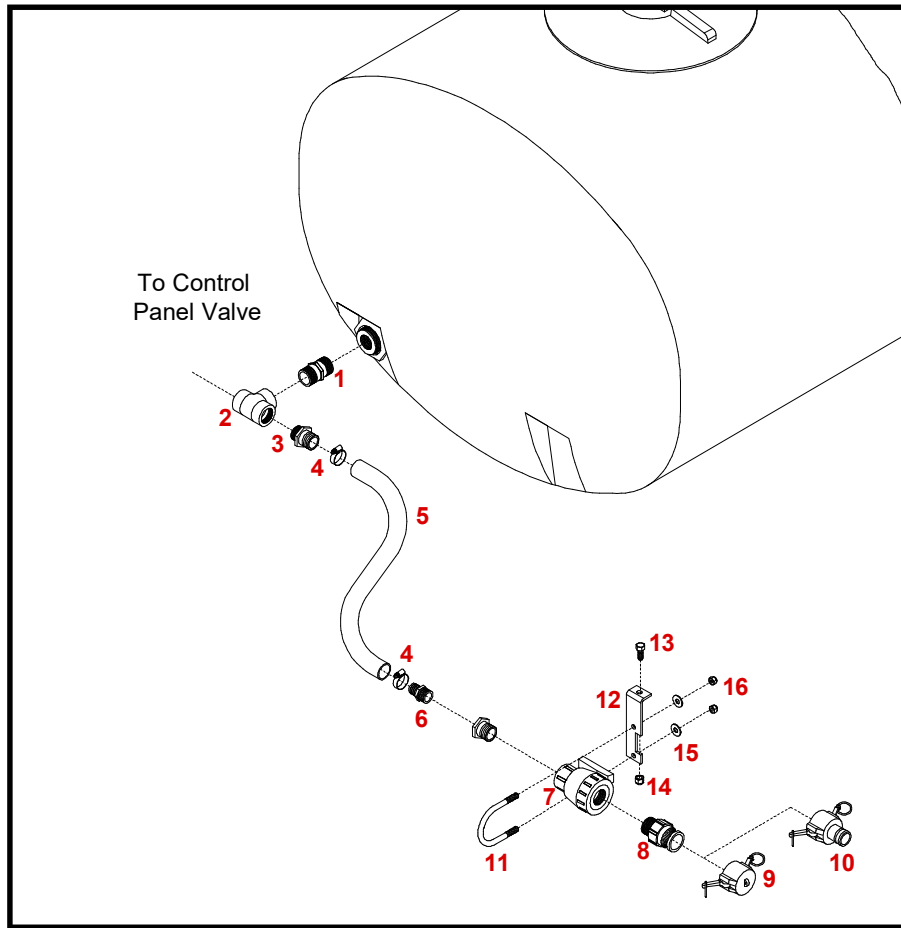
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	PFVDEM-1X	1	Valve Assembly (CP290)
2.	02757	1	7/16"-14 UNC x 3" Rnd. U-bolt
3.	01811-30	1	Valve Mounting Bracket
4.	02771	2	7/16"-14 UNC Nylon Locknut
5.	LS150B*	1	Line Strainer Body/Cap Assy.
6.	LS180	1	Mesh Screen
7.	LS150G	1	Gasket
8.	LS200C	1	Cap for Strainer
9.	BA112	4	1-1/2" MPT x 1-1/2" HB
10.	BM1120	1	1-1/2" MPT Nipple Fitting
11.	UV150FP	1	1-1/2" Poly Ball Valve
12.	EL112	8	1-1/2" MPT x 1-1/2" HB Elbow
13.	EL114 112	1	1-1/4" MPT x 1-1/2" HB Elbow
14.	B32H	14	1-1/2" Gear Clamp
15.	BTT112	2	1-1/2" FPT Tee
16.	BRB112 114	1	1-1/2" MPT x 1-1/4" FPT Reducer
17.	BEL114	2	1-1/4" MPT x 1-1/4" HB Elbow
18.	BA114	3	1-1/4" MPT x 1-1/4" HB
19.	S112	-	1-1/2" Suction Hose
20.	1140RB	-	1-1/4" Rubber Hose
21.	B24H	8	1-1/4" Gear Clamp
22.	BEL1 114	1	1" MPT x 1-1/4" HB Elbow
23.	BEL1010	1	1" MPT x 1" HB Elbow
24.	1010RB	-	1" Rubber Hose
25.	BEL114 1	1	1-1/4" MPT x 1" HB Elbow
26.	B16H	2	1" Gear Clamp
27.	N8P	3	Tank Outlet Nut
28.	5078V	3	Viton Grommet
29.	P114A	1	1-1/4" Outlet Fitting
30.	P114PAV	2	1-1/4" Anti-vortex Outlet

REF. NO.	PART NO.	QTY.	DESCRIPTION
31.	5044 1	4	Single Agitation Wand
32.	R1212	2	1/2" MPT Tee
33.	P012D	2	1/2" Double Thread Outlet
34.	5077V	2	Viton Grommet
35.	N5P	2	Tank Outlet Nut
36.	BEL1234	2	1/2" MPT x 3/4" HB Elbow
37.	B12H	6	3/4" Gear Clamp
38.	T34	1	3/4" HB Tee
39.	340RB	-	3/4" Rubber Hose
40.	F2000	1	2" MPT Plug
41.	UV200FP3	1	2" Single Union Poly Ball Valve
42.	A200	1	2" MPT x 2" HB
43.	BEL200	1	2" MPT x 2" HB Elbow
44.	S2020	-	2" Suction Hose
45.	B44H	2	2" Gear Clamp
46.	RVF100C	1	Line Strainer
47.	RVF140	1	Mesh Screen
48.	RVF114GV	1	Gasket
49.	RVF114B	1	Line Strainer Bowl
50.	UV125FP3	2	1-1/4" 3-Way Poly Ball Valve
51.	F1014	1	1-1/4" MPT Plug
52.	F1000	1	1" MPT Plug
53.	BEL1034	1	1" MPT x 3/4" HB Elbow
54.	BM1000	2	1" MPT Nipple Fitting
55.	BTT114	1	1-1/4" FPT Tee
56.	BM1140	1	1-1/4" MPT Nipple Fitting
57.	BRB114 1	1	1-1/4" MPT x 1" FPT Reducer
58.	BSE114	1	1-1/4" FPT x 1-1/4" MPT Elbow
59.	UV100FP3	1	1" 3-Way Poly Valve

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

* Body **NOT** sold separately

(OPTIONAL CPTK1) QUICK REFILL PARTS BREAKDOWN AND INSTALLATION



QUICK REFILL (CPTK1) PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	BM1140	2	1-1/4" MPT Nipple (GFP)
2.	BTT114	2	1-1/4" FPT Tee (GFP)
3.	A114 112	1	1-1/4" MPT x 1-1/2" HB (GFP)
4.	B32H	2	1-1/2" SS Gear Hose Clamp
5.	1120RB	-	1-1/2" Rubber Hose
6.	BA200 112	1	2" MPT x 1-1/2" Hose Barb (GFP)
7.	UV200FP	1	2" Poly Ball Valve
8.	633F2020	1	2" Adapter - Male NPT
9.	634B2020	1	2" Cap for Adapter
10.	633C2020	1	2" Hose Shank Coupler
11.	02757	2	7/16"-14 UNC x 3" U-Bolt
12.	01811-30	1	Quick Refill Mounting Bracket
13.	00967	2	1/2"-13 UNC x 1-1/4" Hex Head Bolt (Gr 5)
14.	02178	2	1/2"-13 UNC Nylon Insert Locknut
15.	00205	2	7/16" Flatwasher
16.	02771	2	7/16"-14 UNC Nylon Insert Locknut

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

QUICK REFILL OPERATING INSTRUCTIONS (CPTK2)

Start by having all valves in closed position.

1. Remove the cap (No. 9) from the NPT quick coupler adapter (No. 8) and attach the 2" hose shank coupler (No. 10) which is connected to the nurse tank hose.
2. Open valve (No. 7 and 15) and the valve on the nurse tank. Make sure there is liquid up to the pump before starting the pump. Running the pump dry will cause seals to fail.
3. When the tank is full, open valve **(A)** and close valve (No. 7) simultaneously. Open the agitation line valve on the control panel and close valve (No. 15). The unit is now agitating.
4. Close nurse tank valve, disconnect coupler (No. 8) and replace cap (No. 9)

NOTE: Apply thread sealant to the fittings. Do not use sealant on external threads of tank outlet fitting.

DFS 55 MOUNTING ON HTH SPRAYER

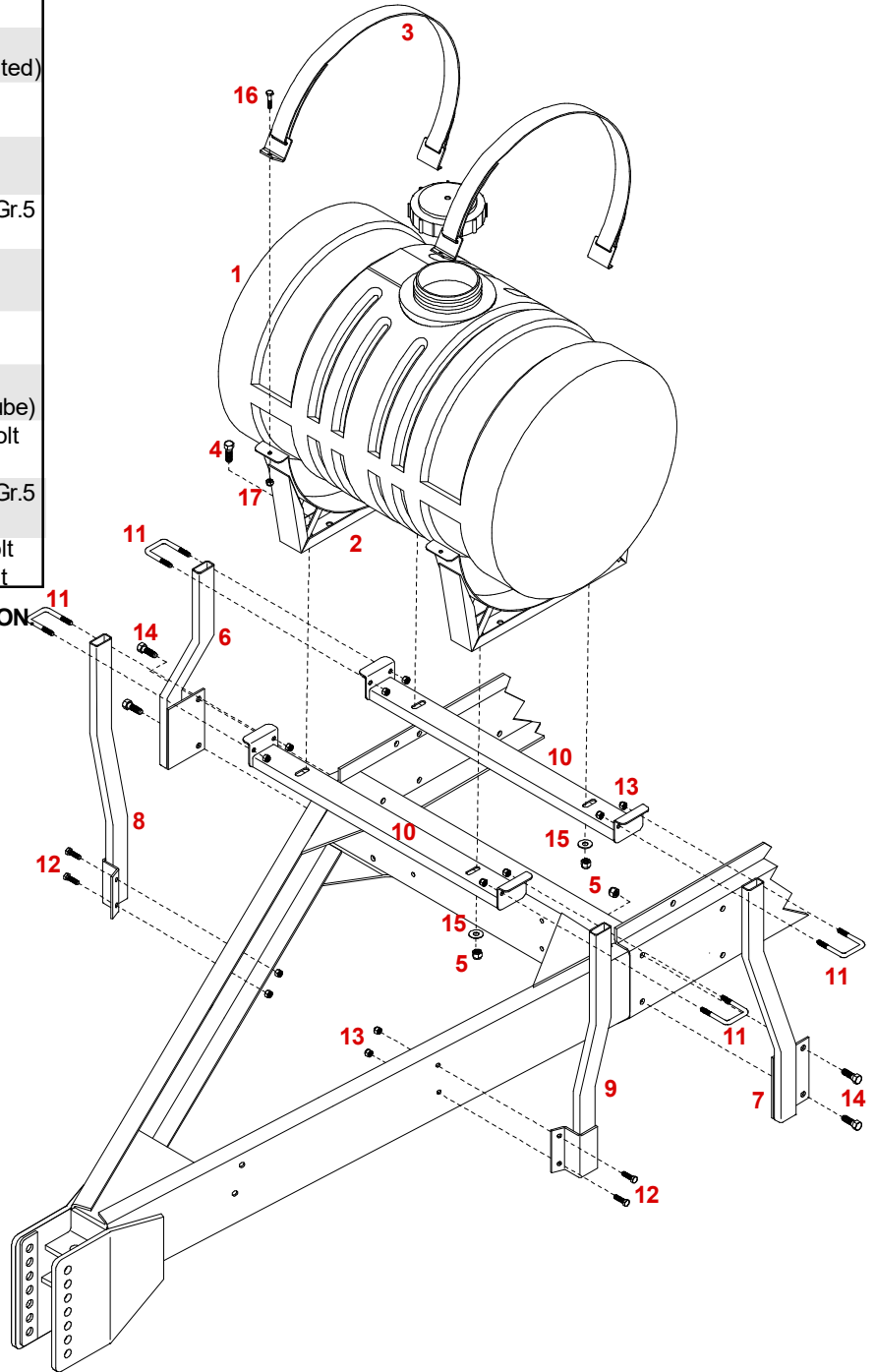
PARTS LIST FOR MOUNTING ON HP/HTH SPRAYER

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	P55 23F	1	Tank (55 gallon) w/ 1-1/4" AV Fitting
-	PL5R	1	Tank Lid
-	PL5A	1	Optional Replacement Lid
-	PL5N	1	Optional Replacement Lid (non-vented)
2.	02645-30	2	Tank Saddle
3.	04353	2	Tie Down Strap
-	05785-95	4	Strap Anchor
-	02729-95	2	Strap Buckle
4.	00967	4	1/2"-13 UNC x 1-1/4" Hex Head Bolt Gr.5
5.	02178	8	1/2"-13 UNC Nylon Insert Locknut
6.	07142-30	1	Right Rear Mounting Arm
7.	07143-30	1	Left Rear Mounting Arm
8.	07146-30	1	Right Front Mounting Arm
9.	07147-30	1	Left Front Mounting Arm
10.	07148-30	2	Crossmember Mount
11.	05294	4	3/8"-16 UNC Sq. U-bolt (fits 1" x 2" tube)
12.	00523	4	3/8"-16 UNC x 1-1/4" Hex Head Bolt
13.	02592	12	3/8"-16 UNC Nylon Insert Locknut
14.	01254	4	1/2"-13 UNC x 1-1/2" Hex Head Bolt Gr.5
15.	00085	4	1/2" Flatwasher
16.	04352	4	5/16"-18 UNC x 4" F.T Hex Hd. Bolt
17.	02802	4	5/16"-18 UNC Nylon Insert Locknut

Please order replacement parts by **PART NO.** and **DESCRIPTION**

ASSEMBLY INSTRUCTIONS

1. Remove and discard existing 1/2" x 1-1/4" bolts which mount the existing handrail brackets. Remount handrail brackets along with rear mounting arms (#6,7) to the sprayer frame using four 1/2" x 1-1/2" bolts (#14), and four 1/2" locknuts (#5) as shown.
2. Now mount the front mounting arms (#8,9) to the sprayer frame using four 3/8" x 1-1/4" bolts (#12), and four 3/8" locknuts (#13) as shown.
3. Attach the crossmember mounts (#10) to the front and rear mounting arms using four 3/8" x 2" sq. U-bolts (#11), and eight 3/8" locknuts (#13).
4. Mount the tank saddles (#2) on the crossmember mounts (#10) with four 1/2" x 1-1/4" bolts (#4) four 1/2" flatwashers (#15), and four 1/2" locknuts (#5).
5. Lay tank (#1) in the tank saddle (#2). Secure tank with the tie down straps (#3) four 5/16" x 4" bolts (#16), and four 5/16" locknuts (#17) as shown.

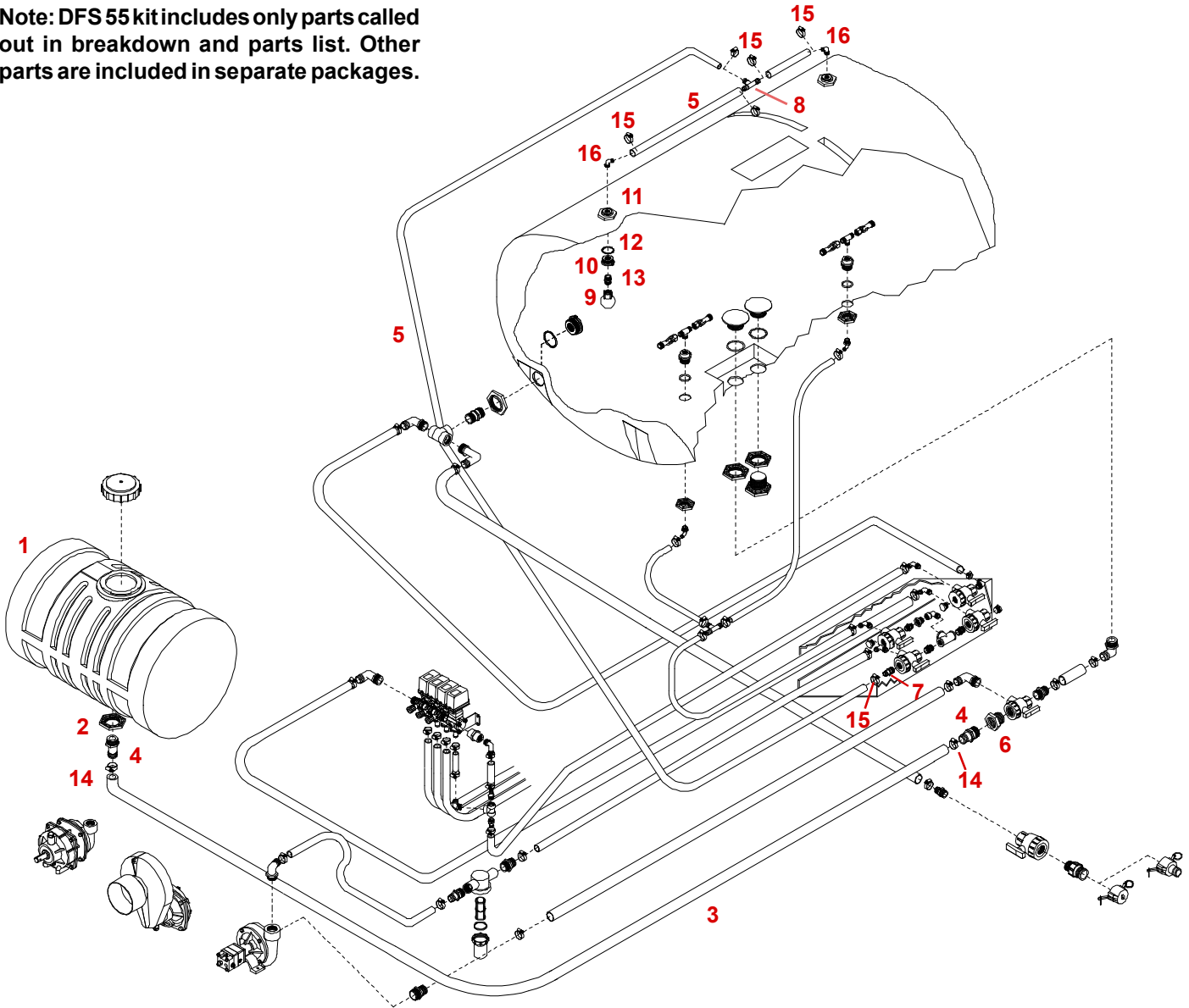


DFS 55 MOUNTING ON HTH (750/1000 GL.) SPRAYER



DFS 55 PLUMBING BREAKDOWN AND PARTS LIST

Note: DFS 55 kit includes only parts called out in breakdown and parts list. Other parts are included in separate packages.



DFS 55 (PLUMBING) PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	P55 23F	1	Tank (55 Gallon)
2.	N8P	1	Tank Outlet Nut
3.	1140RB	-	1-1/4" Rubber Hose
4.	BA114	2	1-1/4" MPT x 1-1/4" HB-GFP
5.	340RB	-	3/4" Rubber Hose
6.	BRB200 114	1	2"x1-1/4" Reducer Bushing-GFP
7.	EL114 34	1	1-1/4" MPT x 3/4" HB Elbow-GFP
8.	T34	1	3/4" Tee HB x HB x HB
9.	03813	2	Spinner
10.	P100DA	2	1" Outlet Bushing
11.	N5P	2	Replacement Nut
12.	5077V	2	Replacement O-Ring
13.	11067	2	1" MPT Nipple-GFP
14.	B24H	2	Hose Clamp Fits 1-1/4" Hose
15.	B12H	6	Hose Clamp Fits 3/4" Hose
16.	BEL1034	2	1" MPT x 3/4" HB Elbow-GFP

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

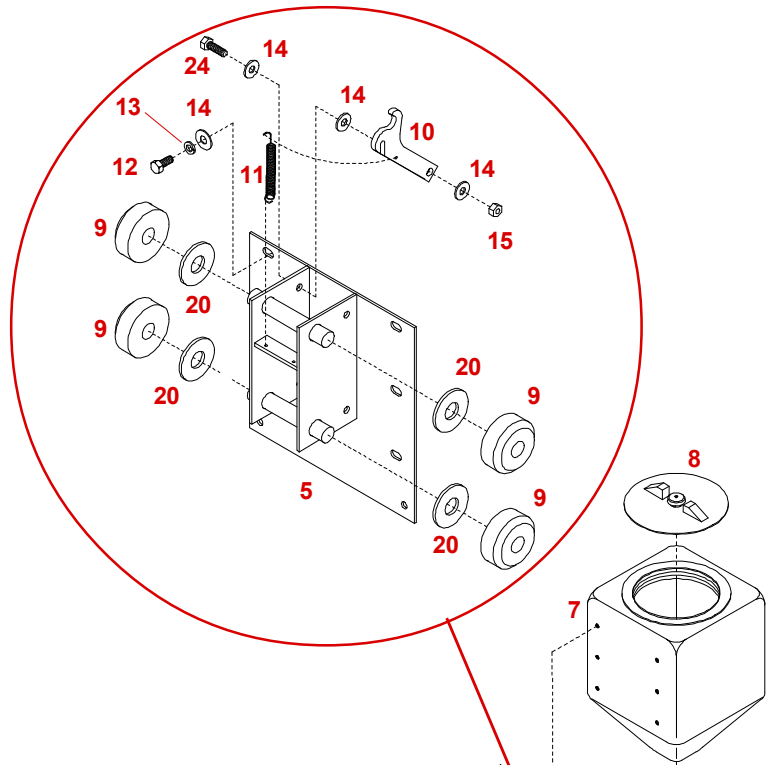
5 GALLON CHEMICAL INDUCTOR BREAKDOWN

INDUCTOR PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	09255-30	1	Mounting Brace Plate
2.	09258-30	2	Slide Channel Cross Strap
3.	09257-30	1	Slide Channel
4.	09737-30	1	Mounting Strap
5.	09251-30	1	Mounting Plate
6.	09254-30	1	Bent Strap Handle
7.	09318	1	5 Gallon Cone Tank with Lid
8.	09319	1	5 Gallon Cone Lid
9.	09253	4	Nylatron Roller Wheel
10.	09252-95	1	Lever Lock
11.	01864	1	Ratchet Spring
12.	01263	12	5/16"- 18 UNC x 3/4" Bolt (Gr. 5)
13.	00036	6	5/16" Lockwasher
14.	00004	8	5/16" Flatwasher
15.	02802	7	5/16"- 18 UNC Nylon Locknut
16.	00907	3	3/8"- 16 UNC x 1" Bolt (Gr. 5)
17.	02592	3	3/8"- 16 UNC Nylon Locknut
18.	00482	2	1/2"- 13 UNC x 1-3/4" Bolt (Gr. 5)
19.	02178	2	1/2"- 13 UNC Nylon Locknut
20.	02534	4	3/4" Machine Washer
21.	04822	1	1/4" x 1-1/16 x 1-1/2" sq. U-bolt
22.	02772	2	1/4" Locknut
23.*	05641-30	1	Front Hand Rail
24.	02990	1	5/16" x 1" Bolt (Gr. 5)

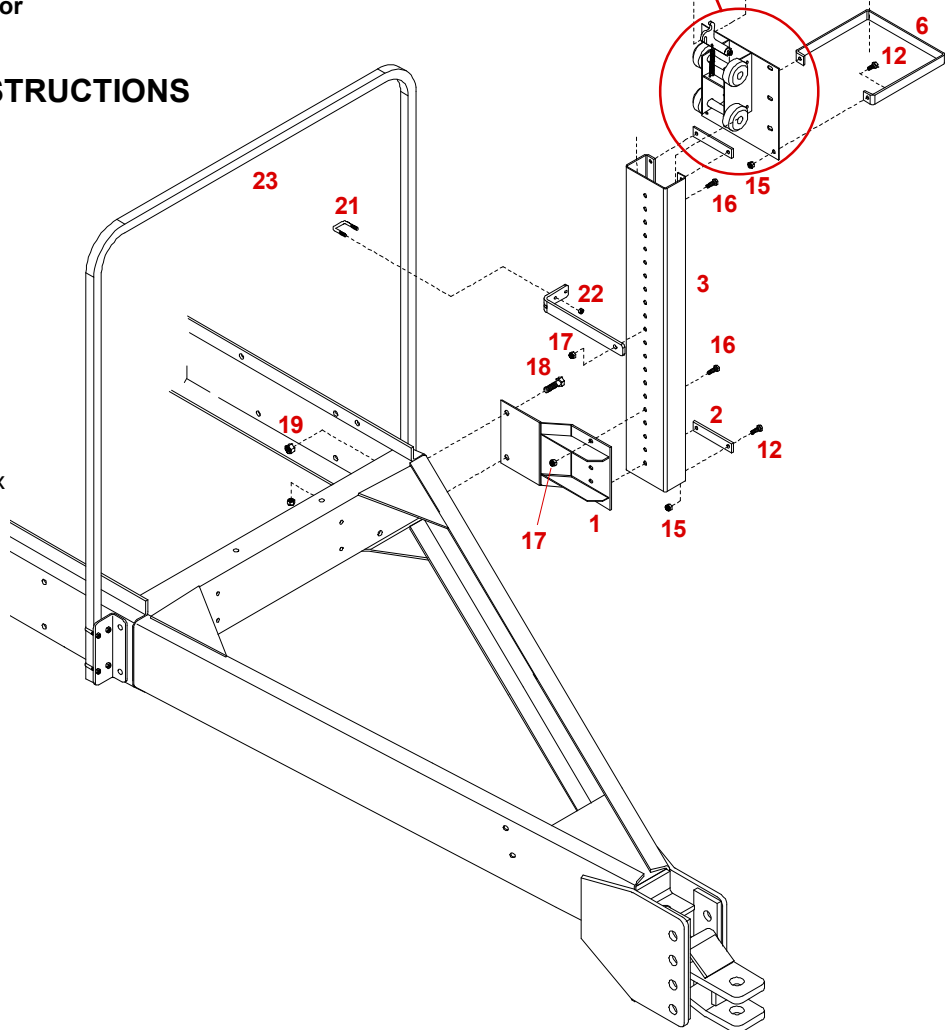
Please order replacement parts by PART NO. and DESCRIPTION.

* Not Included with Chemical Inductor

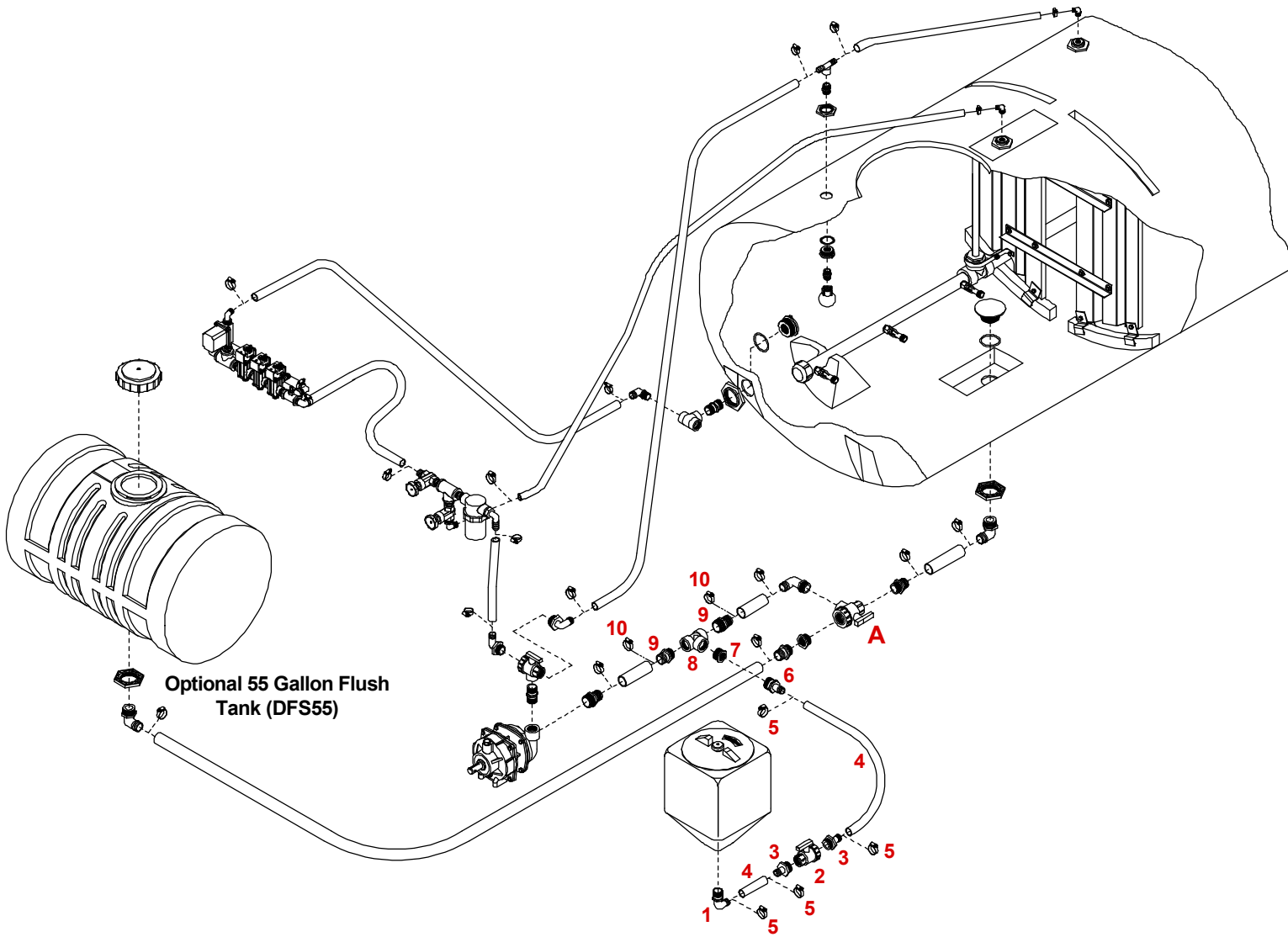


CHEMICAL INDUCTOR ASSEMBLY INSTRUCTIONS

1. Mount the brace plate (#1) to the side of the frame using two 1/2" x 1-3/4" hex head bolts (#18) and two 1/2" locknuts (#19).
2. Next, mount the slide channel (#3) to the brace plate (#1) using two 3/8" x 1" hex head bolt (#16) and two 3/8" locknuts (#17). Mount the mounting strap (#4) to the slide channel with one 3/8" x 1" hex head bolt (#16) and 3/8" locknut (#17). Mount this strap to the front handrail (#23) using a 1/4" x 1-1/6" sq. u-bolt (#21) and two 1/4" locknuts (#22). Then put the bottom slide channel cross strap (#2) on using two 5/16" x 3/4" bolt (#12) and two 5/16" locknuts (#15).
3. Now assemble the tank carriage. Mount the four nylatron rollers (#9) and machine washers (#20) as shown. Mount the lever lock (#10) to the plate using a 5/16" x 3/4" bolt (#12), three 5/16" flatwashers (#14), and one 5/16" locknut (#15). Mount the ratchet spring (#11) to the mounting plate (#5) and the lever lock (#10) as shown in the picture above. Mount the bent strap (#6) to the mounting plate (#5) using two 5/16" x 3/4" bolts (#12) and two 5/16" locknuts (#15).
4. Now slide the carriage into the slide channel (#3). Mount the top channel cross strap (#2) using two 5/16" x 3/4" bolts (#12) and two 5/16" locknuts (#15).
5. Now mount the tank (#7) to the mounting plate (#5) using six 5/16" x 3/4" bolts (#12), six 5/16" lockwashers (#14), and six 5/16" flatwashers (#14).



5 GALLON CHEMICAL INDUCTOR PLUMBING BREAKDOWN



INDUCTOR TANK OPERATING INSTRUCTIONS

1. Begin by filling tank 1/3 to 1/2 full of water.
2. Put Chemical in the inductor tank with the water.
3. Start pump on sprayer, making sure valve (A) in suction line is open.
4. Open valve (#2) under inductor tank.
5. When inductor tank is empty, Close valve (#2).

INDUCTOR PLUMBING PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	BEL1010	1	1" MPT x 1" HB Elbow- GFP
2.	UV075FP	1	1" Poly Ball Valve
3.	A3410	2	3/4" MPT x 1" HB Elbow- GFP
4.	1010RB	-	1" Rubber Hose
5.	B16H	4	1" Gear Clamp
6.	BA114 1	1	1-1/4" MPT x 1" HB- GFP
7.	BRB200 114	1	2" x 1-1/4" FPT Reducer- GFP
8.	BTT200	1	2" FPT Tee- GFP
9.	A200	2	2" MPT x 2" HB- GFP
10.	B32H	2	1-1/2" Gear Clamp

Please order replacement parts by
PART NO. and DESCRIPTION.



DETHMERS MFG. COMPANY

4010 320th St., P.O. BOX 189, BOYDEN, IA. 51234

PH: (712) 725-2311 or (712) 725-2302

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