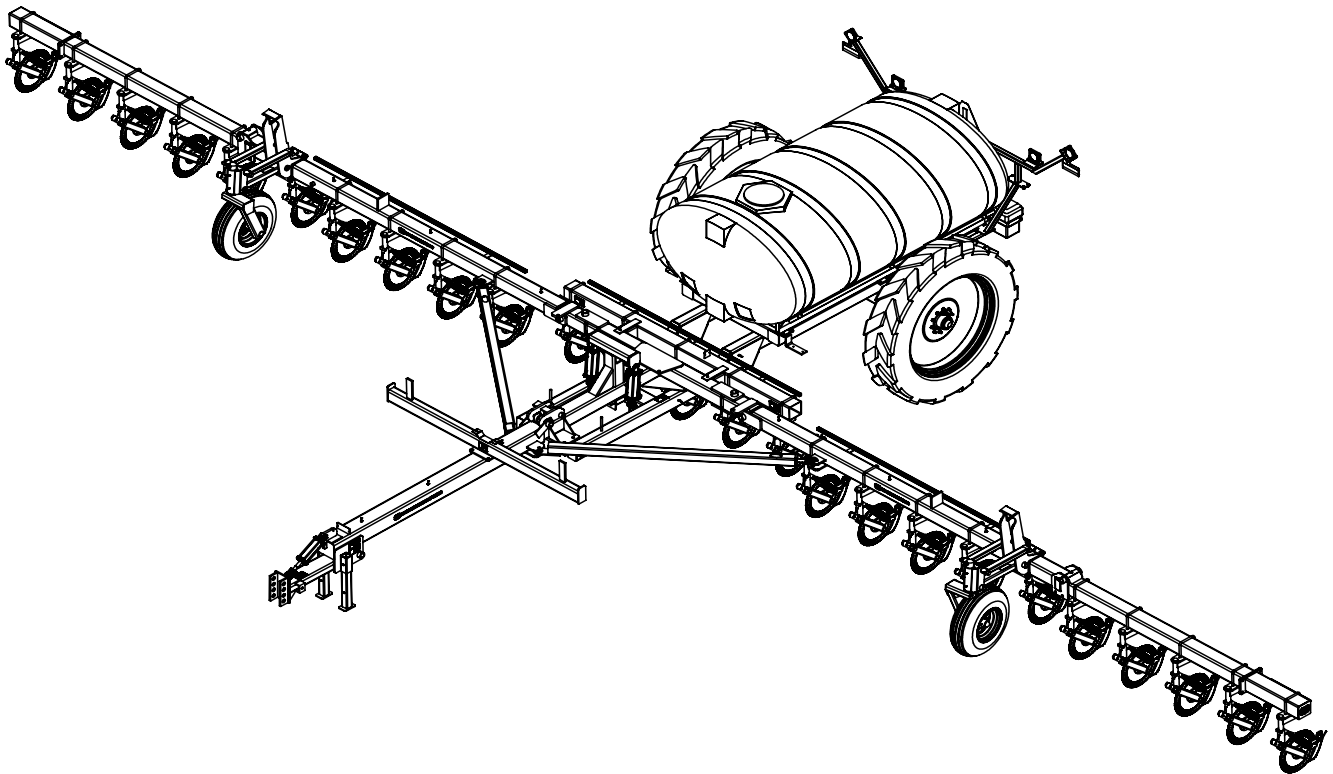




KONGSKILDE F3500

LIQUID SIDEDRESS APPLICATOR - Assembly/Parts

Kongsilde
F3500



Model
F3500

763500901 60' Liquid Sidedress Applicator

*Model may not be exactly as shown.
Kongsilde reserves the right to make changes to product designs and specifications without notice or obligation to rework.
See your local Kongsilde representative for current product specifications and options.

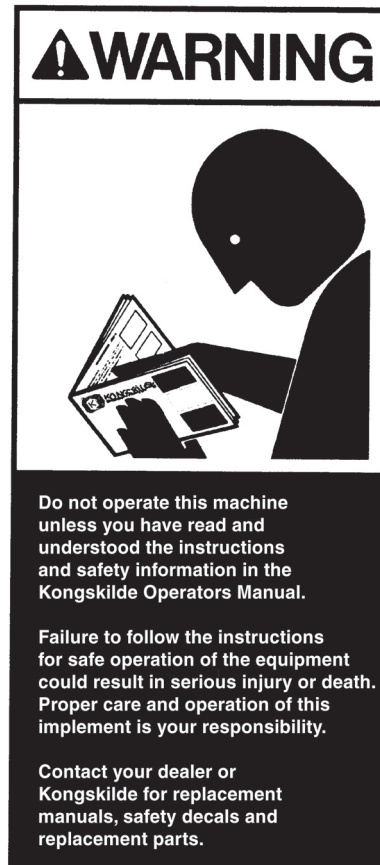
760000243 - Revision 5
Serial No. 400041 - current

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Introduction:

Please take the time to carefully read all the instruction booklets provided with your new Kongskilde product. Once you are finished reading do not throw these guides out. Keep them for later review.



These instruction booklets have been developed to assist you in assembling, adjusting and maintaining your new Kongskilde Product. To obtain optimal performance over the lifetime of the product read and follow these instructions carefully.

When the assembly of the unit is completed, please refer to the Owners Manual before attempting to adjust or use the product. The Owners Manual will provide you with further instructions on the proper Field Settings, Adjustments and Maintenance Procedures for Safe Operation of the unit.

If optional equipment or attachments have been ordered for your unit, please refer to the instruction booklets provided for proper installation and adjustment of these accessories.

Please take the time to fill out and return the Owners Registration and Warranty Form provided with the Owners Manual in order to activate the warranty coverage.

NOTES:

- Images in this manual are for reference only and may not exactly match actual components.
- This manual depicts "Left" and "Right" as if standing behind the unit facing forward.
- Refer to torque chart in Appendix B for proper tightening of bolts, unless otherwise noted.

Hitch Roller Bushing Assembly

Instructions:

- Use hardware from hardware bag 760063000
- Install hitch roller bushing weldment onto outer tongue weldment as shown.

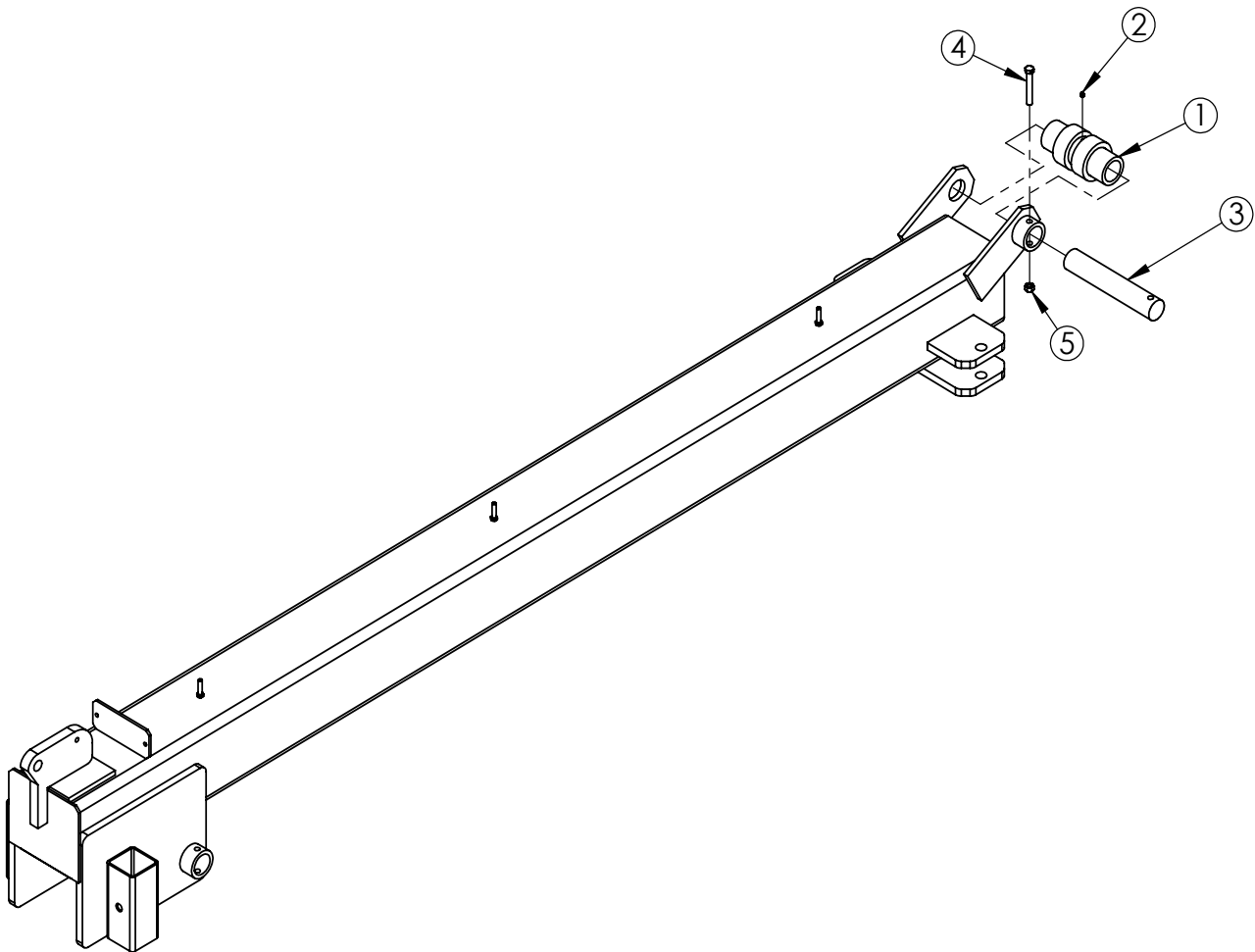


Fig.	Part no.	Qty	Description
1	76801750	1	Wdmt, Hitch Roller Bushing
2	600471000	1	Zerk, Grease 1/4"-28 Straight
3	76602145	1	Pin, Hinge 1-1/2" x 11"
4	600356137	1	Bolt, 1/2"-13 x 3-1/2" Gr. 5
5	600366030	1	Nut, Top Lock 1/2"-13

Combination Clevis Assembly

Instructions:

- Use hardware from hardware bag 760063000
- Install combination clevis and safety chain on hydraulic assist hitch. Place 3 flat washers inside mounting tabs of chain and mount to outside of channel on hitch.

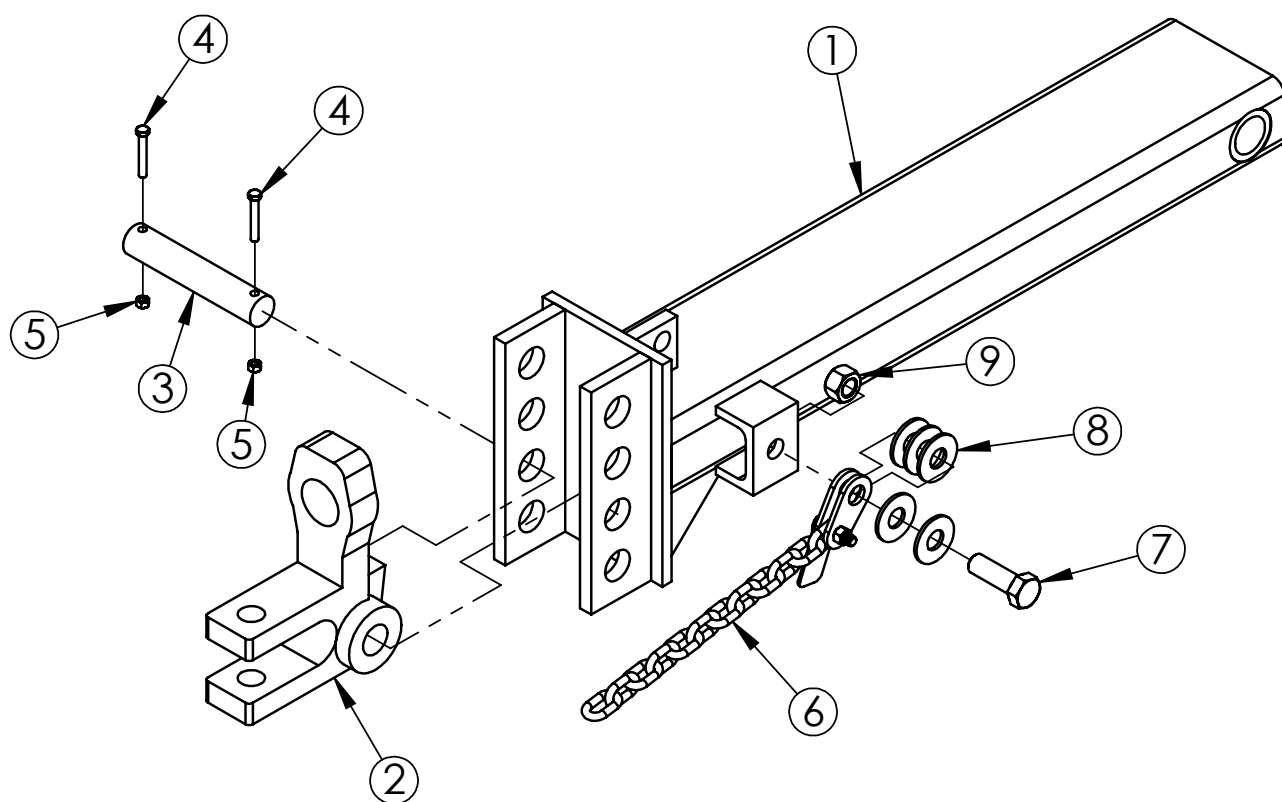


Fig.	Part no.	Qty	Description
1	76801740	1	Hitch, Hydraulic Assist
2	76450016	1	Clevis, Combination
3	76602178	1	Pin, Clevis 1-5/8" Dia x 8-1/2"
4	600356007	2	Bolt, 3/8"-16 x 2-1/2" Gr. 5
5	600366028	2	Nut, Top Lock 3/8"-16
6	600461011	1	Chain, Safety 3/8" Gr. 70
7	600356002	1	Bolt, 1"-8 x 3" Gr. 5
8	600381018	1	Washer, Flat 1"
9	600366032	1	Nut, Top Lock 1"-8

Hitch Cylinder Assembly

Instructions:

- Install hydraulic assist hitch onto outer hitch weldment.
- Install 3" x 8" onto hydraulic assist hitch and outer hitch weldment.

Note: Always use safety lock when transporting toolbar.

NOTE: ALWAYS INSTALL
SAFETY LOCK ON CYLINDER
WHEN TRANSPORTING TOOLBAR

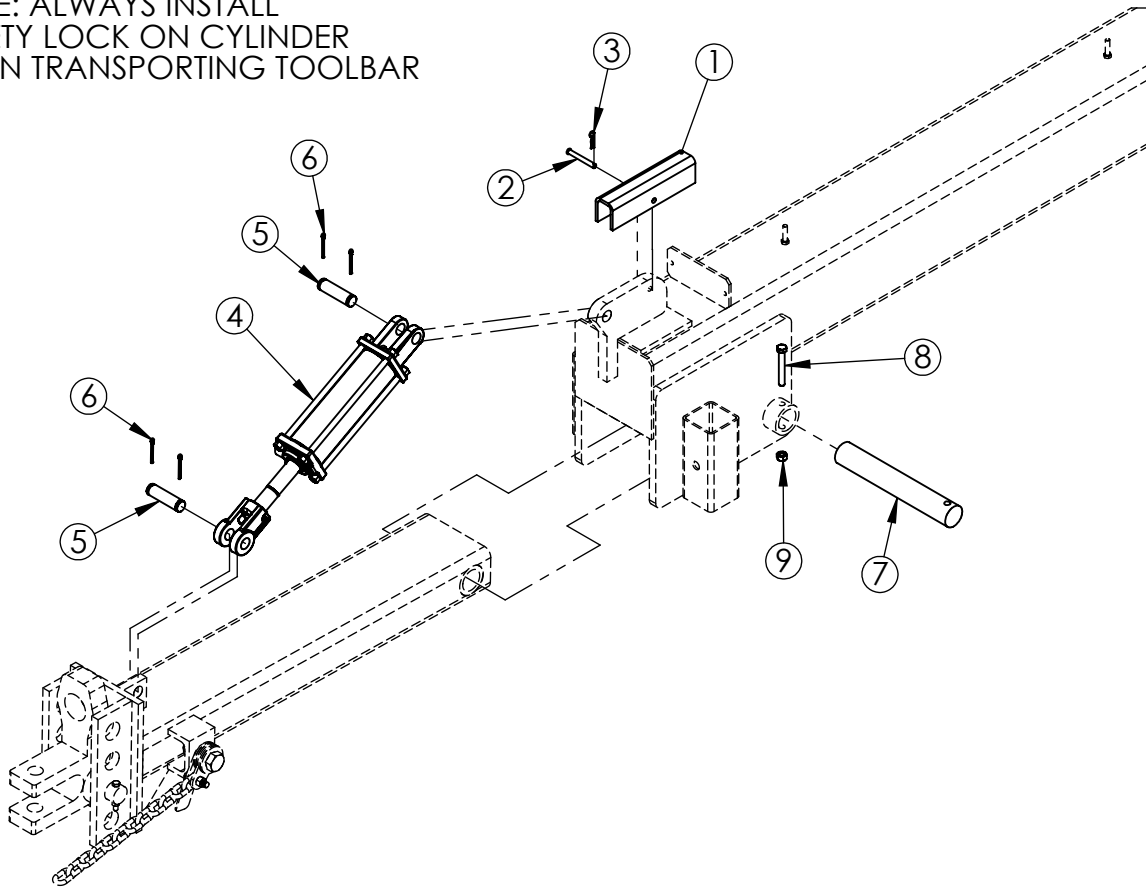


Fig.	Part no.	Qty	Description
1	764000831	1	Lock, Cylinder Safety 8" Stroke
2	76101257	1	Pin, Latch 3/8" x 3"
3	76101258	1	Hairpin, 3/32" x 1-1/2"
4	76204002	1	Cylinder, Hydraulic 3" x 8"
5	76602112	2	Pin, Cylinder 1" x 3-3/8"
6	600383058	4	Pin, Cotter 5/32" x 2"
7	76602223	1	Pin, 2" x 13"
8	600356137	1	Bolt, 1/2"-13 x 3-1/2" Gr. 5.
9	600366030	1	Nut, Top Lock 1/2"-13

Transport and Quick Hitch Safety Latches and Valve Mount Bracket

Instructions:

- Use hardware from hardware bag 760063000.
- Install quick hitch safety latch with 1.50" x 11" pin and hardware shown.
- Install transport safety latch with 1" x 10-1/2" pin and hardware shown.
- Install ball valve mount plate with u-bolt, lock washers, and nuts.

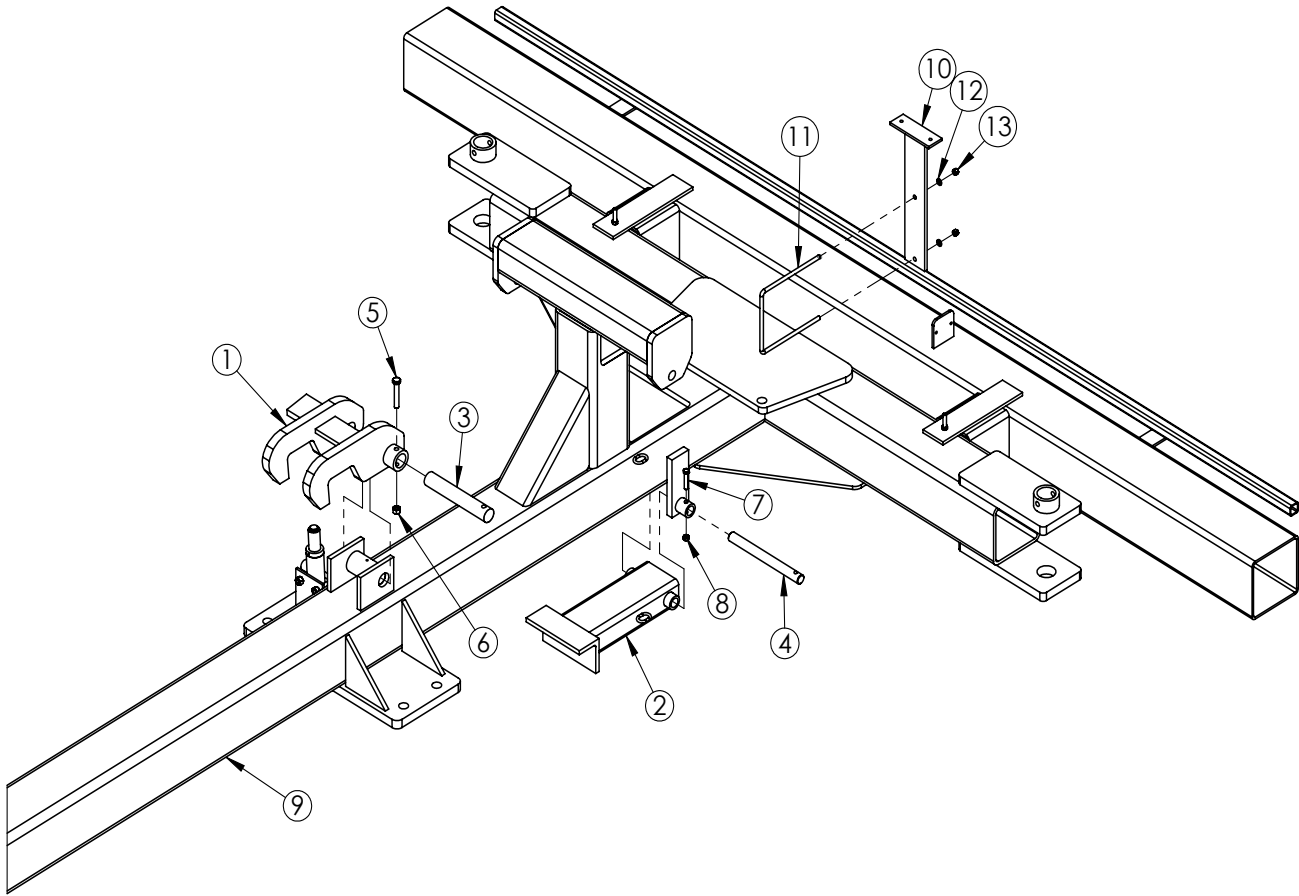


Fig.	Part no.	Qty	Description
1	76801745	1	Latch, Quick Hitch Safety
2	76801873	1	Latch, Transport Safety
3	76602129	1	Pin, 1.50" x 11"
4	7660224	1	Pin, 1" x 10-1/2"
5	600356003	1	Bolt, 1/2"-13 x 3" Gr. 5
6	600366030	1	Nut, Toplock 1/2"-13
7	600356111	1	Bolt, 3/8"-16 x 2" Gr. 5
8	600366028	1	Nut, Toplock 3/8"-16
9	76801874	1	Frame, Upper Main
10	760000117	1	Bracket, Ball Valve Mount
11	76101329	1	U-Bolt, 3/8"-16 x 7" x 8-1/2"
12	600382051	2	Washer, Lock 3/8"
13	600365008	2	Nut, Hex 3/8"-16

Hydraulic Ram Safety Lock Cylinder Assembly

Instructions:

- Use hardware from hardware bag 76213020.
- Install hydraulic ram cylinder with bolt and toplock nut with ports facing out.
- Secure cylinder with u-bolt and toplock nuts.

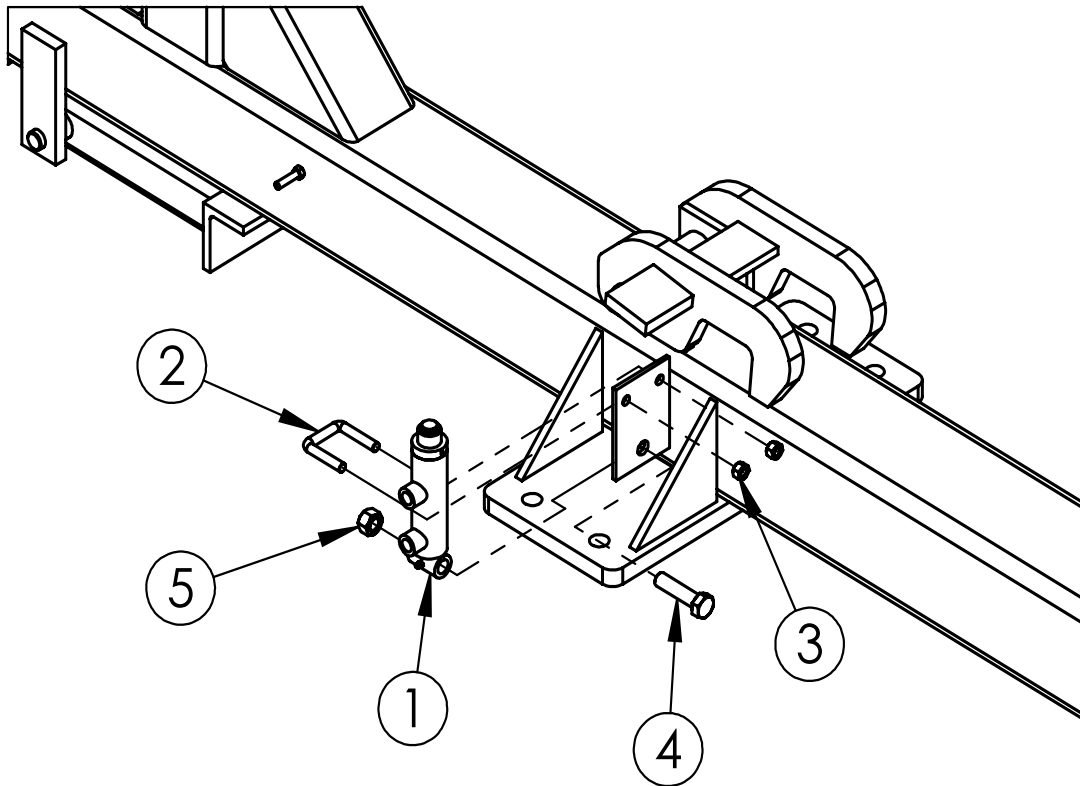


Fig.	Part no.	Qty	Description
1	76204020	1	Cylinder, Hydraulic Ram
2	76101355	1	U-Bolt, 1/2"-13 x 2-1/2" x 2-1/2"
3	600366030	2	Nut, Toplock 1/2"-13
4	600356000	1	Bolt, 3/4"-10 x 3" Gr. 5
5	600366024	1	Nut, Toplock 3/4"-10

Attaching Upper Mainframe to Lower Mainframe

Instructions:

- Use hardware from 760063000
- Place upper mainframe over lower mainframe.
- Install grease zerks into lower pin blocks.
- Attach upper mainframe to lower mainframe with pin blocks and hardware shown. Torque nuts before locking with jam nuts. See torque chart in appendix for proper torque values.

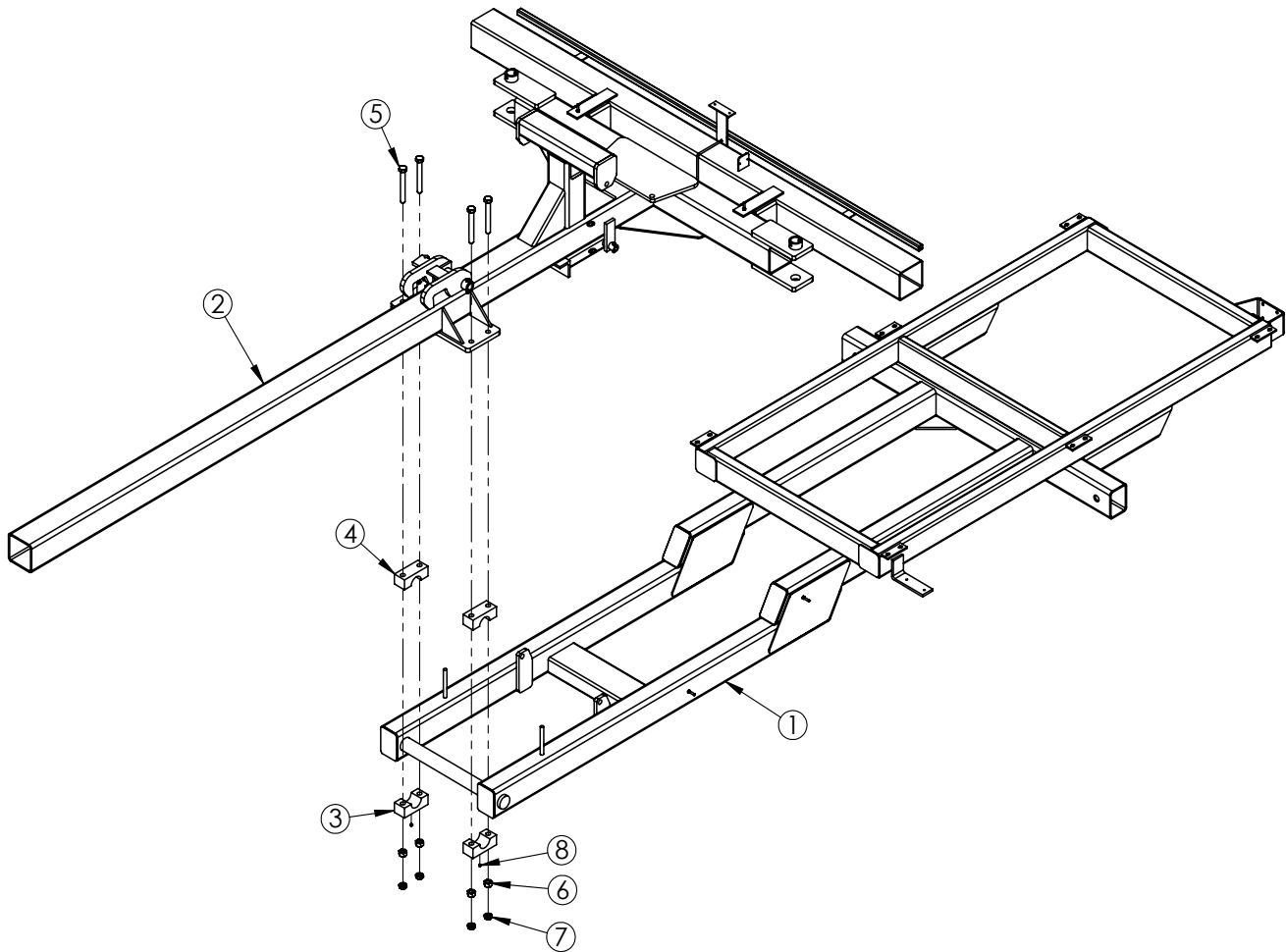


Fig.	Part no.	Qty	Description
1	760062000	1	Frame, Lower Mainframe
2	76801874	1	Frame, Upper Mainframe
3	76400237	2	Block, Zerked 3" Pin
4	76400245	2	Block, 3" Pin (No Zerk)
5	600355027	4	Bolt, 1"-8 x 8" Gr. 8
6	7600365079	4	Nut, Hex 1"-8 Gr. 8
7	76101501	4	Nut, Jam 1"-8
8	76101252	2	Zerk, Grease 1/4"-28 Straight

Tires and Axles Assemblies

Instructions:

- Use hardware from hardware bag 76102259.
- Use hoist to raise frame.
- Install axles placing bushing on front side of axle.
- Secure with lock washer and nut.
- Install tire and wheel assemblies.

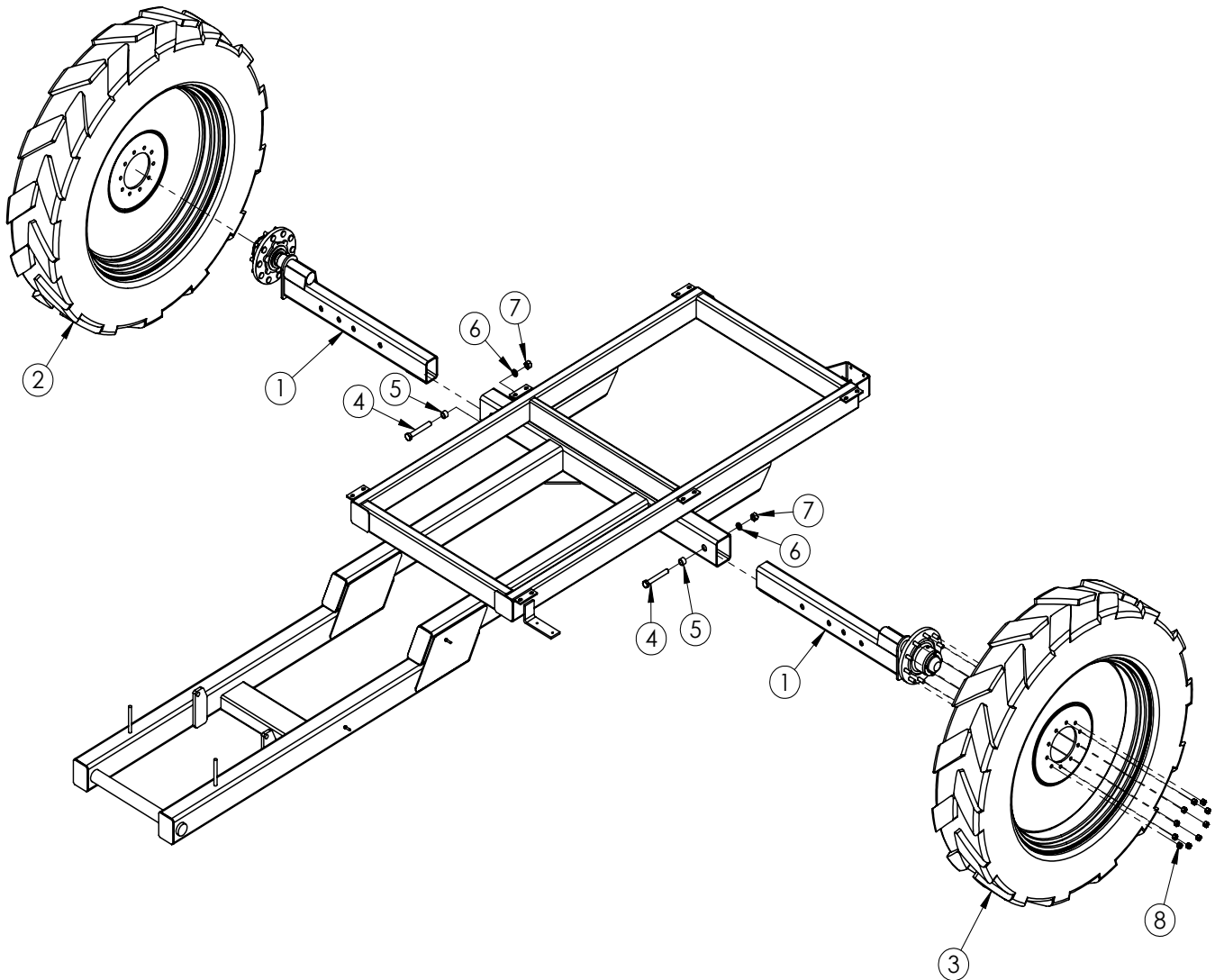


Fig.	Part no.	Qty	Description
1	762450046	2	Assy, 10 Bolt Hub and Axle
2	76301249R	1	Assy, 14.9R x 46 8 Star Wheel and Tire-RH
-	763012664	1	Assy, 320/105R54-10 Bolt Wheel and Tire-RH
3	76301249L	1	Assy, 14.9R x 46 8 Star Wheel and Tire-LH
-	763012663	1	Assy, 320/105R54-10 Bolt Wheel and Tire-LH
4	76101203	2	Bolt, 1"-8 x 7" Gr. 5
5	76602104	2	Bushing, 1-1/2" O.D. x 1.024" I.D. x 1"
6	600382056	2	Washer, Lock 1"
7	600365020	2	Nut, Hex 1"-8
8	76301189	20	Nut, Lug 3/4"-16

Crossbar, Jack Stands, and Hose Holder

Instructions:

- Use hardware from hardware bag 760063000.
- Install jack stand weldments using jack stand pins and hairpins.
- Install crossbar weldment. For 30" rows, place crossbar mount plate approximately 86" from end of hitch tube. Note: Crossbar position for other row spacings will vary. Crossbar must be placed to avoid interference with gauge wheels and row units.
- Install manual canister with hardware shown. Place bolts from the top to avoid interference with canister cap.
- Install hose holder bracket using hardware shown. Bolt on light plug holder socket.

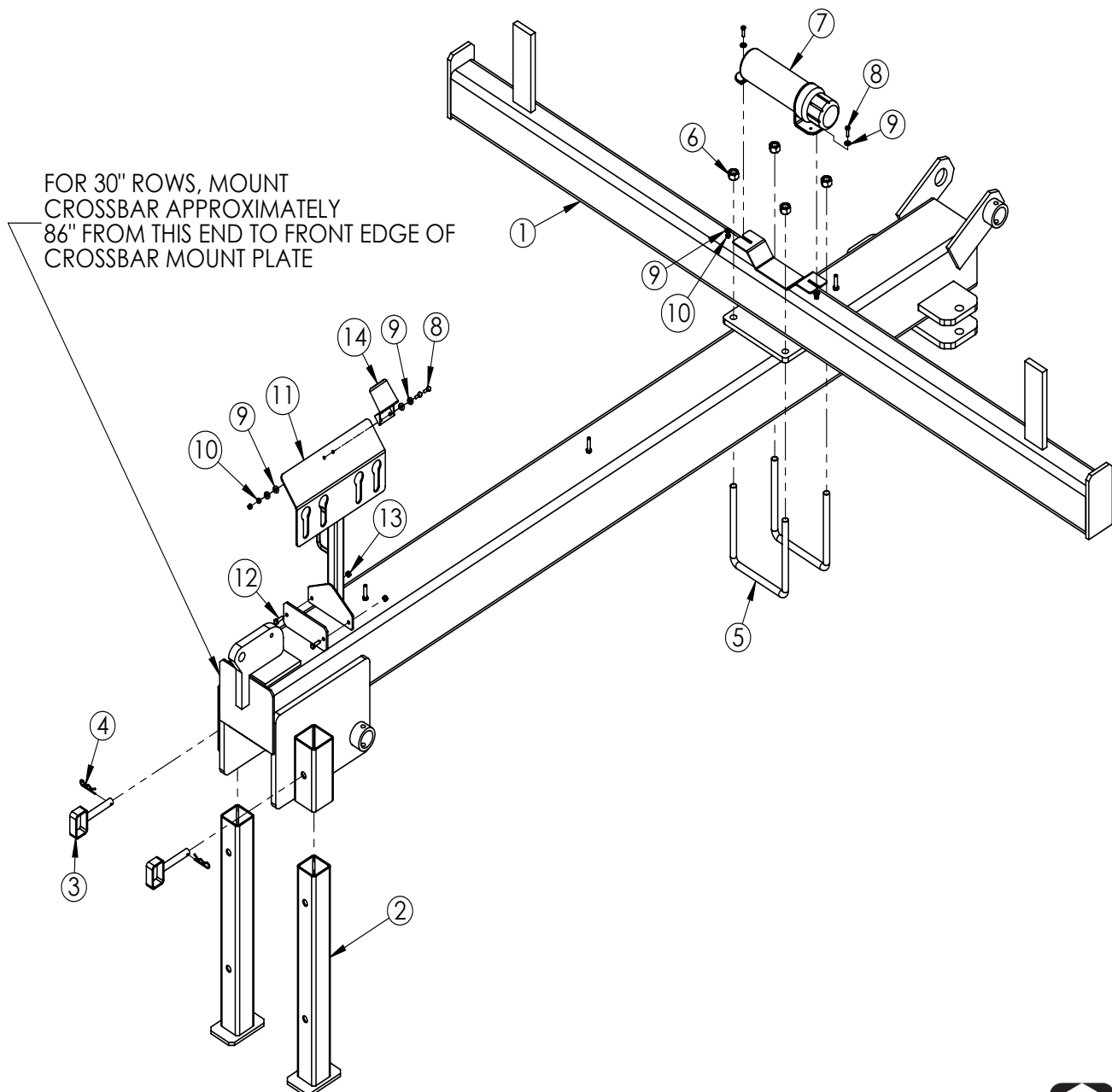
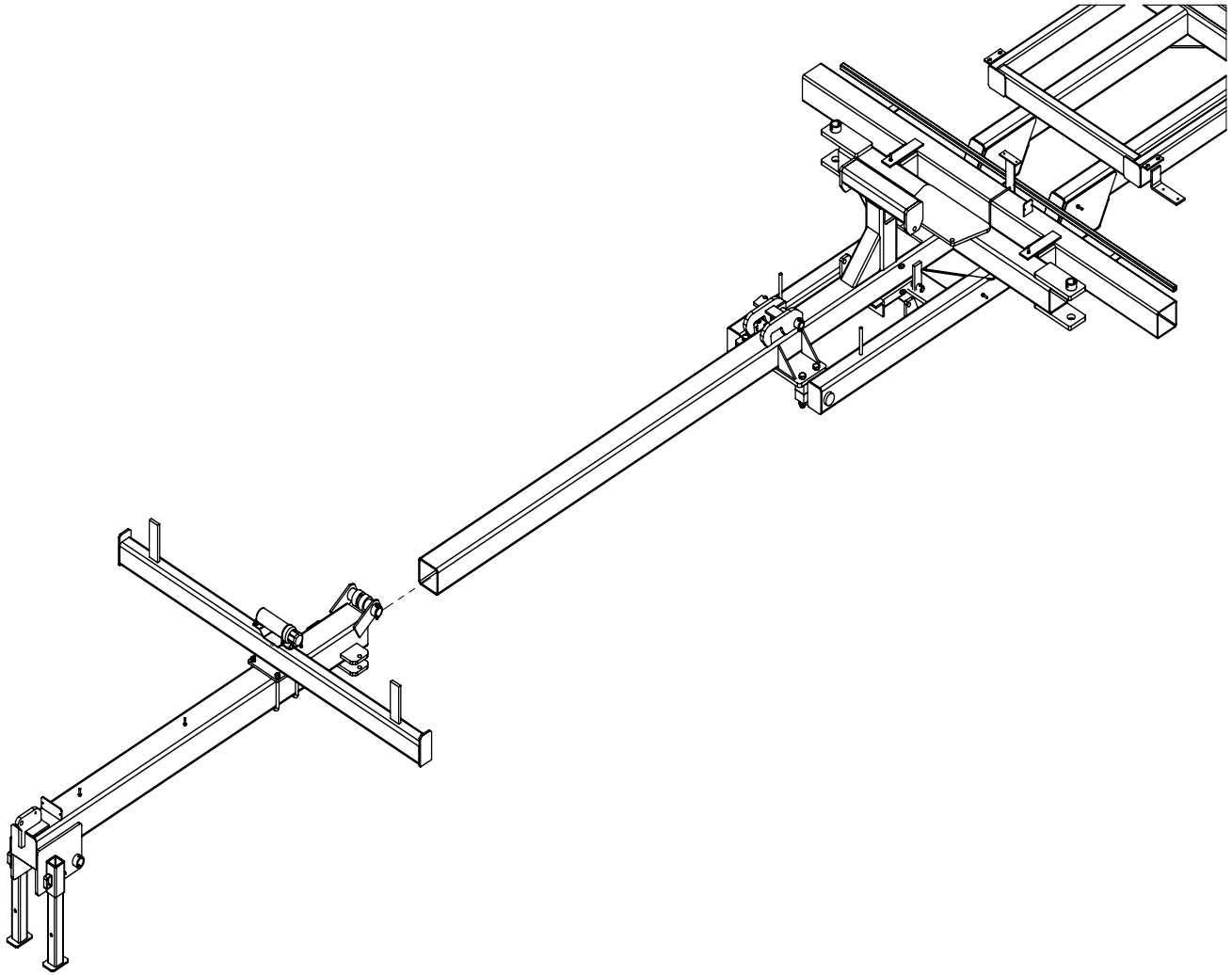


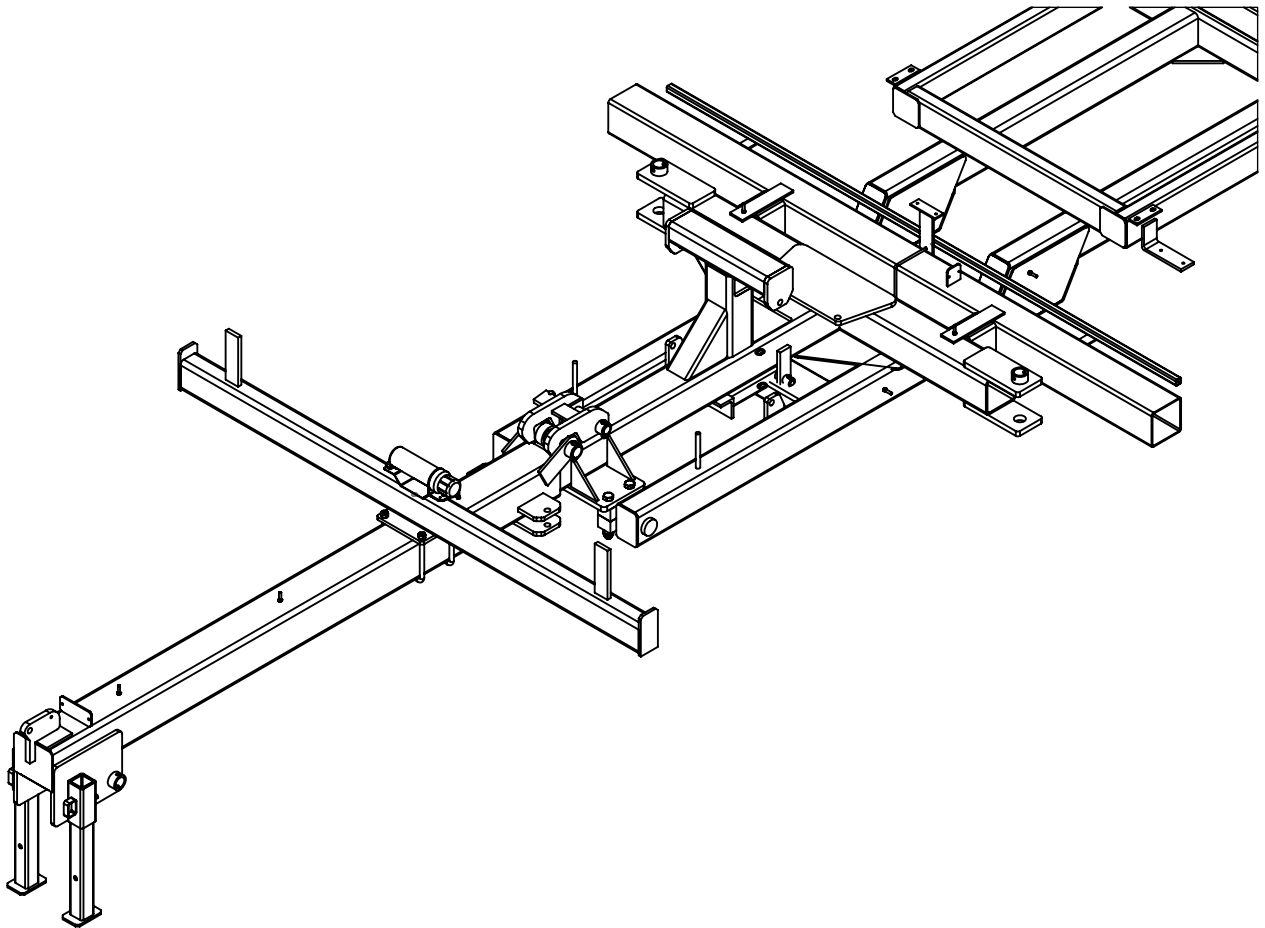
Fig.	Part no.	Qty	Description
1	76801872	1	Crossbar
2	76801665	2	Stand, Jack
3	76801666	2	Pin, Jack Stand
4	76101250	2	Hairpin, 1/8" x 2-1/2"
5	76101492	2	U-Bolt, 3/4"-10 x 8 x 9-1/2"
6	600366024	4	Nut, Toplock 3/4"-10
7	600600268	1	Canister, Manual
8	600356138	4	Bolt, 1/4"-20 x 1" Gr. 5
9	600381023	8	Washer, Flat 1/4"
10	600366026	4	Nut, Toplock 1/4"
11	760062012	1	Bracket, Hose Holder
12	600356106	2	Bolt, 5/16"-18 x 1" Gr 5
13	600366027	2	Nut, Toplock 5/16"-18
14	760001005	1	Socket, 7 Pin Light Plug Storage

Attaching Outer Hitch To Mainframe Assembly

Instructions:

- Slide outer hitch tube over upper mainframe tube up to hitch safety lock.
- Manually lift safety lock and slide tube back and engage safety lock over roller bushing weldment





Attaching Mainframe Lift Cylinders

Instructions:

-Install 3-1/2" x 10" lift cylinders using cylinder pins and cotter pins with ports facing rear of machine.

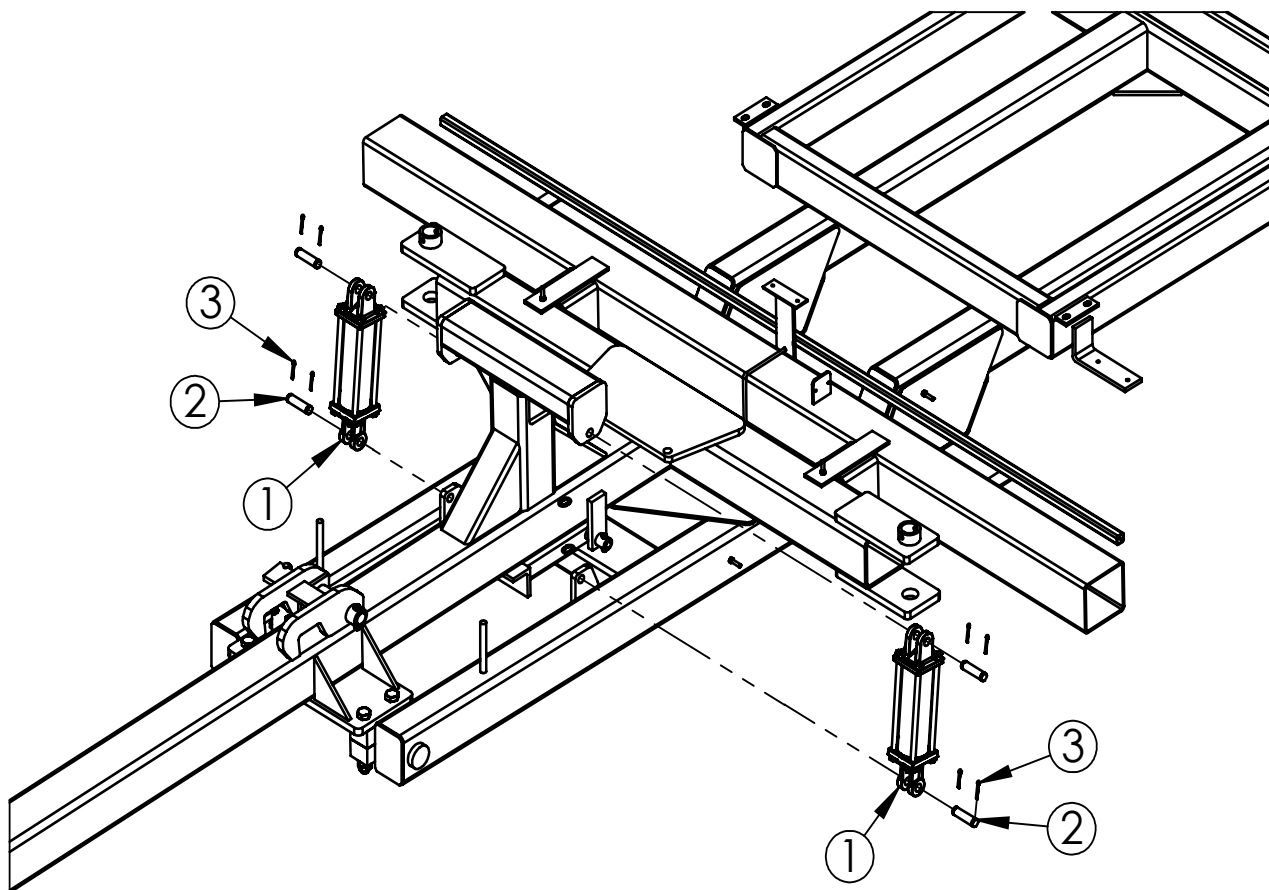


Fig	Part no.	Qty	Description
1	76204016	2	Cylinder, Rephase 3-1/2" x 10"
2	76602112	4	Pin, Cylinder 1" x 3-3/8"
3	600383058	8	Pin, Cotter 5/32" x 2"

Attaching Inner Wing Hinge Weldments

Instructions:

- Use hardware from hardware bag 760063000.
- Install inner wing weldments with 2" x 11" pins and hardware while installing hose support weldments on bolts.

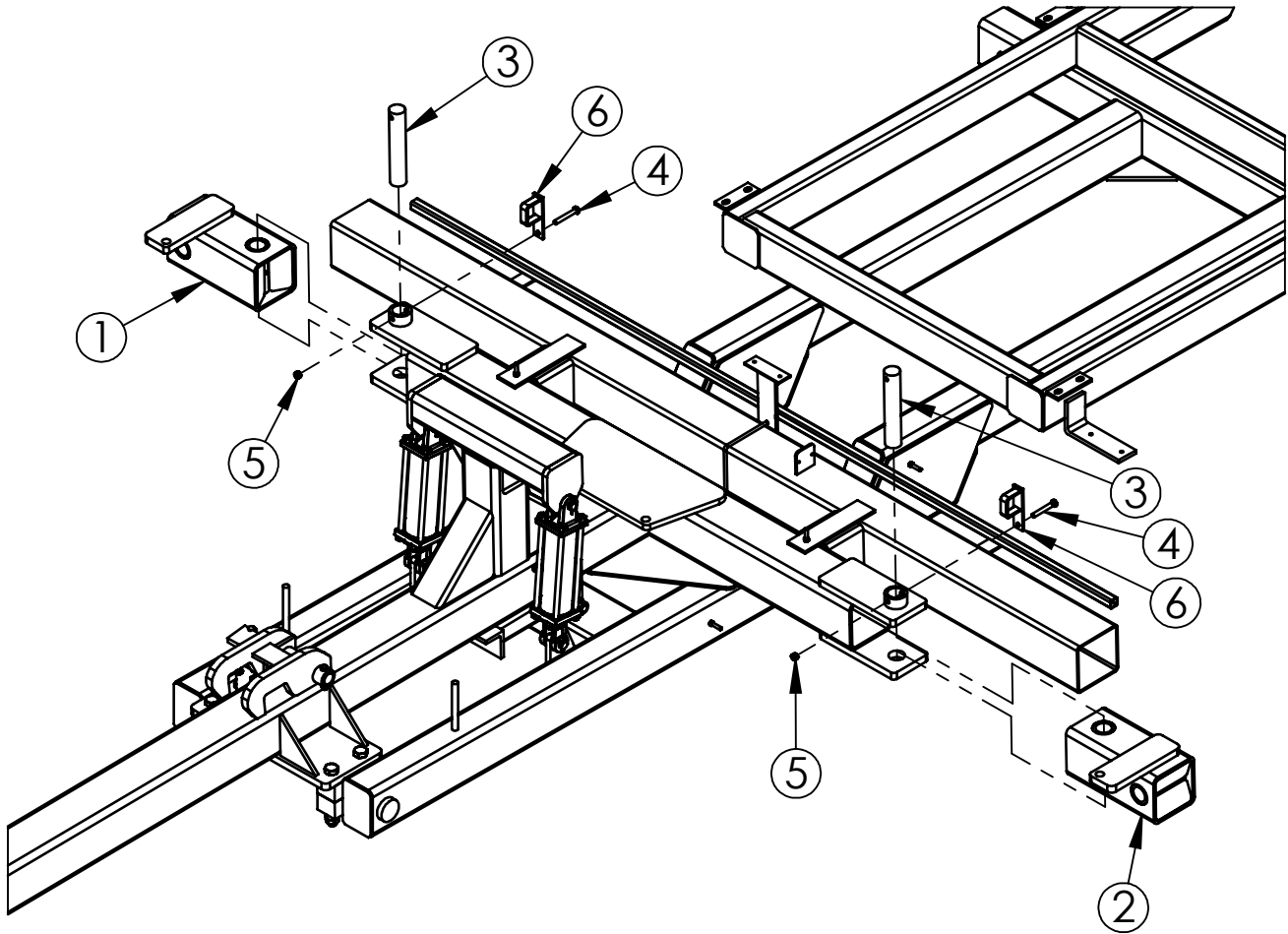
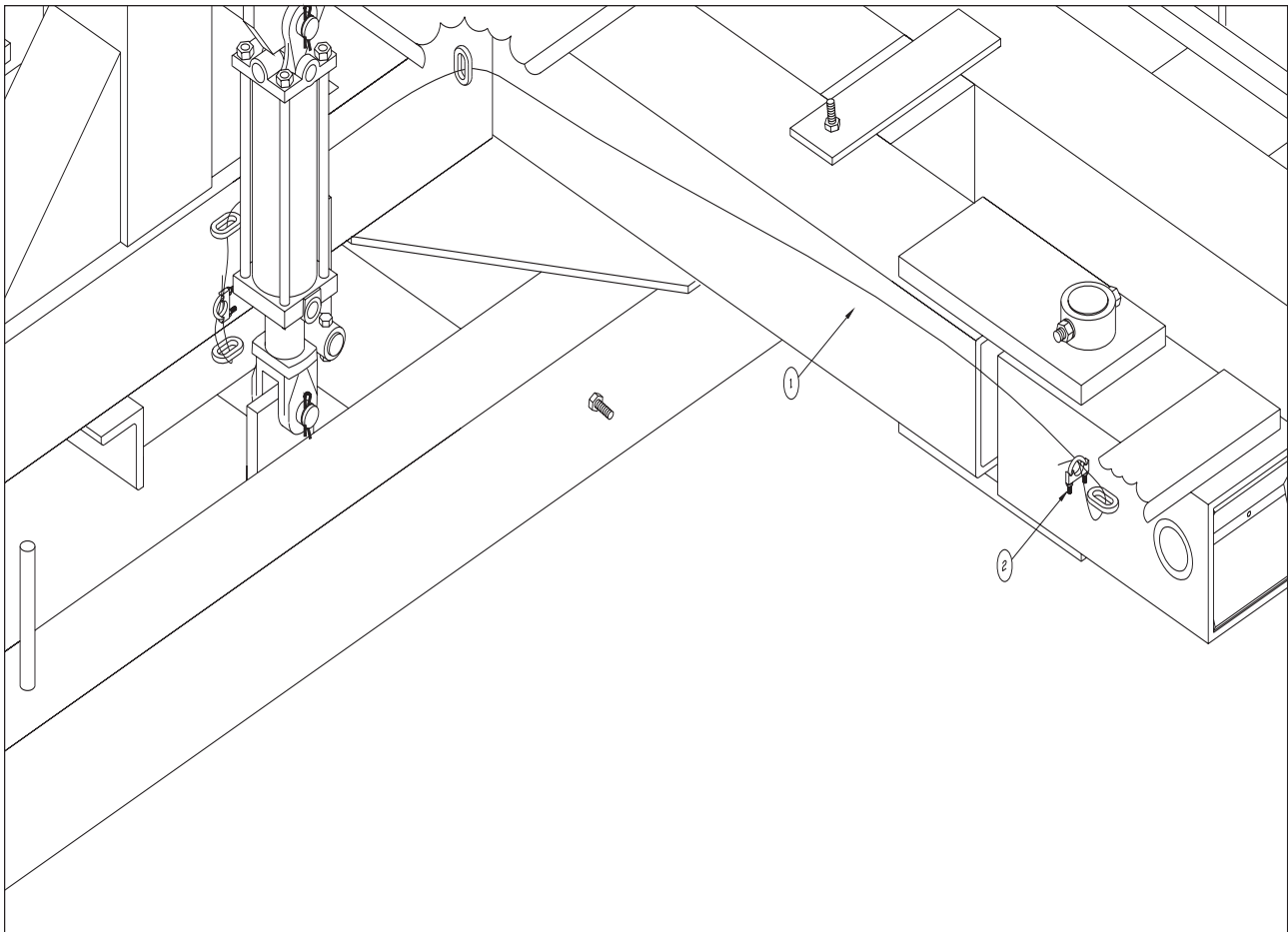


Fig.	Part no.	Qty	Description
1	76801181	1	Wdmt, Inner Wing Hinge-RH
2	76801182	1	Wdmt, Inner Wing Hinge-LH
3	76602145	2	Pin, 2" x 11"
4	600356137	2	Bolt, 1/2"-13 x 3-1/2"" Gr 5
5	600366030	2	Nut, Toplock 1/2"-13
6	76801841	2	Wdmt, Hose Support

Installing Safety Lock Cable

Instructions:

- Use hardware in 760063000.
- Attach 3/16" steel cable to welded loop on transport safety weldment by making a loop and securing with cable clamp.
- Pull cable up and through loop welded on 7 x 7 frame.
- Pull cable towards rear of implement and through loop located at end of hitch tube.
- Continue to pull cable to final welded loop located on inner wing hinge weldment.
- While wings are in unfolded position (as shown), cable should be pulled snug causing transport safety weldment to contact bottom of 7 x 7 frame. Secure cable with cable clamp.



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Attaching Inner Wings

Instructions:

- Use hardware in 7600300.
- Install inner wing weldments to inner wing hinges using 2" x 12-1/2" pins and hardware.

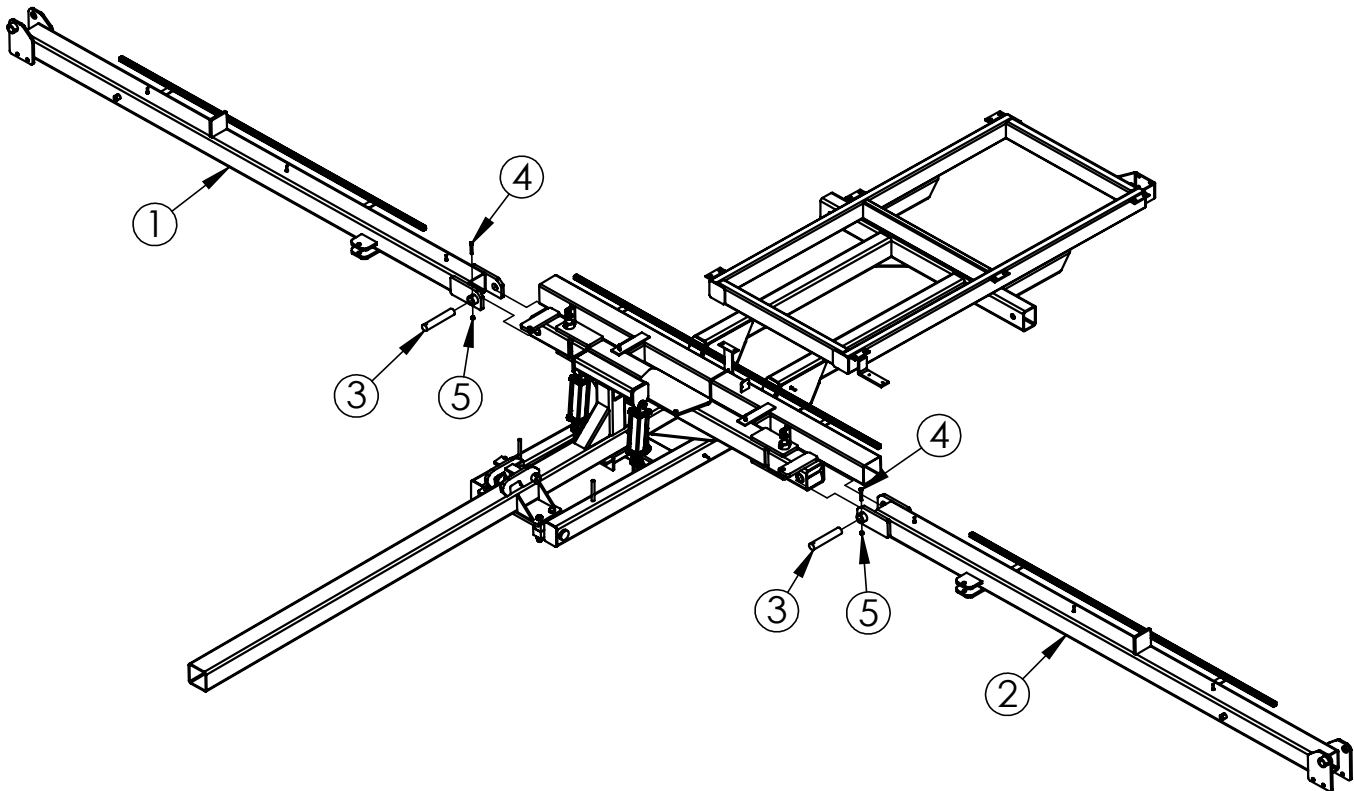


Fig.	Part no.	Qty	Description
1	76801877	1	Wdmt, Inner Wing-Right
2	76801878	1	Wdmt, Inner Wing-Left
3	766021991	2	Pin, Hinge 2" x 12-1/2"
4	600356137	2	Bolt, 1/2"-13 x 3-1/2" Gr. 5
5	600366030	2	Nut, Toplock 1/2"-13

Right Caster Wheel Assembly

Instructions:

-Use hardware from hardware bag 76102095.

-Attach caster tower weldment wheel clamp weldment to inner wing using 3/4"-10 x 3' bolts, lock washers, and nuts. Place tower/clamp at following distances from center of bar to center of tower/clamp, dependent on row spacings.

<u>Row Spacing</u>	<u>Distance from center of bar</u>
20", 22", 27.5"	220"
28"	224"
30"	210"
36"	216"
40"	200"

-Install parallel arms, caster tower wheel assembly, and wheel. Install wheel with positive offset. (deeper side of rim towards hub)

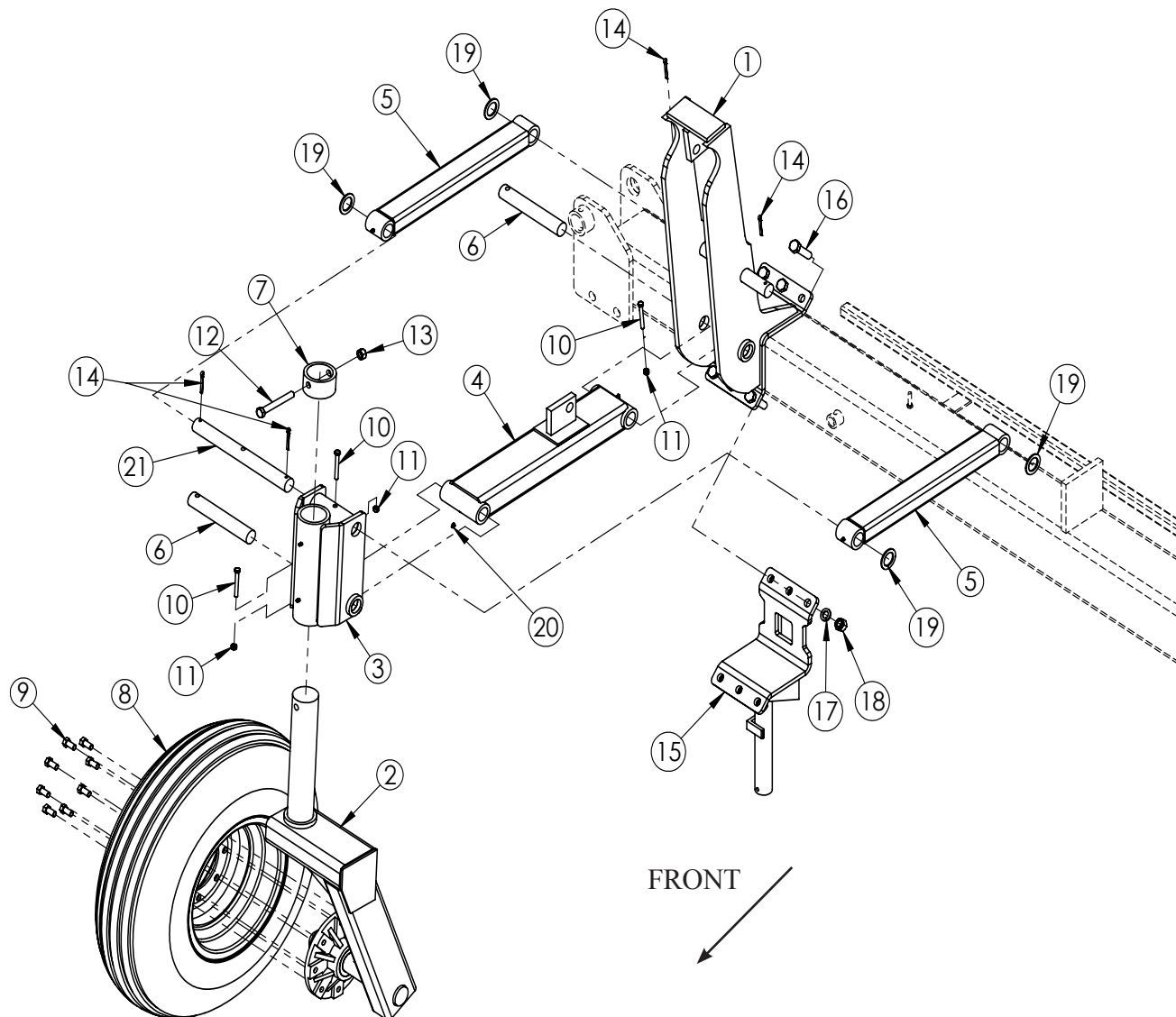
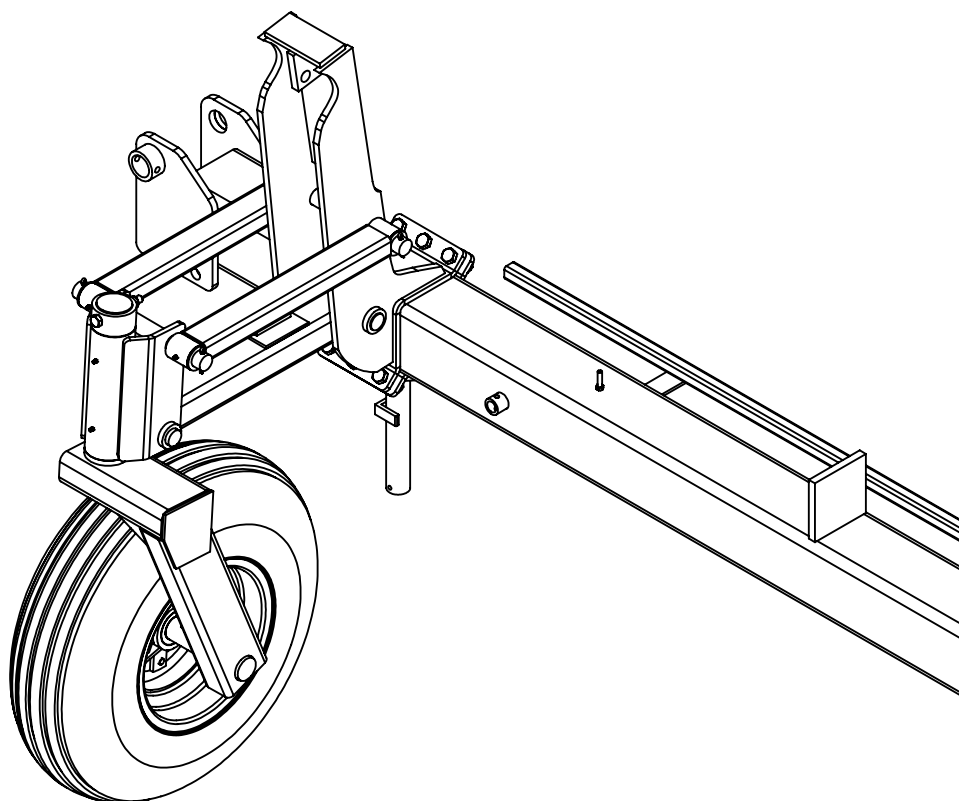


Fig.	Part no.	Qty	Description
1	76801879	1	Tower, Right Caster
2	762500301	1	Assy, Right Caster Tower Wheel
3	760062011	1	Bushing, Right Caster Tower
4	76801388	1	Arm, Lower Parallel
5	76801389	2	Arm, Upper Parallel
6	766022553	2	Pin, Hinge
7	76602187	1	Collar, 3-3/4" O.D. x 3" I.D. x 2"
8	76301233	1	Assy, 12.5L x 15 8-Bolt 12 Ply Tire/Wheel Assy.
9	76301153	8	Bolt, Lug 9/16"-18 x 1-1/8"
10	600356132	3	Bolt, 7/16"-14 x 3" Gr. 5
11	600366100	3	Nut, Toplock 7/16"-14
12	600356113	1	Bolt, 5/8"-11 x 5" Gr. 5
13	600366031	1	Nut, Toplock 5/8"-11
14	76101265	4	Pin, Cotter 1/4" x 2"
15	76801884	1	Wdmt, Wheel Clamp
16	600356000	6	Bolt, 3/4"-10 x 3" Gr. 5
17	600382055	6	Washer, Lock 3/4"
18	600365019	6	Nut, Hex 3/4"-10
19	76101462	4	Washer, Machine 10 Ga. x 1-1/2"
20	600471000	8	Zerk, Grease - 1/4"-28
21	760061018	1	Pin, 1.5" x 15"



Left Caster Wheel Assembly

Instructions:

-Use hardware from hardware bag 76102095.

-Attach caster tower weldment wheel clamp weldment to inner wing using 3/4"-10 x 3' bolts, lock washers, and nuts. Place tower/clamp at following distances from center of bar to center of tower/clamp, dependent on row spacings.

<u>Row Spacing</u>	<u>Distance from center of bar</u>
20", 22", 27.5"	220"
28"	224"
30"	210"
36"	216"
40"	200"

-Install parallel arms, caster tower wheel assembly, and wheel. Install wheel with positive offset. (deeper side of rim towards hub)

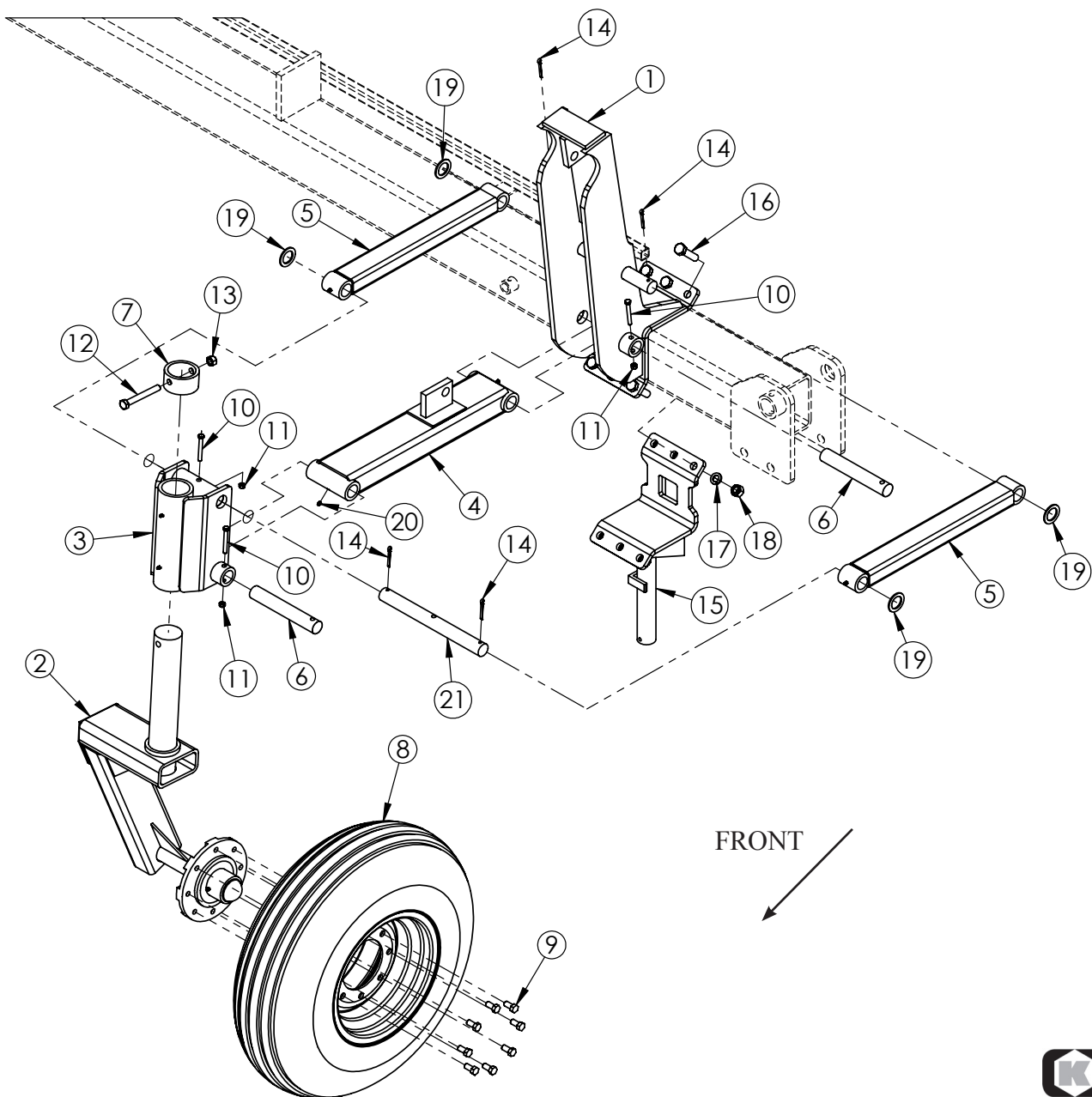
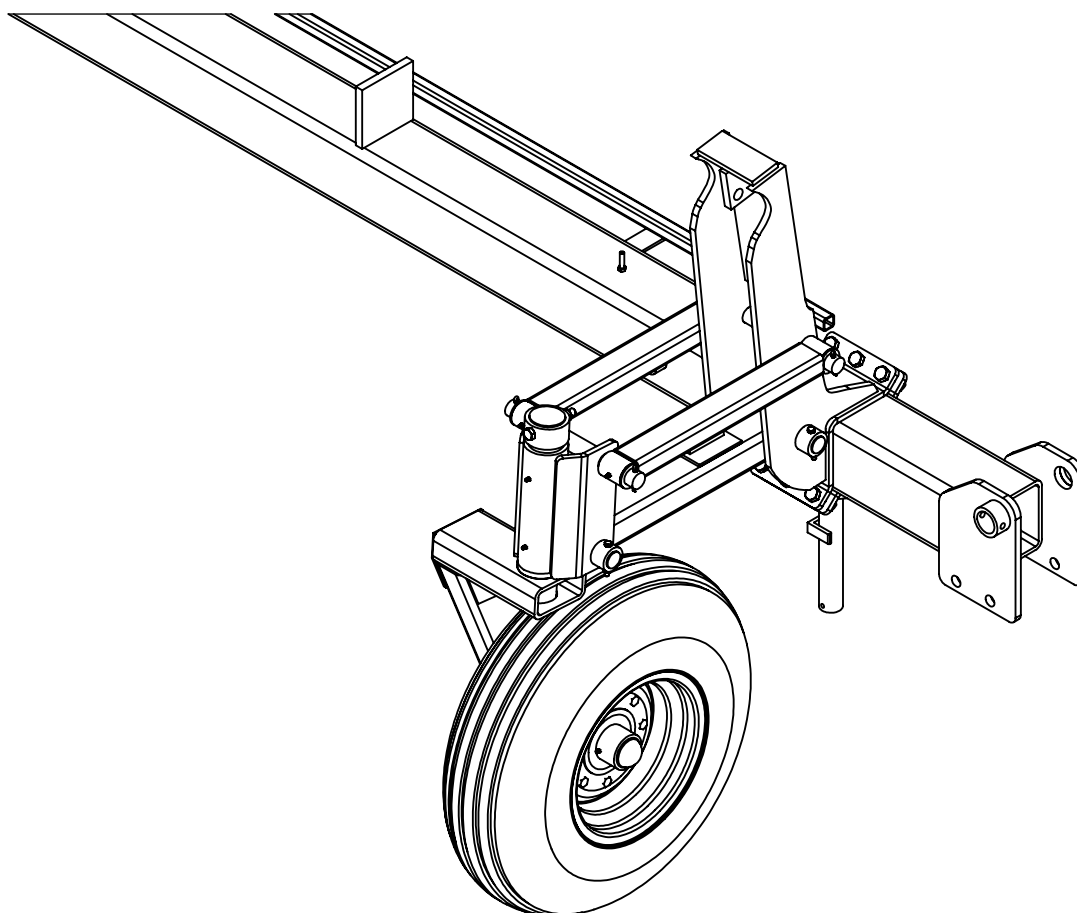


Fig.	Part no.	Qty	Description
1	76801880	1	Tower, Left Caster
2	762500300	1	Assy, Left Caster Tower Wheel
3	760062010	1	Bushing, Left Caster Tower
4	76801388	1	Arm, Lower Parallel
5	76801389	2	Arm, Upper Parallel
6	766022553	2	Pin, Hinge
7	76602187	1	Collar, 3-3/4" O.D. x 3" I.D. x 2"
8	76301233	1	Assy, 12.5L x 15 8-Bolt 12 Ply Tire/Wheel Assy.
9	76301153	8	Bolt, Lug 9/16"-18 x 1-1/8"
10	600356132	3	Bolt, 7/16"-14 x 3" Gr. 5
11	600366100	3	Nut, Toplock 7/16"-14
12	600356113	1	Bolt, 5/8"-11 x 5" Gr. 5
13	600366031	1	Nut, Toplock 5/8"-11
14	76101265	4	Pin, Cotter 1/4" x 2"
15	76801884	1	Wdmt, Wheel Clamp
16	600356000	6	Bolt, 3/4"-10 x 3" Gr. 5
17	600382055	6	Washer, Lock 3/4"
18	600365019	6	Nut, Hex 3/4"-10
19	76101462	4	Washer, Machine 10 Ga. x 1-1/2"
20	600471000	8	Zerk, Grease - 1/4"-28
21	760061018	1	Pin, 1.5" x 15"



Installing Caster Wheel Cylinders

Instructions:

- Install caster wheel cylinder with cylinder pins and cotter pins.
- Note: Right side shown. Repeat for left side.

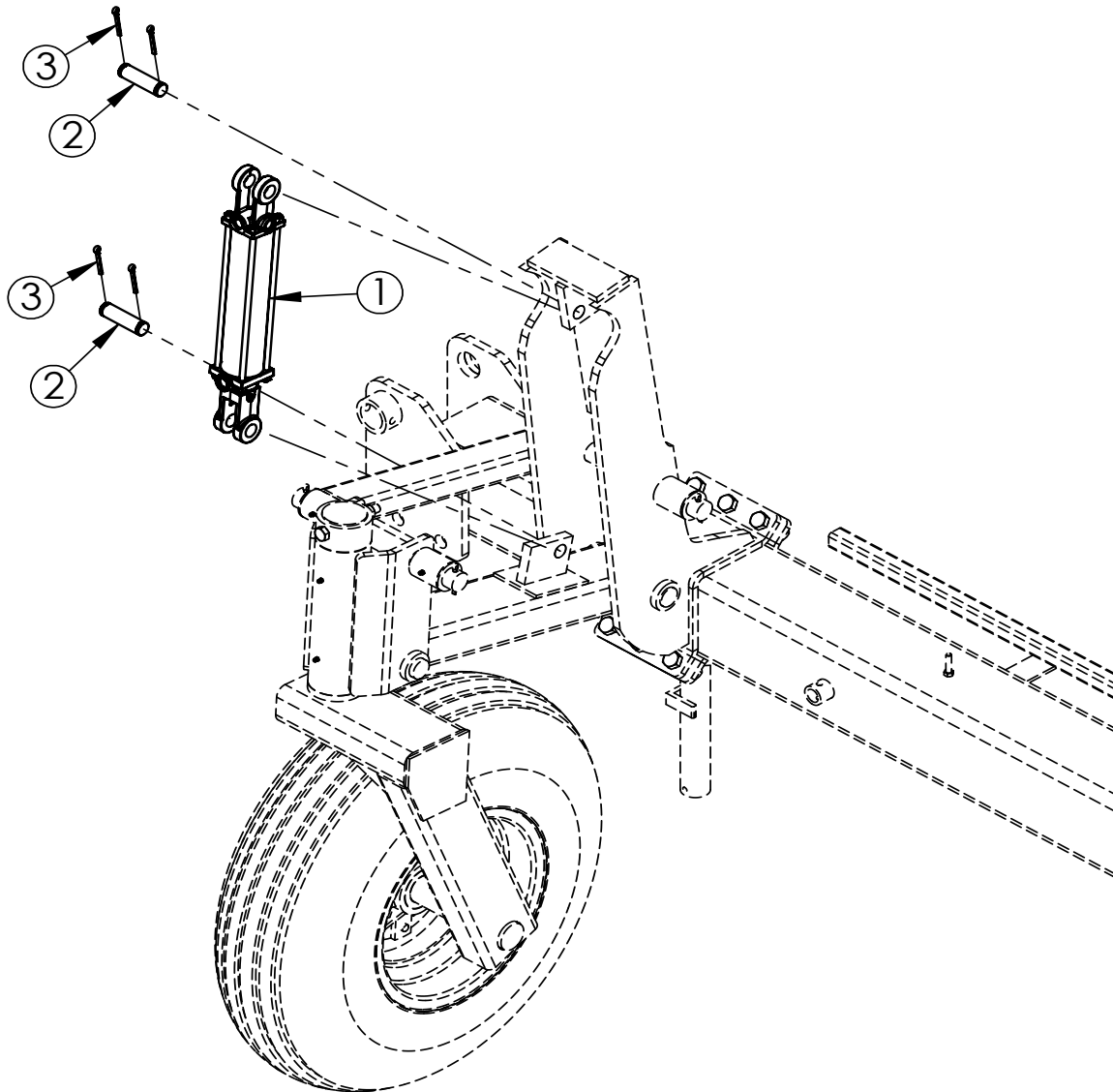


Fig.	Part no.	Qty	Description
1	76204015	2	Cylinder, Rephase 3-1/4" x 10"
2	76602112	4	Pin, Cylinder 1" x 3-3/8"
3	600383058	8	Pin, Cotter 5/32" x 2"
			Note: Quanties shown for both Right and Left sides.

Pullarm Assemblies

Instructions:

- Use hardware from hardware bag 76102071.
- Install eyebolts and jam nuts into pull arms.
- Install pull arms with slot in tube facing up.
- Place bushing into eyebolts and install pullarms with 1" bolts, lock washers, and nuts.
- Adjust eyebolts until wings are parallel to mainframe cross tube.

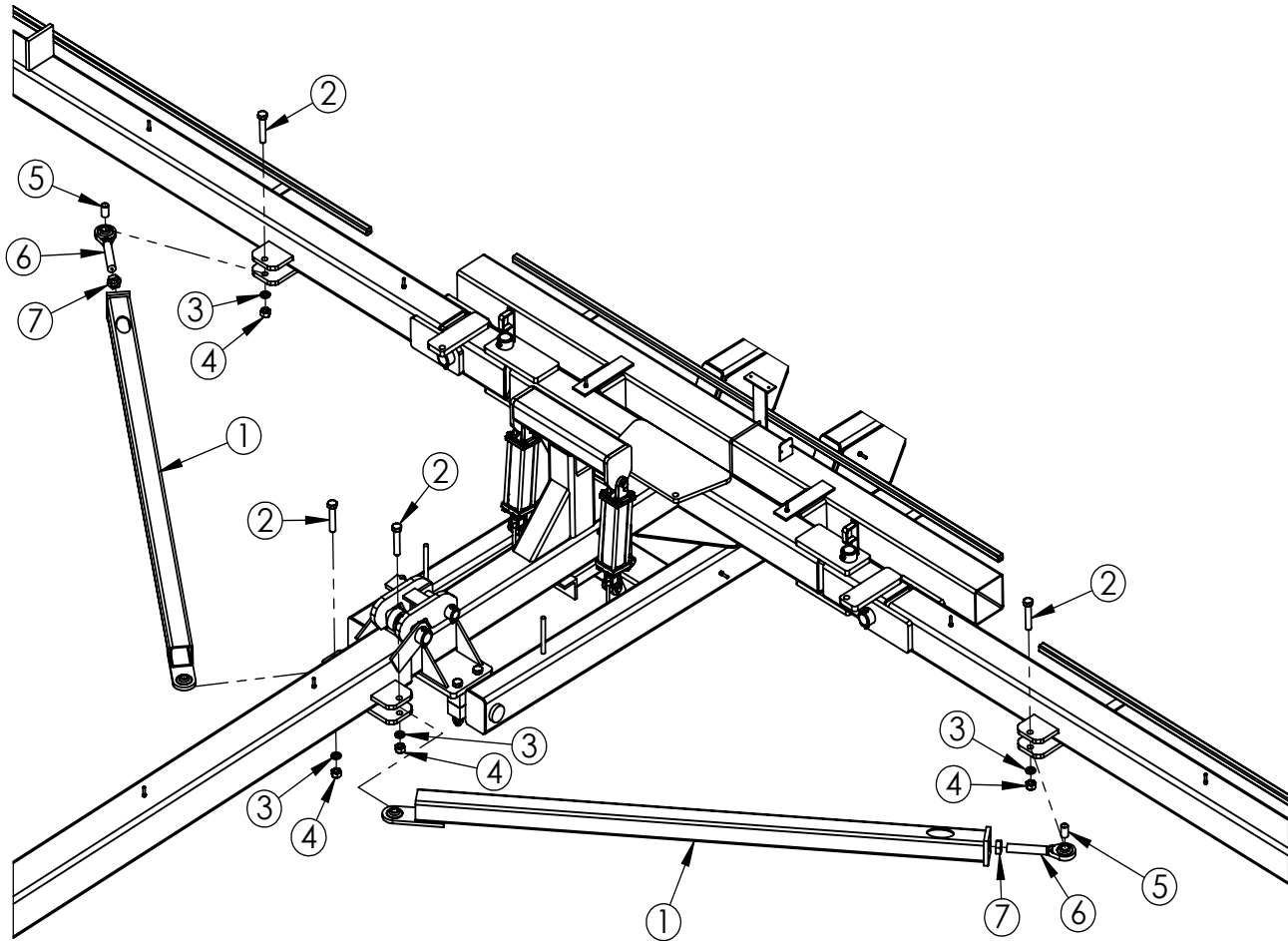


Fig.	Part no.	Qty	Description
1	76801890	2	Pullarm, F3500
2	600356101	4	Bolt, 1"-8 x 5" Gr. 5
3	600382056	4	Washer, Lock 1"
4	600365020	4	Nut, Hex 1"-8
5	76602115	2	Bushing, 1.25" O.D. x 1.024" I.D. x 2"
6	76101379	2	Eyebolt, 1-3/8"-6 x 12" w/ 1" Bore
7	76101380	2	Nut, Jam 1-3/8"-6

Attaching Wing Fold Cylinders

Instructions:

-Install wing fold cylinders with cylinder pins and cotter pins with ports facing up.

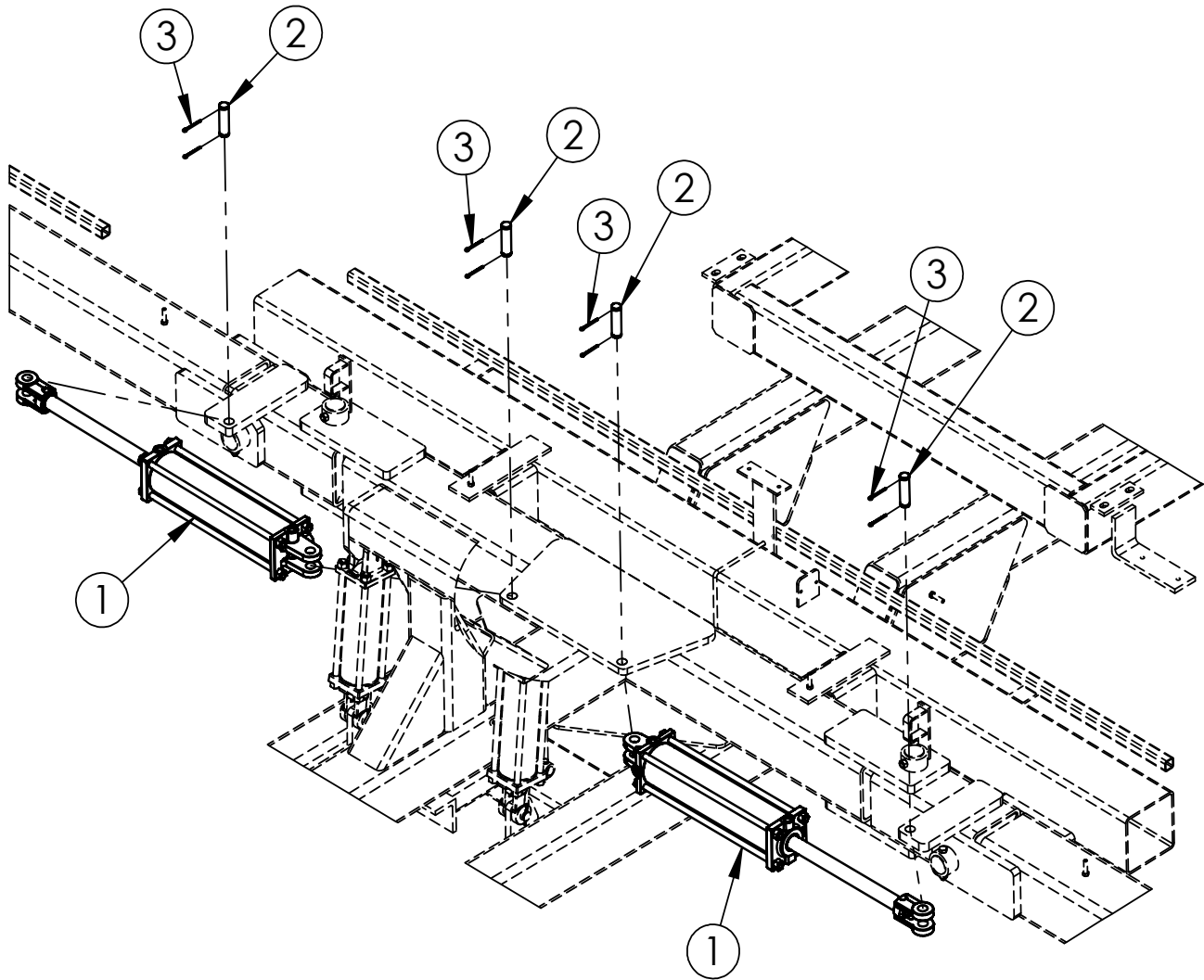


Fig.	Part no.	Qty	Description
1	76204007	2	Cylinder, 4" x 16"
2	76602112	4	Pin, Cylinder 1" x 3-3/8"
3	600383058	8	Pin, Cotter 5/32" x 2"

Outer Wing Fold Cylinder Assembly

Instructions:

- Use hardware from hardware bag 76213020.
- Install drag link before inserting cylinder with welded cylinder pin, rollers, washer, and cotter pin.
- Install cylinder with 1" x 10" pin and 3/8" x 2" bolt and toplock nut.

Note: Right outer wing fold cylinder assembly shown. Repeat for left wing.

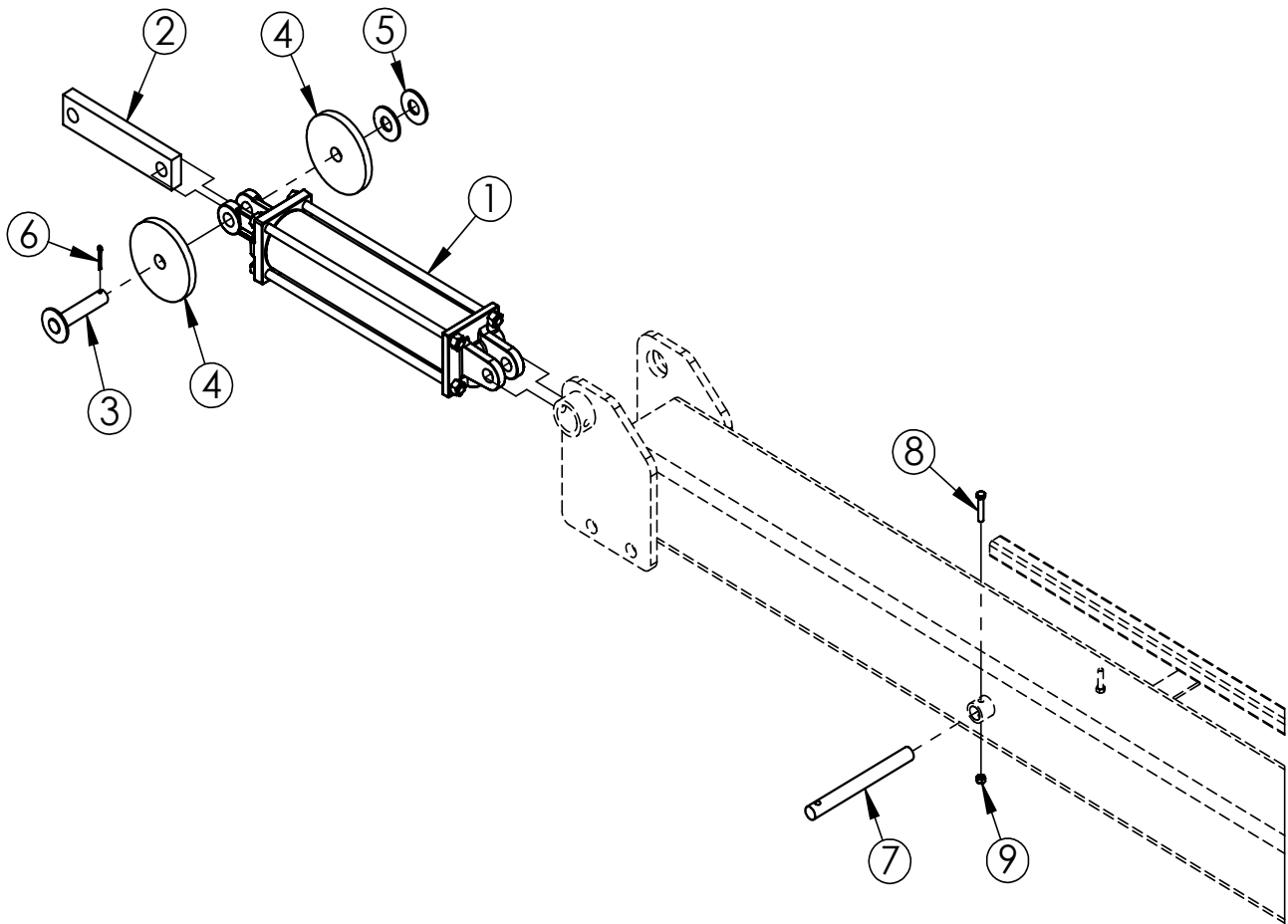


Fig.	Part no.	Qty	Description
1	76204007	2	Cylinder, 4" x 16"
2	76400050	2	Link, Drag 1" x 2-1/2" x 11"
3	76602193	2	Pin, Welded Cylinder 1" x 5.00"
4	76400204	4	Roller, 5/8" x 6"
5	76101235	4	Washer, Flat 1"
6	600383003	2	Pin, Cotter 3/16" x 1-3/4"
7	76602166	2	Pin, 1" x 10" Stressproof
8	600356111	2	Bolt, Hex 3/8"-16 x 2"
9	600366028	2	Nut, Toplock 3/8"-16
Note: Quanties shown are for both left and right assemblies.			

Attaching Outer Wing Weldment

Instructions:

- Use hardware from hardware bag 76213020.
- Install outer wing weldment to inner wing.
- Attach drag link to outer wing.
- Note: Right wing shown. Repeat for left wing.
- Note: Use outer wing locking pins in outer hinge plate holes while outer wings are unfolded. Store pins in inner holes while outer wings are folded.

-CAUTION: DO NOT ATTEMPT TO FOLD WINGS WITHOUT REMOVING LOCK DOWN PINS FIRST.

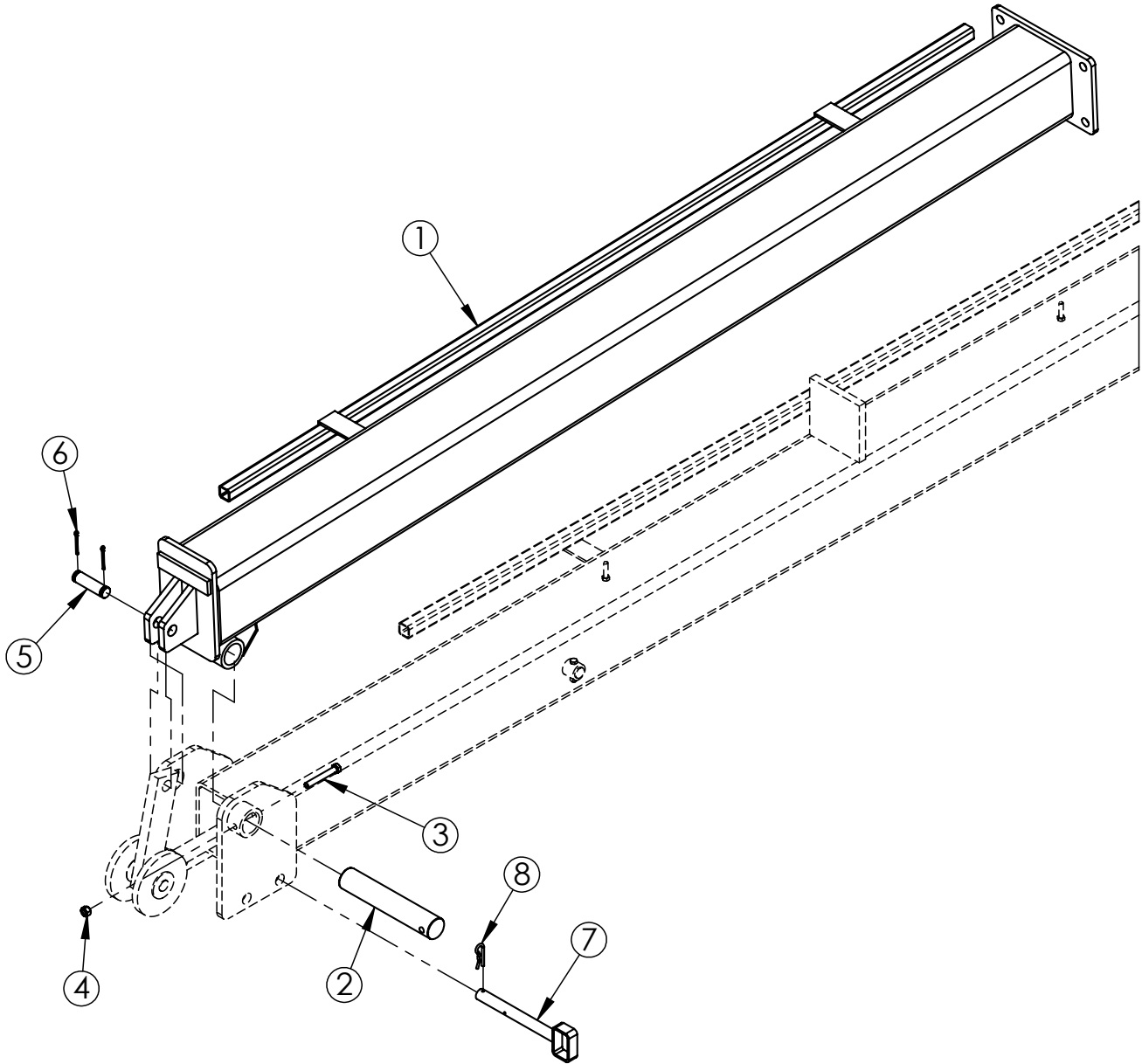


Fig.	Part no.	Qty	Description
1	76801891	1	Wing, Right Outer
-	76801892	1	Wing, Left Outer (Not Pictured)
2	766022551	2	Pin, Hinge 2" x 10-3/4"
3	600356137	2	Bolt, 1/2"-13 x 3-1/2" Gr. 5
4	600366030	2	Nut, Toplock 1/2"-13
5	76602112	2	Pin, Cylinder 1" x 3-3/8"
6	600383058	4	Pin, Cotter 5/32" x 2"
7	76602219	2	Pin, Welded 1" x 9-1/4"
8	76101426	2	Pin, Hair 3/16" x 2"
Note: Quanties shown are for both left and right assemblies.			

Outer Stub Wing Attachment (Optional)

Instructions:

- Attach outer stub wing to outer wing with 3/4"-10 x 2-1/2" bolts, 3/4" lock washers, and 3/4"-10 hex nuts.
- Note: Right outer stub wing shown. Repeat for left outer stub wing.

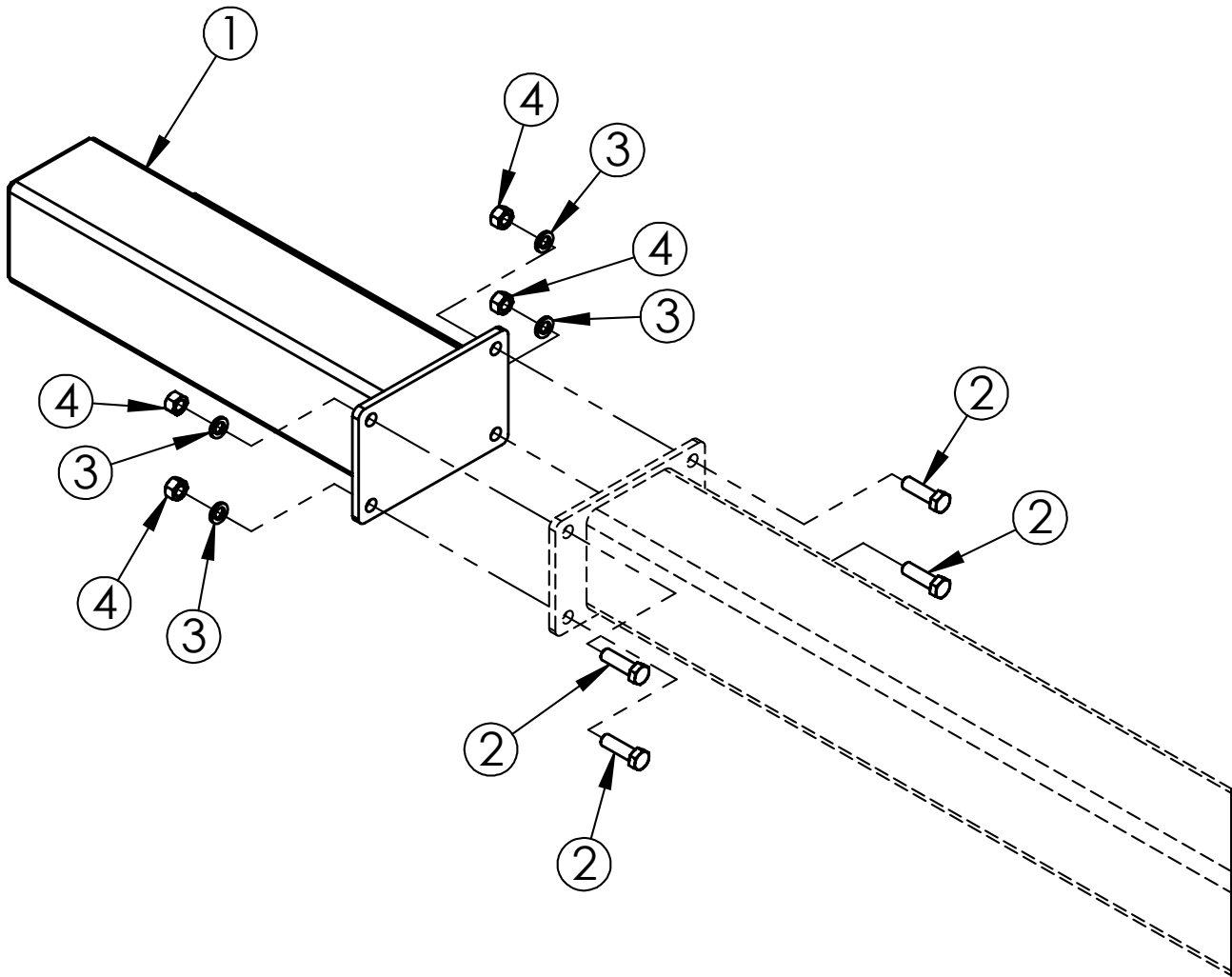


Fig.	Part no.	Qty	Description
1	76801724	1	Wing, Right Outer Stub
-	76801725	1	Wing, Left Outer Stub (Not Pictured)
2	600356011	8	Bolt, 3/4"-10 x 2-1/2" Gr. 5
3	600382055	8	Washer, Lock 3/4"
4	600365019	8	Nut, Hex 3/4"-10
Note: Quantities shown are for both left and right assemblies.			

Tank Saddle, Lightbar Mounts, and Optional 2" Quick Fill Mount

Instructions:

- Use hardware from hardware bag 76102257.
- If using 2" quick fill option, use hardware from hardware bag 76102258 to install quick fill brackets.
- Install 1600 gallon tank saddle with sump cut out facing towards front of implement using hardware as shown. Install light bar mount brackets on top of mounting tabs on saddle. If using 2" quick fill option, install quick fill L-bracket under right rear saddle mount tab on frame.
- Cut 3/8" hose into two 10" and two 14" pieces. Slice lengthwise and insert onto edges of sump cut-out.

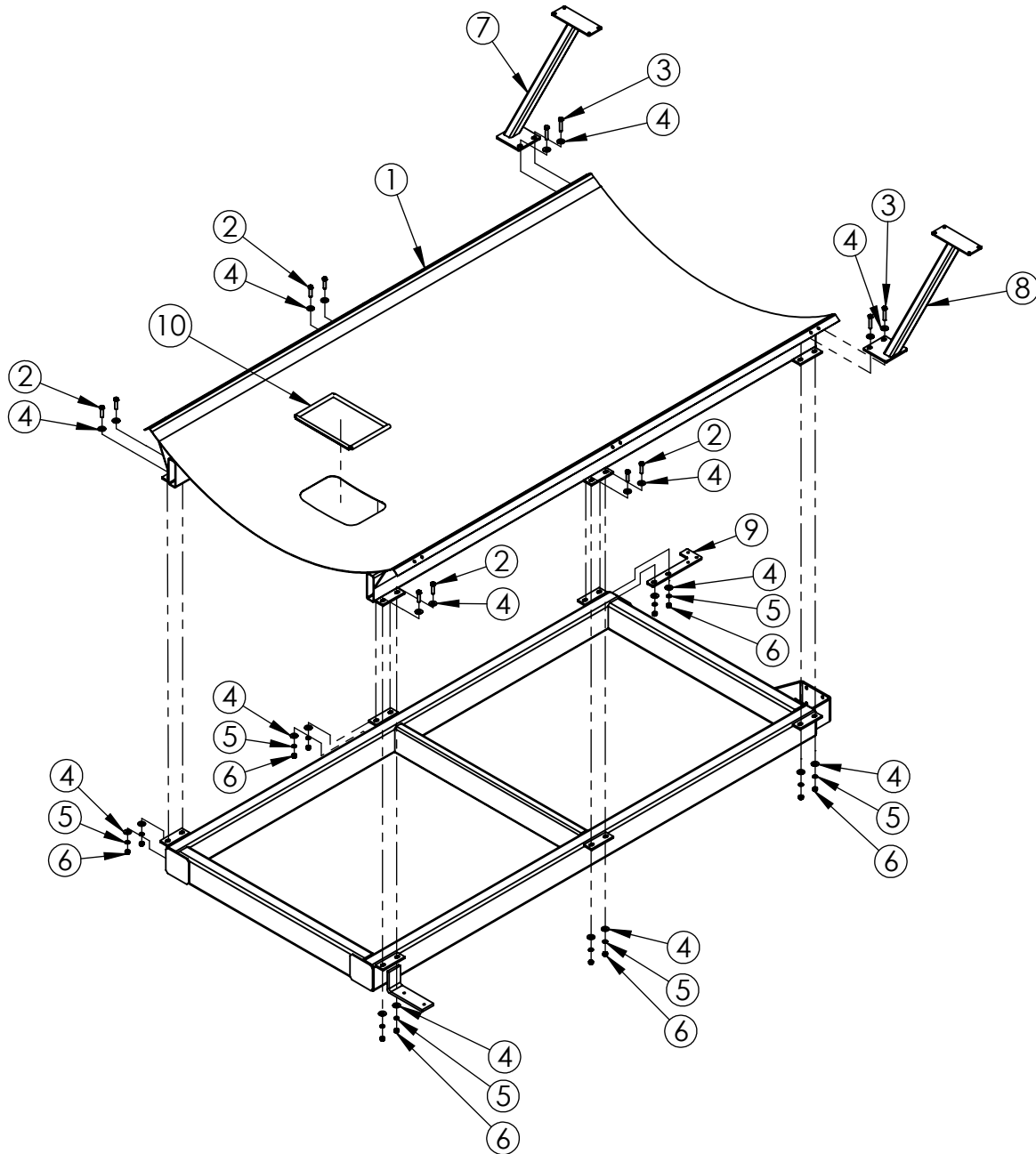


Fig.	Part no.	Qty	Description
1	76801819	1	Saddle, 1600 Gallon Tank
2	600356128	8	Bolt, 1/2"-13 x 2" Hex Gr. 5
3	600356022	4	Bolt, 1/2"-13 x 2-1/2" Gr. 5
4	600381050	24	Washer, Flat 1/2"
5	600382053	12	Washer, Lock 1/2"
6	600365009	12	Nut, Hex 1/2"-13
7	762450081	1	Bracket, Right Light Bar Mount
8	762450080	1	Bracket, Left Light Bar Mount
9	76400168	1	L-Bracket, 2" Quick Fill (2" Quick Fill Option Only)
10*	76700122	*	Hose, 3/8" EPDM
			*Item 10 is sold by the foot using part no. 76700122.

Attaching 1600 Gallon Tank

Instructions:

- Place tank in saddle ensuring sump is centered in saddle hole.
- Use tank straps and hardware as shown to secure tank to saddle. First tighten bolts down with one hex nut, then lock nut with second hex nut.

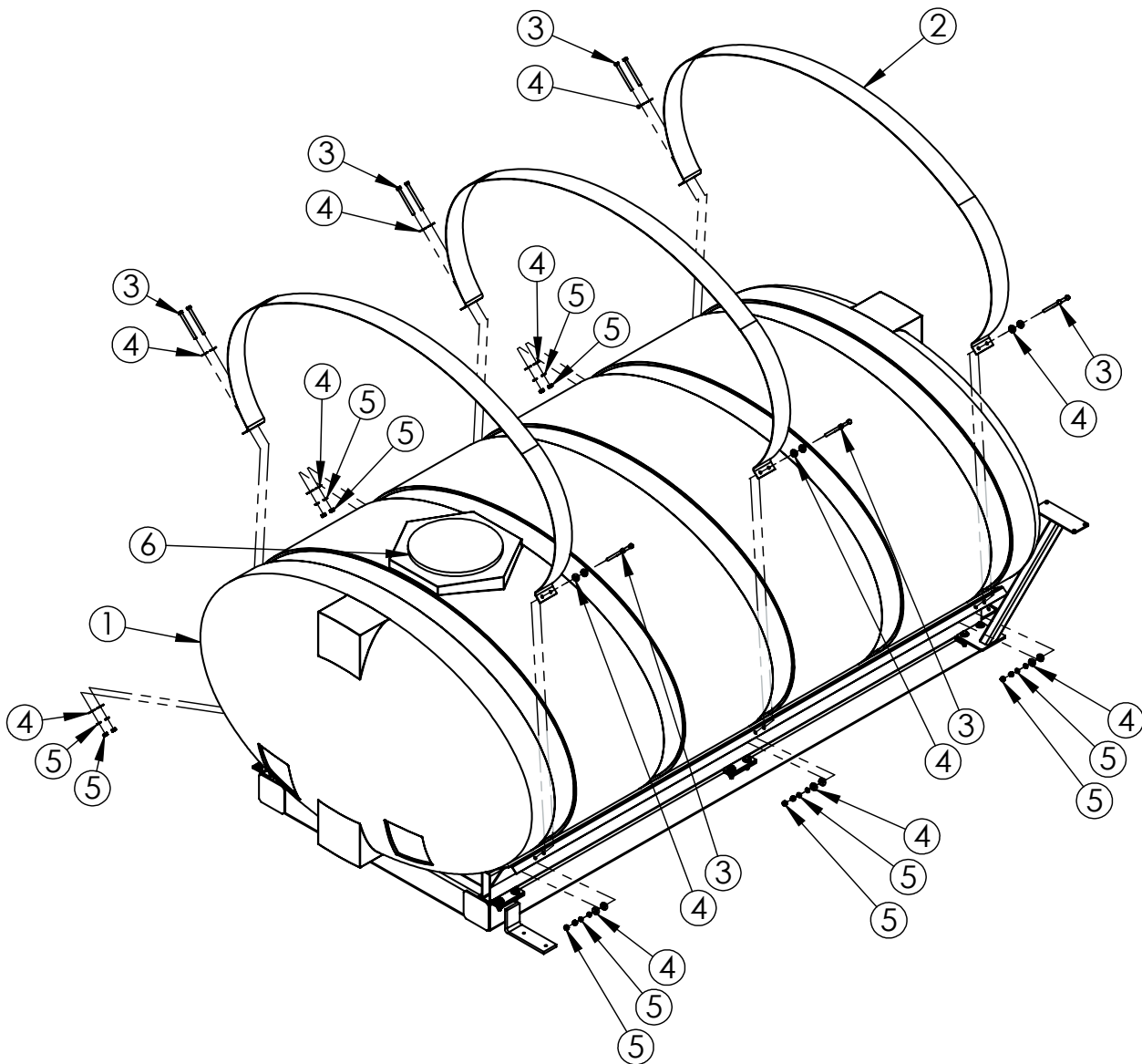


Fig.	Part no.	Qty	Description
1	76750037	1	Tank, 1600 Gallon Elliptical Poly
2	76400009	3	Strap, 1000/1600 Gallon Tank
3	76801838	12	Bolt, 7/16"-14 x 5" Gr 5 Full Thread
4	600381007	24	Washer, Flat 7/16"
5	600365050	12	Nut, Hex 7/16"-14
6	76750033	*	Lid, Tank (Included with Tank 76750037)

Hydraulic Pump Mounting Assembly

Instructions:

- Install hydraulic pump on mount bracket located at front left corner of tank frame
- Install fittings and hoses on hydraulic pump.
- Route hoses underneath toolbar, loop up to topside of toolbar and route over to right pullarm through hose loop and through right pull arm to front of implement
- Place hydraulic motor/pump color code decal on hose holder weldment directly above cut out for holding hoses. Install couplers and colored bands on hoses.

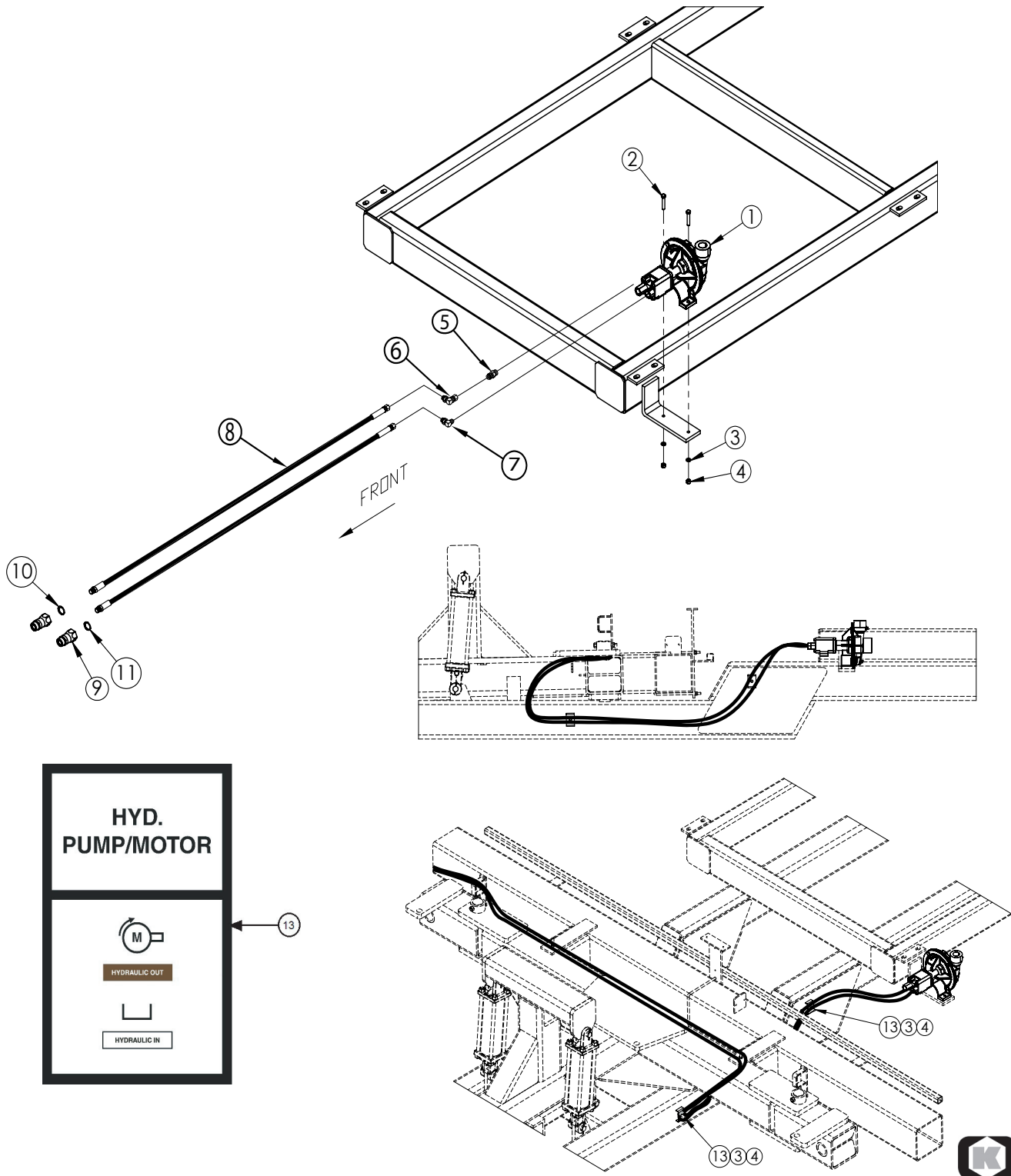


Fig.	Part no.	Qty	Description
1	76750039	1	Pump, Hydraulic
2	600356111	2	Bolt, 3/8"-16 x 2" Gr. 5
3	600382051	4	Washer, Lock 3/8"
4	600365008	4	Nut, Hex 3/8"-16
5	76201057	1	Fitting, 8MJIC x 1/2" MNPT Straight
6	76201059	1	Fitting, 8MJIC x 8FJIC Swivel 90 deg
7	76201034	1	Fitting, 8MJIC x 1/2" MNPT 90 deg
8	762022801	2	Hose, 1/2" x 528" 1/2" MNPT x #8FJIC
9	600470110	2	Coupler, 1/2" Male - 8FNPT
10	7600470543	1	Band, Plastic Spiral 3/4" Brown
11	7600470544	1	Band, Plastic Spiral 3/4" White
12	7600475284	1	Decal, Hyd. Pump/Motor Color Code
13	76400117	2	Bracket, 2 Hose Hold Down

Hydraulic Lift Schematic

Instructions:

- Install fittings onto cylinders.
- Install relief valves onto mainlift cylinders.
- Attach hoses. See Hose Routing section for hose routings.
- Install hydraulic couplers and colored bands on ends of main hoses at front of implement.

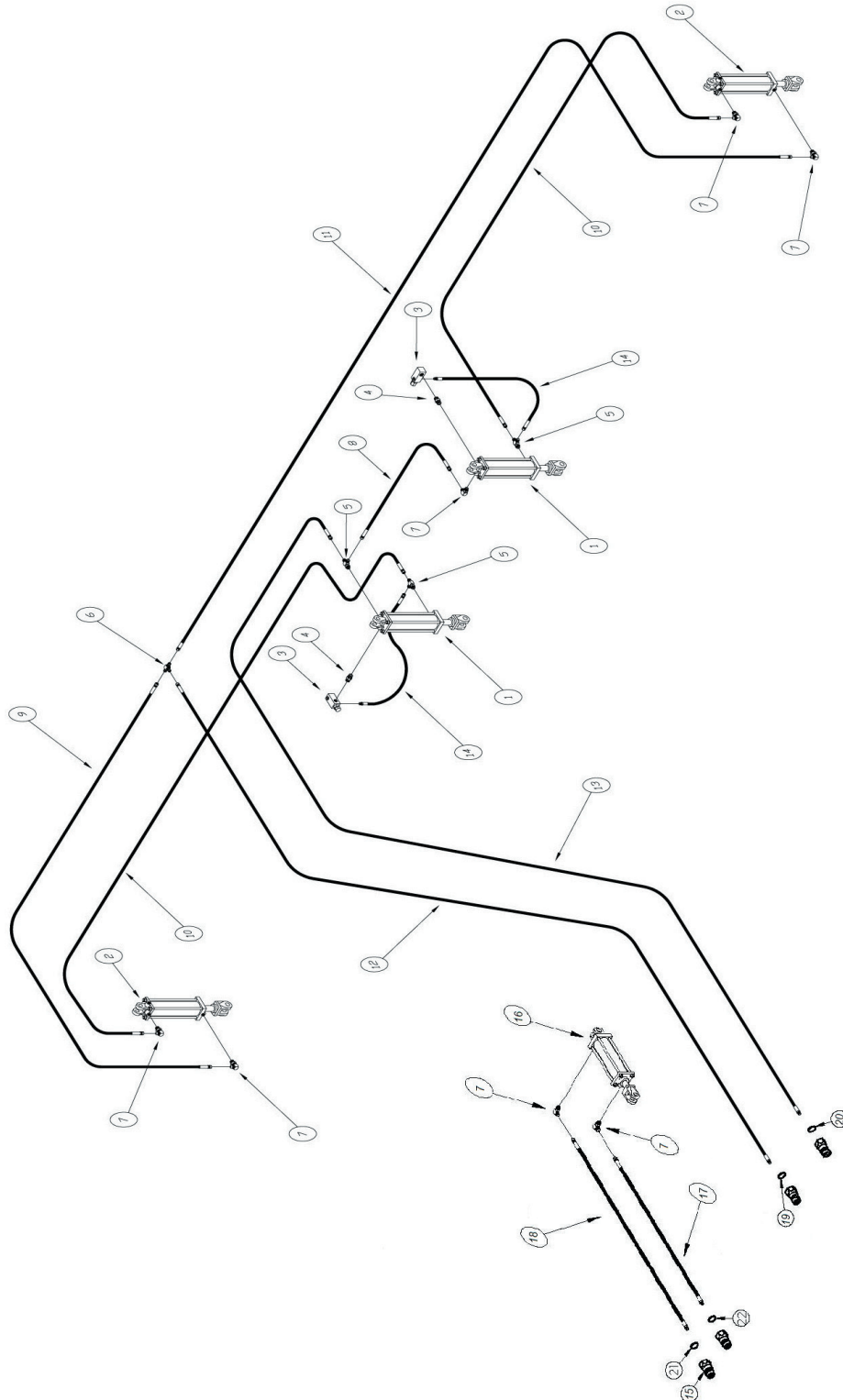


Fig.	Part no.	Qty	Description
1	76204016	2	Cylinder, 3-1/2" x 10" Rephase
2	76204015	2	Cylinder, 3-1/4" x 10" Rephase
3	76203005	2	Valve, Relief 1/2" NPT
4	76201062	2	Adapter, 1/2" NPT x #8M O-Ring
5	76201037	3	Tee, Run #8 M O-Ring x #8 MJIC
6	76201010	1	Tee, #8 MJIC
7	76201002	7	Elbow, #8 M O-ring x #8 M JIC
8	76202056	1	Hose, 3/8" x 8FJIC x 8FJIC x 28"
9	76205152	1	Hose, 3/8" x 8FJIC x 8FJIC x 144"
10	76202252	2	Hose, 3/8" x 8FJIC x 8FJIC x 270"
11	76202274	1	Hose, 3/8" x 8FJIC x 8FJIC x 330"
12	76202277	1	Hose, 3/8" x 8FJIC x 1/2" MNPT x 336"
13	76202278	1	Hose, 3/8" x 8FJIC x 8FJIC x 432"
14	76202104	2	Hose, 3/8" x 8FJIC x 1/2" MNPT x 18"
15	600470110	2	Coupler, Hyd. Quick 1/2" FNPT
16	76204002	1	Cylinder, 3" x 8"
17	76202194	1	Hose, 3/8" x 1/2" MNPT x 8FJIC x 60"
18	76202195	1	Hose, 3/8" x 1/2" MNPT x 8FJIC x 72"
19	7600470519	1	Band, Plastic Spiral 3/4" Red
20	7600470520	1	Band, Plastic Spiral 3/4" Blue
21	7600470523	1	Band, Plastic Spiral 3/4" Black
22	7600470524	1	Band, Plastic Spiral 3/4" Orange

Hydraulic Fold Schematic

Instructions:

- Install fittings onto cylinders.
- Attach valve to mounting bracket on mainframe and install fittings.
- Attach hoses. Route hoses through hose loops on wing pivot pin. See Hose Routing section for hose routings.
- Install hydraulic couplers on ends of main hoses at front of implement.

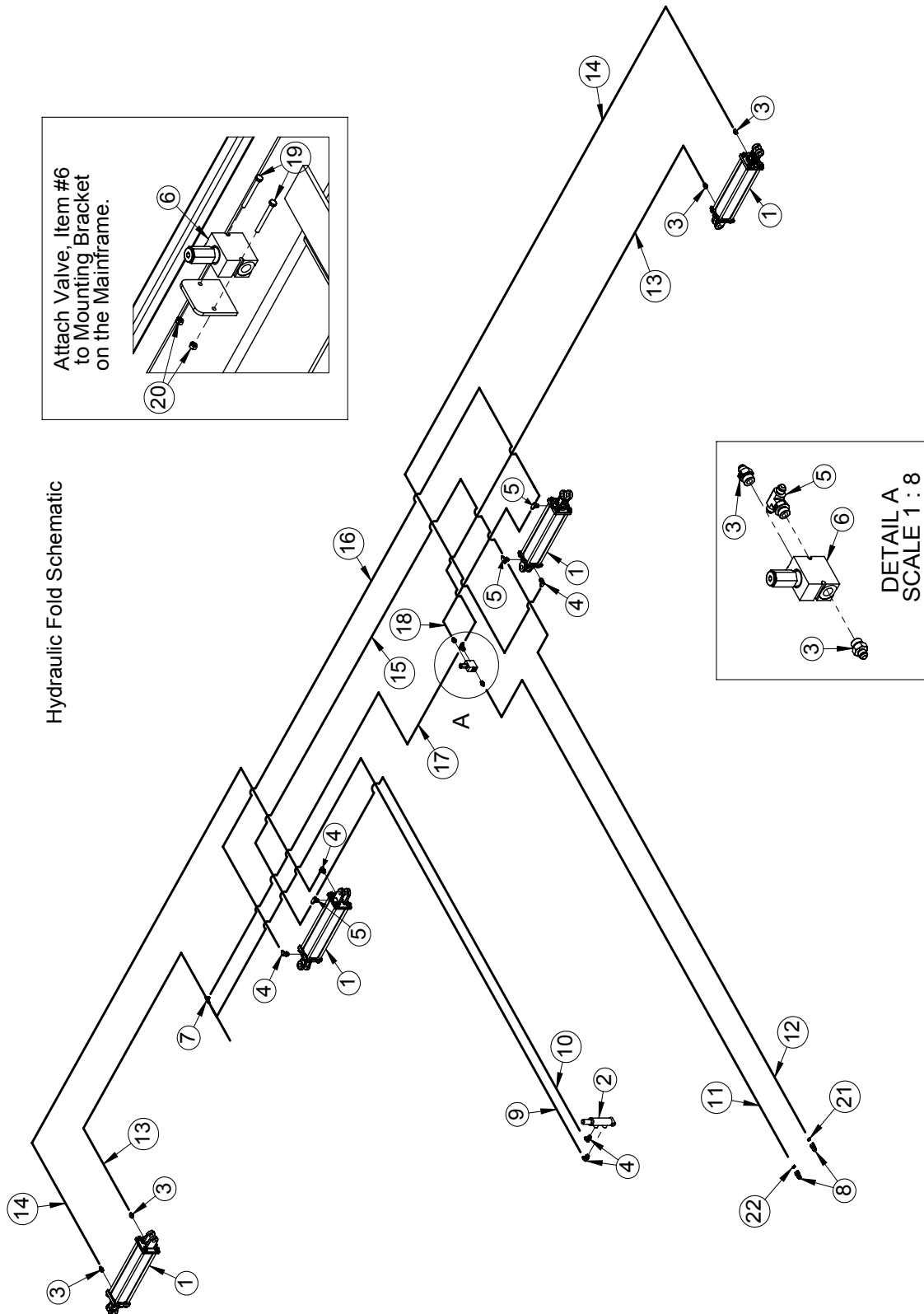


Fig.	Part no.	Qty	Description
1	76204007	4	Cylinder, 4" x 16"
2	76204020	1	Ram, Safety Latch Hydraulic
3	76201003	6	Adapter, 6MJ x 8MB
4	76201001	5	Elbow, 6MJ x 8 MB-90
5	7600470466	4	Tee, Branch 6MJ x 6MJ x 8MB
6	76203101	1	Assy, Valve
7	76201009	1	Tee, Union 6MJ
8	76201028	2	Coupler, Hyd. Quick 1/2" FNPT
9	76202258	1	Hose, 1/4" x 6FJIC x 6FJIC x 84"
10	76202257	1	Hose, 1/4" x 6FJIC x 6FJIC x 64"
11	76202275	1	Hose, 1/4" x 6FJIC x 1/2" MNPT x 402"
12	76202276	1	Hose, 1/4" x 6FJIC x 1/2" MNPT x 420"
13	76202149	6	Hose, 1/4" x 6FJIC x 6FJIC x 200"
14	76202260	2	Hose, 1/4" x 6FJIC x 6FJIC x 222"
15	76202255	1	Hose, 1/4" x 6FJIC x 6FJIC x 22"
16	76202048	1	Hose, 1/4" x 6FJIC x 6FJIC x 106"
17	76202210	1	Hose, 1/4" x 6FJIC x 6FJIC x 70"
18	76202255	1	Hose, 1/4" x 6FJIC x 6FJIC x 50"
19	76101105	2	Bolt, 1/4"-20 x 2-1/2" Gr. 5
20	600366026	2	Nut, Toplock 1/4"-20
21	7600470521	1	Band, Plastic Spiral - 3/4" Yellow
22	7600470522	1	Band, Plastic Spiral - 3/4" Green

Hose Routing

Instructions:

- Route 3/8" lift hoses along tongue, into RIGHT pullarm, and out back of pullarm through cutout.
- Route hoses to lift cylinders.
- Route 1/4" fold hoses on inside of 3/8" lift cylinder hoses along tongue, into LEFT pullarm, and out back of pullarm through cutout.
- Route wing fold hoses through hose loops at wing fold hinges.
- Install hose hold down brackets, leaving brackets loose until after purging hydraulic system.

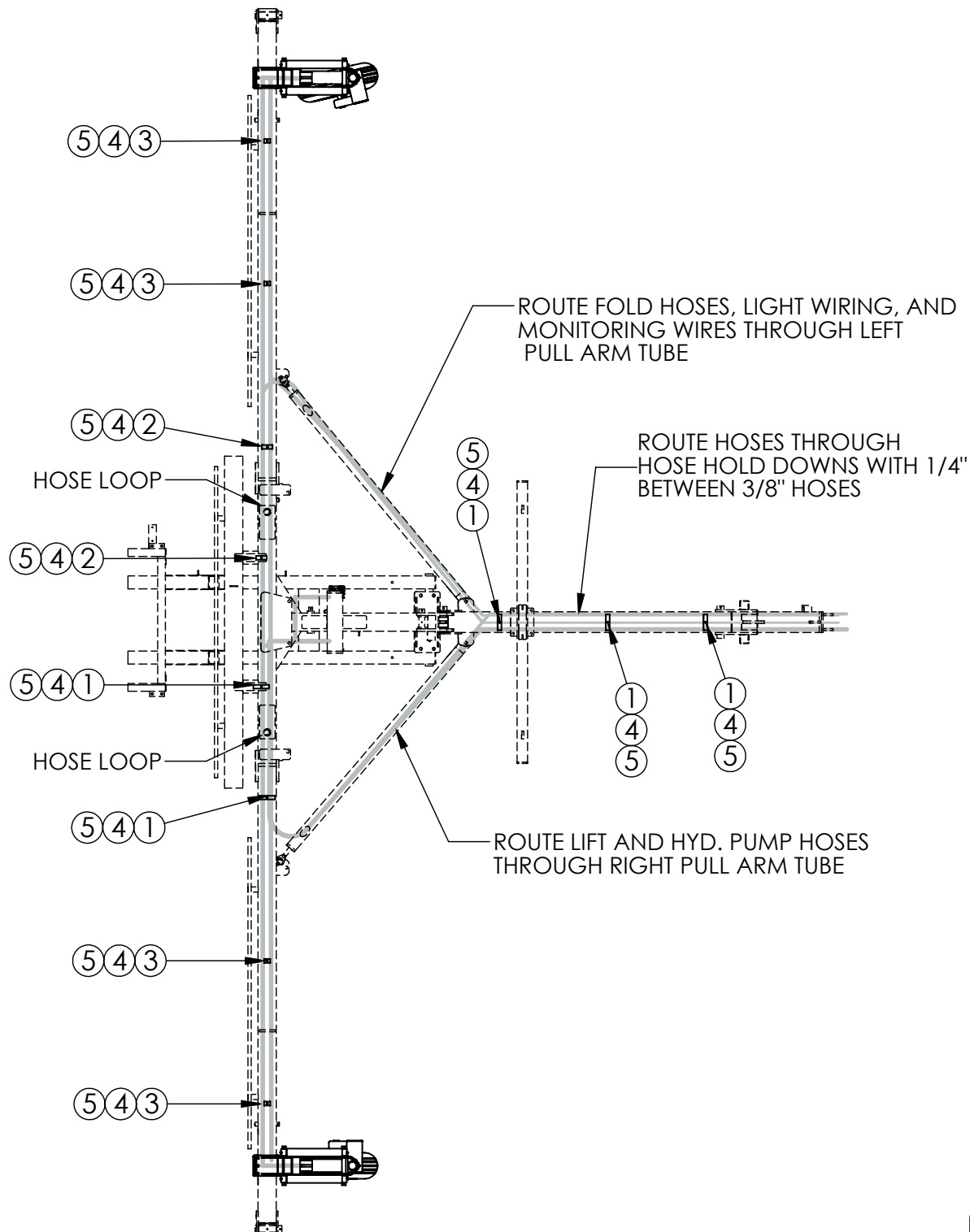


Fig.	Part no.	Qty	Description
1	764000208	5	Bracket, 6 Hose Hold Down
2	76400080	2	Bracket, 4 Hose Hold Down
3	76400117	4	Bracket, 2 Hose Hold Down
4	600382051	11	Washer, Lock 3/8"
5	600365008	11	Nut, Hex 3/8-16

Light Bar and Wiring Assembly

Instructions:

- Install light bar on light bar mounts.
- Install tail lights (red lense to rear) and amber flashing lights.
- Route main wire harness from front along tongue, into left pull arm, and out of pull arm through cut out. Route along chassis, under tank saddle and up left light bar mount.
- Connect 3 ft. "y" harness and route along light bar to left tail light and left flashing light.
- Connect 9 ft. "y" harness and route along light bar to right tail light and right flashing light.
- Secure wiring with cable ties.

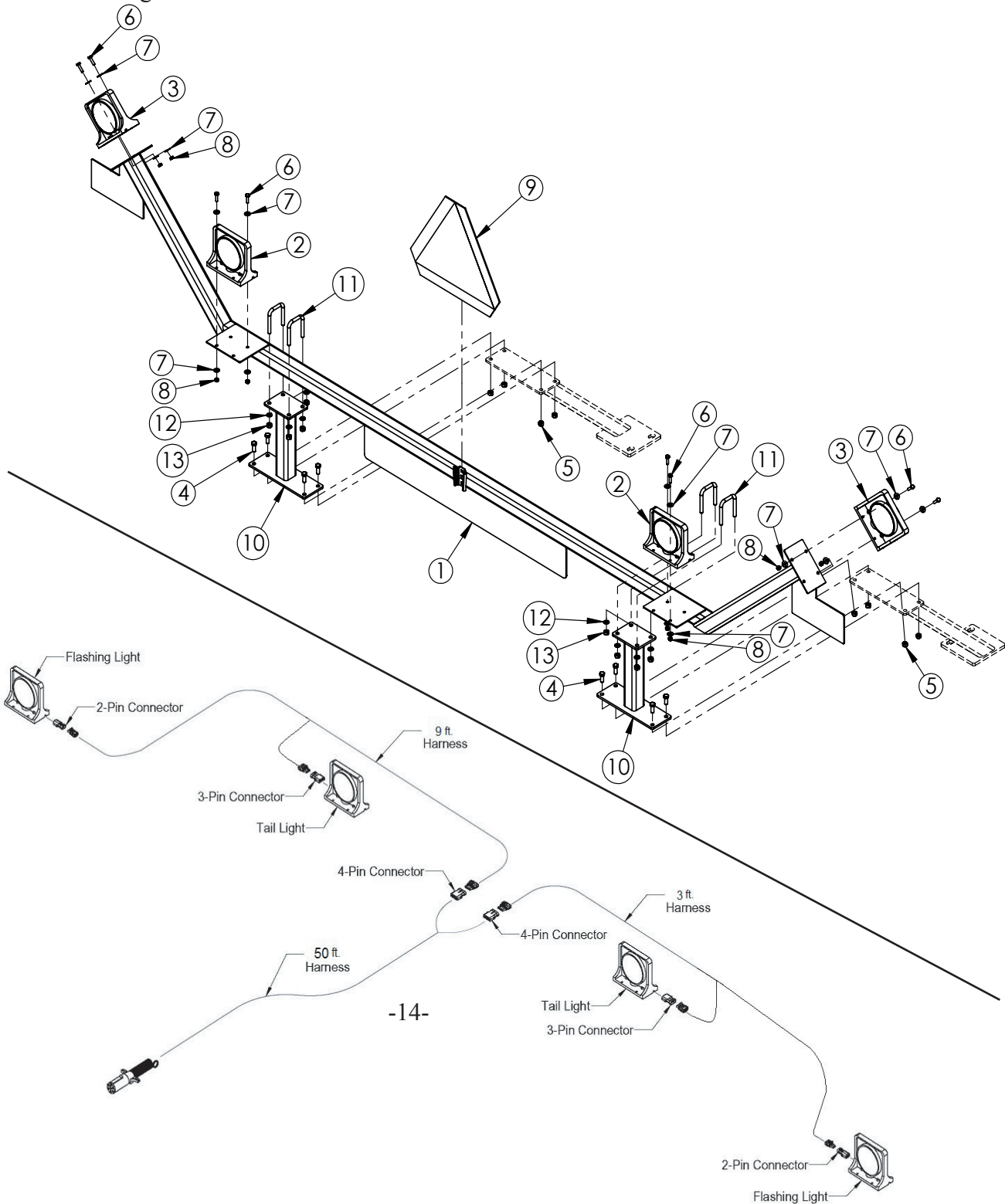


Fig.	Part no.	Qty	Description
1	760062001	1	Wdmt, Light Bar
2	*	2	Light, Tail (Included in Light Kit)
3	*	2	Light, Amber Flashing (Included in Light Kit)
4	600356020	8	Bolt, 3/8"-16 x 1.00 Gr. 5
5	600366028	8	Nut, Toplock 3/8"-16
6	600356138	8	Bolt, 1/4"-20 x 1" Gr 5
7	600381023	16	Washer, 1/4"
8	600366026	8	Nut, Toplock 1/4"-20
9	601140845	1	Assy, SMV
10	7600373128	4	U-Bolt, 3/8"-16 x 2" x 3"
11	760062007	2	Wdmt, Light Bar Mount Extension
12	600382051	8	Washer, Lock 3/8"
13	600365008	8	Nut, 3/8"-16
14	760063003	1	Kit, Light Kit (Includes Items 2 & 3 and wire harnesses)

Hydraulic Pump Plumbing

Instructions:

-If using the hydraulic pump option, plumb the pump to the tank as shown.

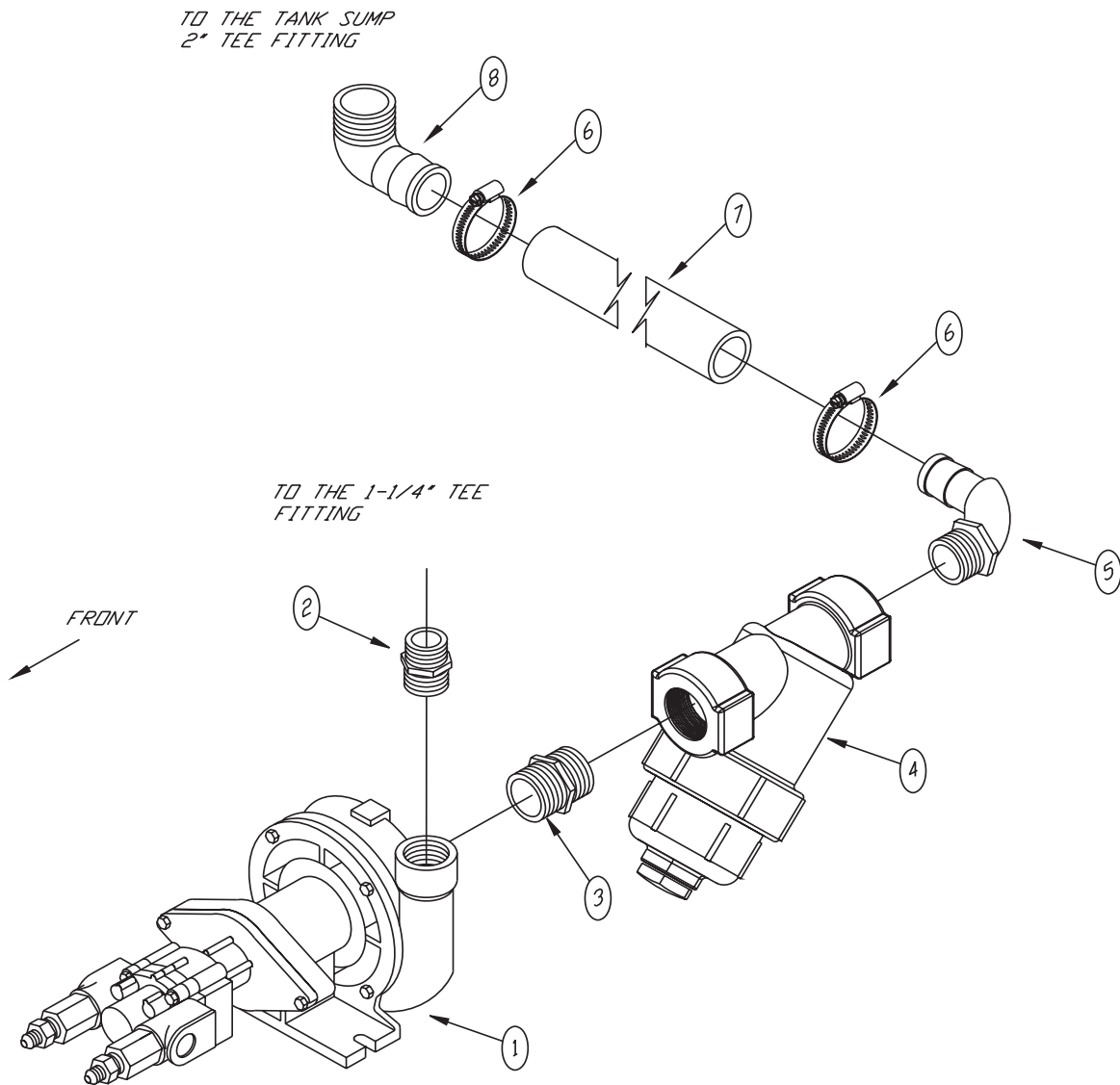


Fig.	Part no.	Qty	Description
1	76750039	1	Pump, Hydraulic
2	76700036	1	Nipple, 1-1/4" NPT Close
3	76700037	1	Nipple, 1-1/2" NPT Close
4	76700214	1	Filter, 1-1/2" NPT Banjo
5	76700026	1	Elbow, 1-1/2" NPT x 1-1/2" Barb 90 deg
6	76700130	2	Clamp, 1-1/2" Stainless Steel Hose
7*	767000121	1	Hose, 1-1/2 x 42" EPDM
8	76700186	1	Elbow, 2" MNPT x 1/2" Barb 90 deg
			*Item 7 is sold by the foot using part no. 767000121

Two Ball Valve Assembly

Instructions:

-Install two ball valves on valve mount plate attached to mainframe as shown.

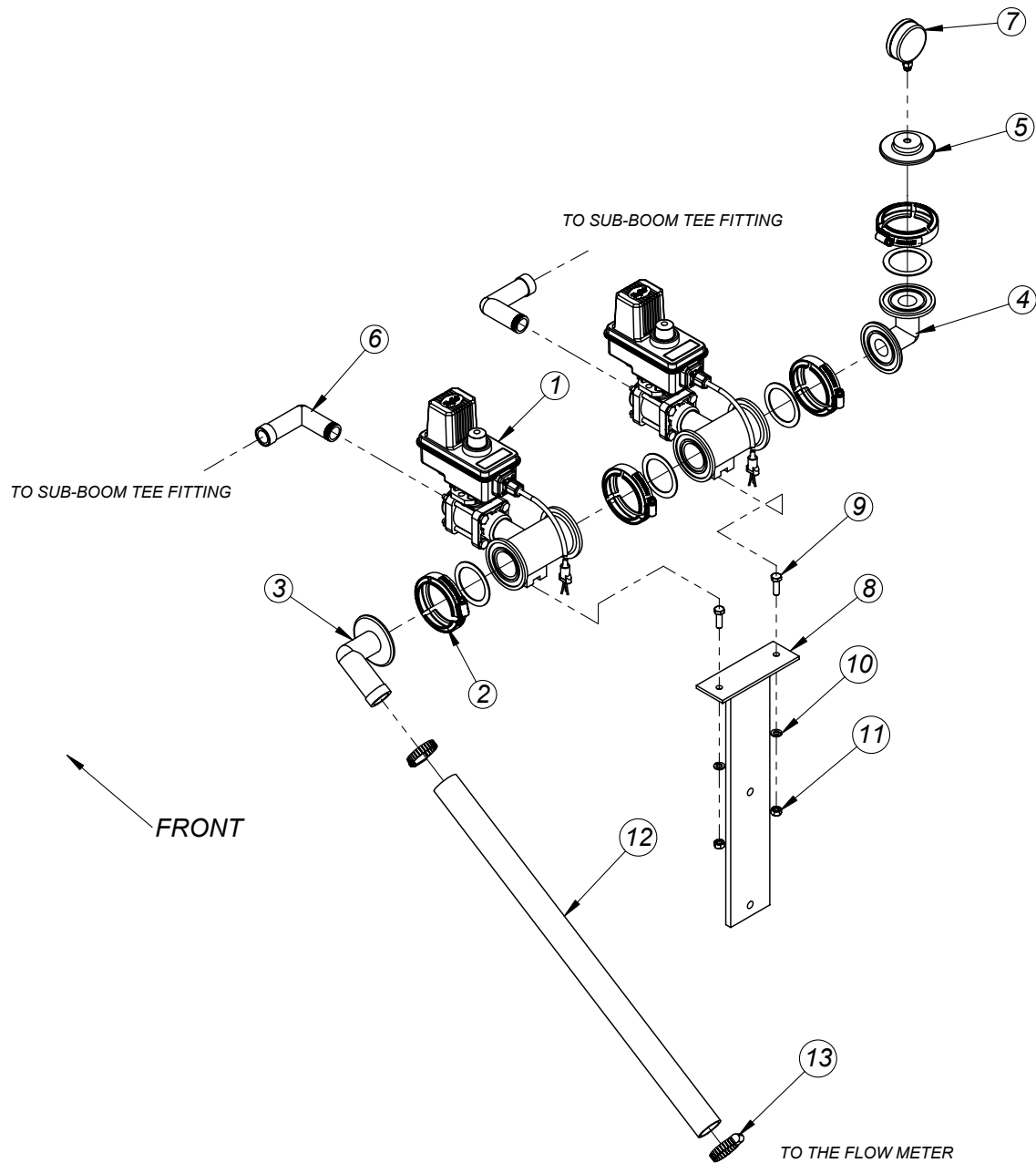


Fig.	Part no.	Qty	Description
1	767800364	1	Valves, Ball (2)-452
**	767800362	**	Valve, Ball (1) -451
2	767002904	4	Clamp, S.S. Flange
3	767002901	1	Flange, 1-1/4" Barb Elbow
4	767002902	1	Elbow, 1-1/4" Flange
5	767002903	1	Adapter, 1-1/4" Flange
6	76700022	2	Elbow, 1" MNPT x 1" Barb 90 deg
7	76700237	1	Gauge, 4" Pressure (0-100 PSI)
8	760000117	1	Mount, Valve
9	76101114	2	Bolt, 5/16"-18 x 1" Gr. 5
10	76101219	2	Washer, Lock 5/16"
11	76101210	2	Nut, Hex 5/16"-18
12*	767001191	1	Hose, 1-1/4" EPDM
13	76700128	2	Clamp, 1-1/4" Hose
			*Item 12 sold by the foot using part no. 767001191
			**Unit comes with two ball valves together, to order just one, use 767800362

Regulator Valve Plumbing

Instructions:

- Install regulator valve top of hydraulic pump.
- Drill 1-5/8" hole in top of tank and install 3/4" tank fitting.
- Install plumbing as shown.

NOTE: Items found in bag 762121533.

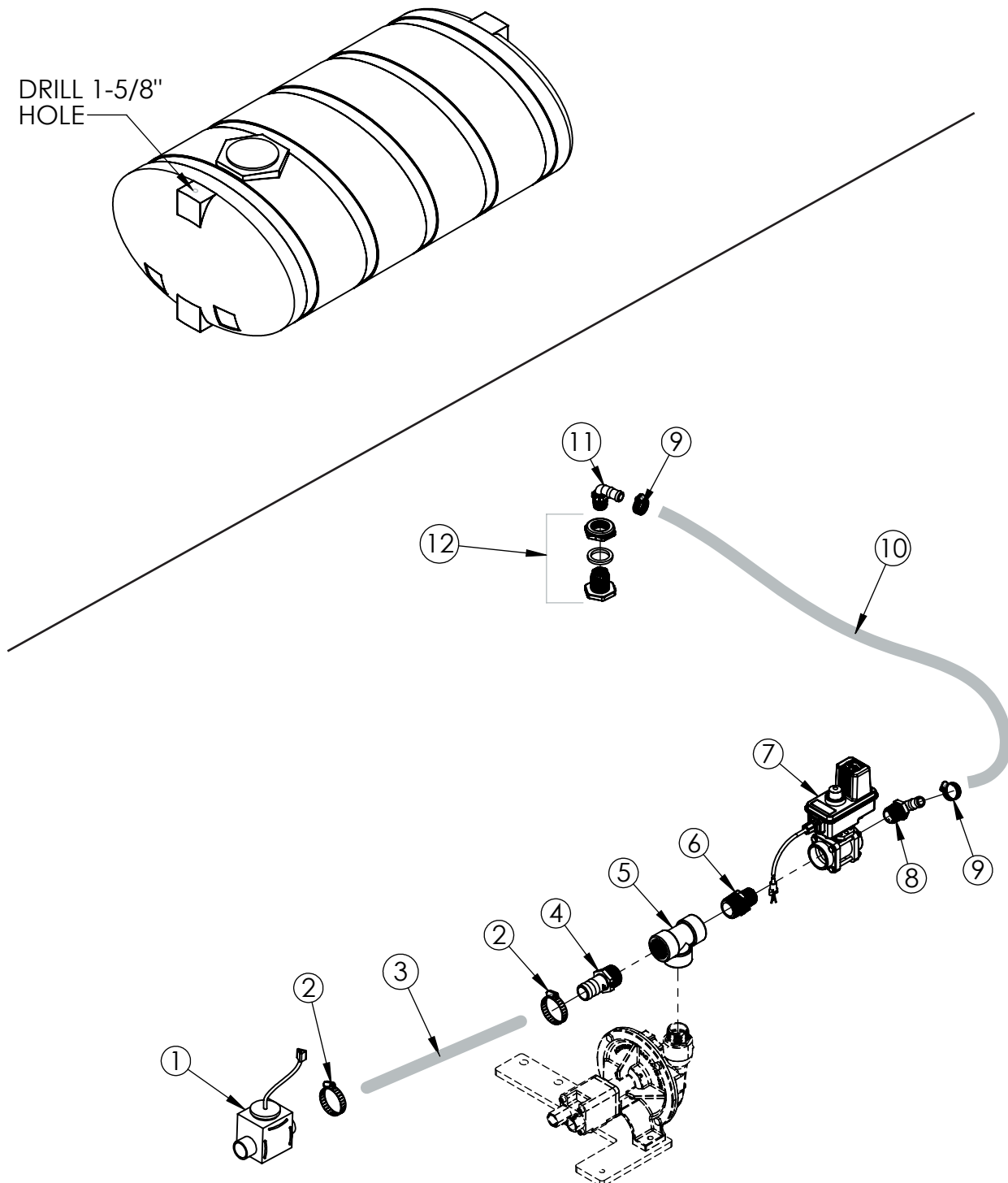


Fig.	Part no.	Qty	Description
1	767800371	1	Meter, 1-1/4" Flow
2	767800128	2	Clamp, 1-1/4" Stainless Steel Hose
3*	767001191	1	Hose, 1-1/4" EPDM
4	76700011	1	Adapter, 1-1/4" NPT x 1-1/4" Barb Straight
5	76700075	1	Tee, 1-1/4" NPT Female
6	76700115	1	Nipple, 1-1/4" x 1" Reducing
7	76780038	1	Valve, Regulator
8	76700021	1	Elbow, 1" NPT x 3/4" Barb 90
9	76700127	2	Clamp, 3/4"-1" Stainless Steel Hose
10*	76700118	1	Hose, 3/4" EPDM
11	76700019	1	Elbow, 3/4" NPT x 3/4" Barb 90
12	76700233	1	Fitting, 3/4" Tank
			* Item 3 is sold by the foot using part no. 767001191
			Item 10 is sold by the foot using part no. 76700118

2" Quick Fill Plumbing Assembly (Option)

Instructions:

- If using 2" quick fill option, install mount angle bracket to quick fill mounting bracket located underneath tank saddle on right hand side at rear of machine.
- Install plumbing to tank sump and route hose to right rear of machine.
- Use rectorseal no. 5, no. 7, or no. 21 on pipe threads instead of teflon tape.
- Remove top nuts and washers from ball valve and attach mounting bracket on bolts. Reinstall washers and nuts.

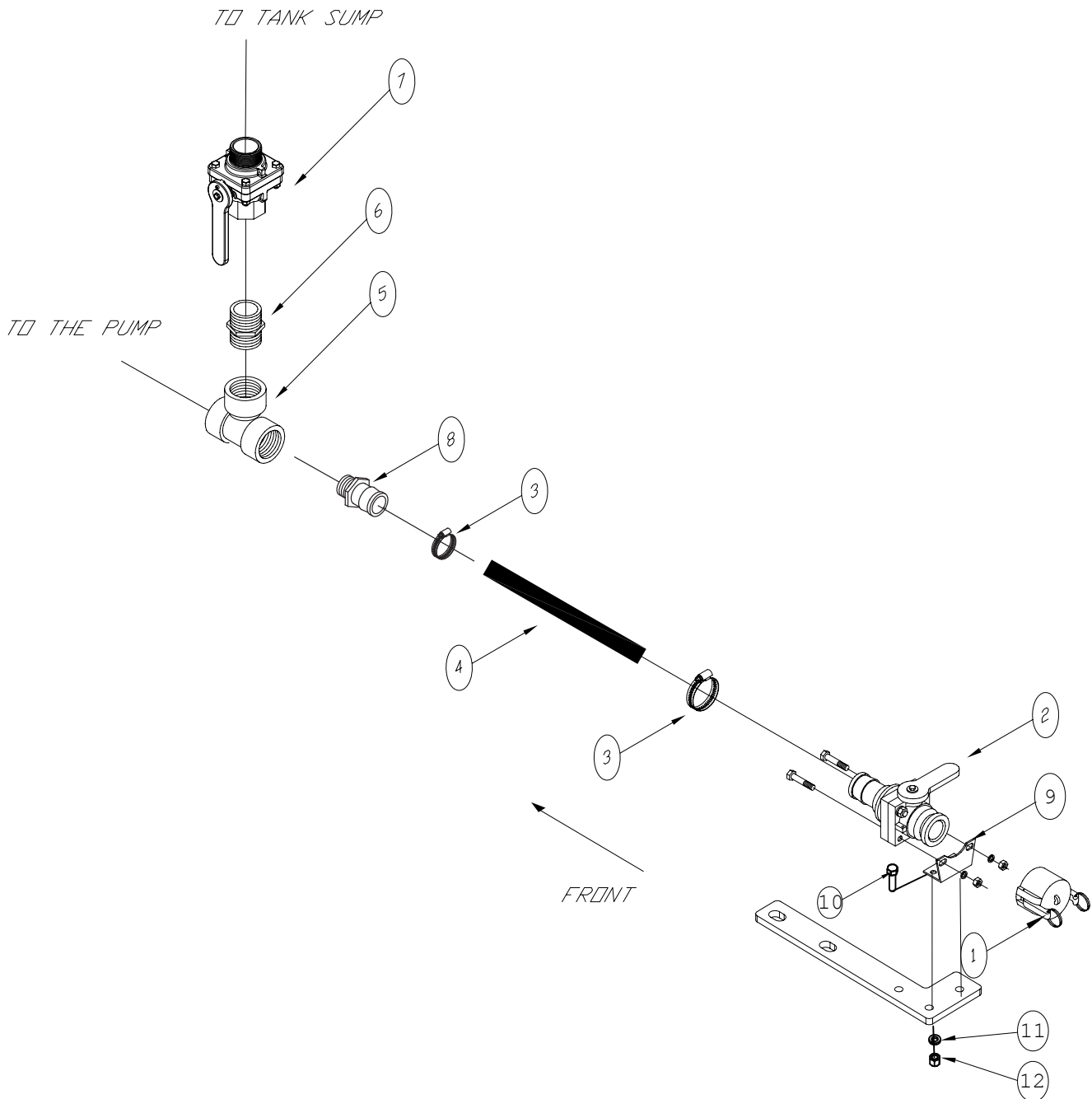


Fig.	Part no.	Qty	Description
1	76700191	1	Cap, 2" Male Adapter
2	76700321	1	Valve, Ball 2" M-M x 2" M-C Flange
3	76700130	2	Clamp, 2" Stainless Hose
4*	76700124	1	Hose, 2" x 60" EPDM
5	76700077	1	Tee, 2" NPT
6	76700038	1	Nipple, 2" NPT Close
7	767805251	1	Valve, Ball 2" MNPT x 2" FNPT
8	76700027	1	Hose Barb, 2" NPT x 2" 90 deg
9	76700192	1	Bracket, Mount Angle
10	600356020	2	Bolt 3/8"-16 x 1" Gr. 5
11	600382051	2	Washer, Lock 3/8"
12	600365008	2	Nut, Standard 3/8"-16
			*Item 4 is sold by the foot using part no. 76700124

3" Quick Fill Plumbing Assembly (Option)

Instructions:

- If using 3" quick fill option, cut 3" diameter hole in rear of tank as shown on next page.
- Install quick fill as shown.
- Install plumbing to tank sump.
- Use rectorseal no. 5, no. 7, or no. 21 on pipe threads instead of teflon tape.

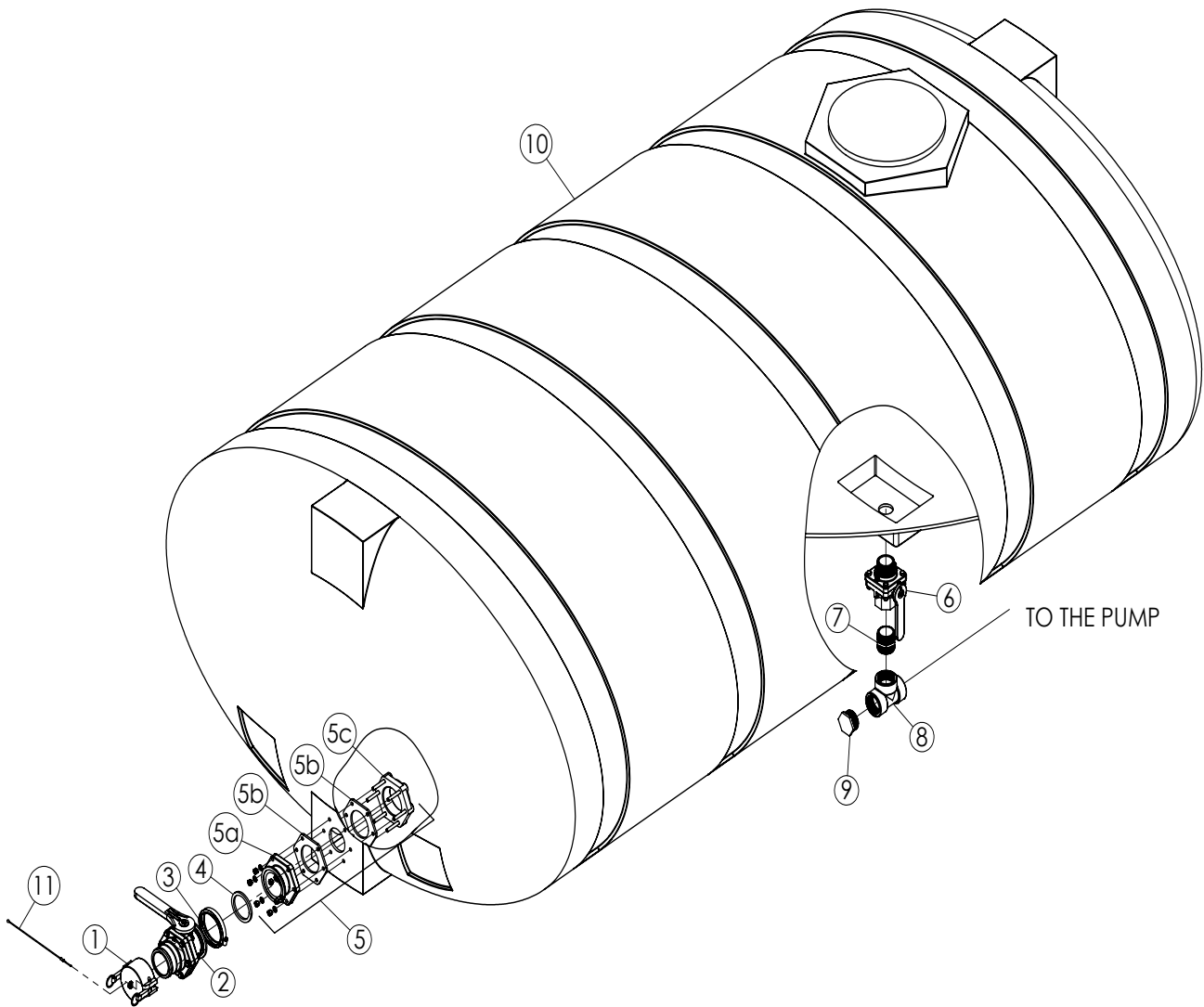
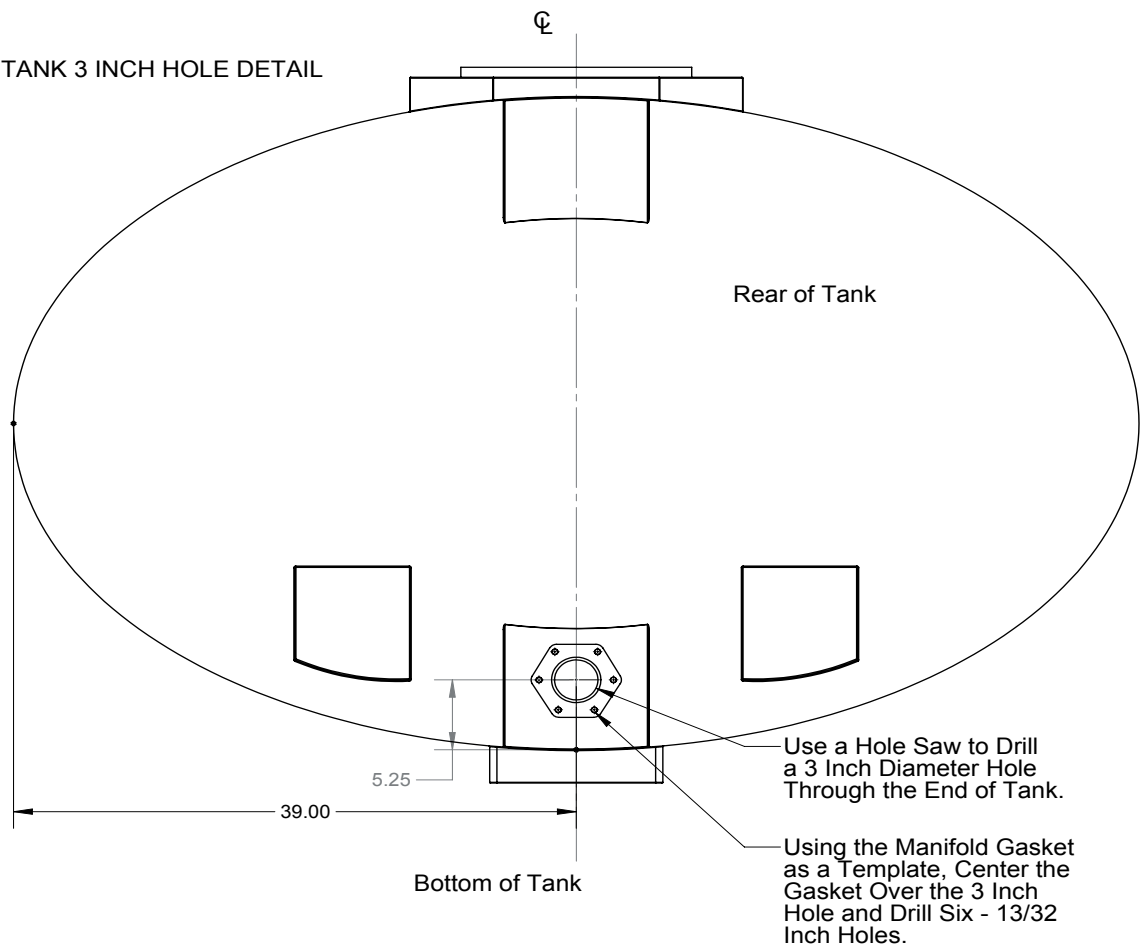


Fig.	Part no.	Qty	Description
1	76700320	1	Cap, 3"
2	76700316	1	Valve, Ball 3" Manifold Flange x 3" Male Adapter
3	76700318	1	Clamp, 3" Worm Screw
4	76700317	1	Gasket, 3"
5	76700319	1	Manifold, 3" Manifold Flange x Female Thread
5a	-	1	Endplate, Manifold
5b	-	2	Gasket, Manifold
5c	-	1	Endplate, Manifold
6	767805251	1	Valve, Ball 2" MNPT x 2" FNPT
7	76700038	1	Nipple, 2" MNPT Close
8	76700077	1	Tee, 2" FNPT
9	76700085	1	Plug, 2" MNPT
10	76750037	1	Tank, 1600 Gallon Poly
11	76450064	1	Lanyard (For Male Adapter Cap)

1600 GALLON TANK 3 INCH HOLE DETAIL

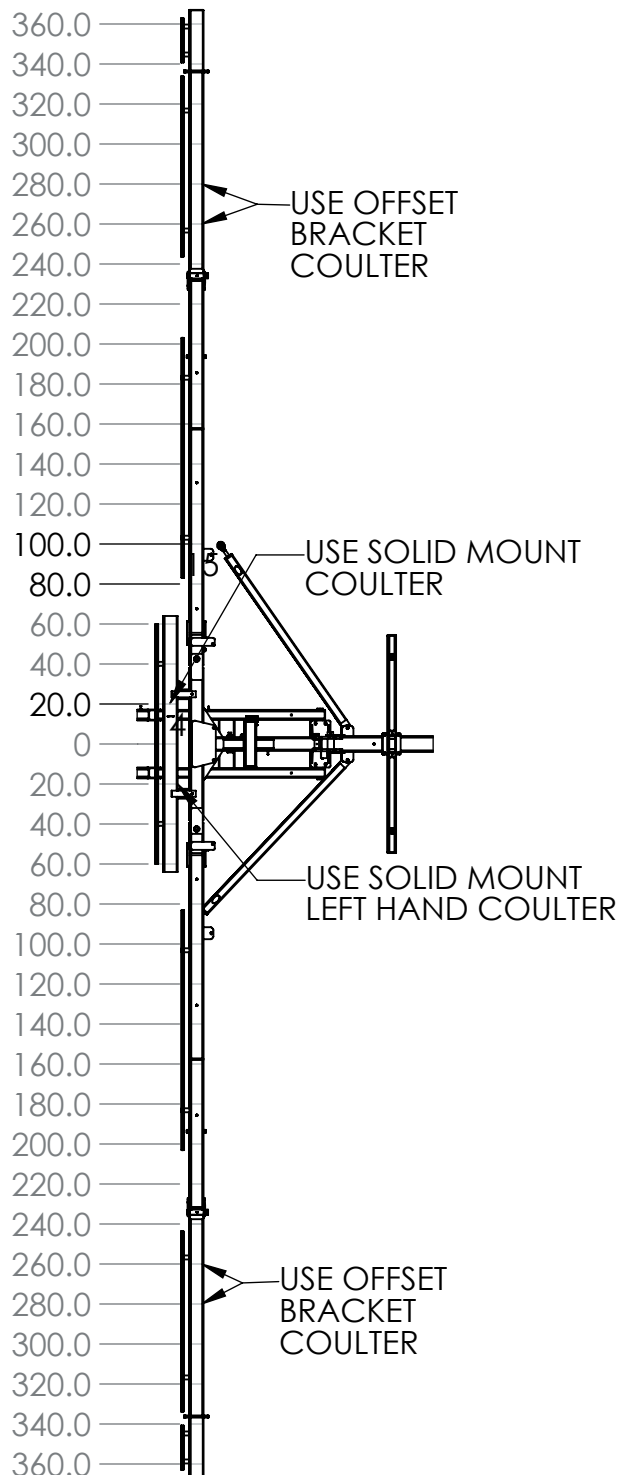


Row Unit Placement (20" and 22" Rows)

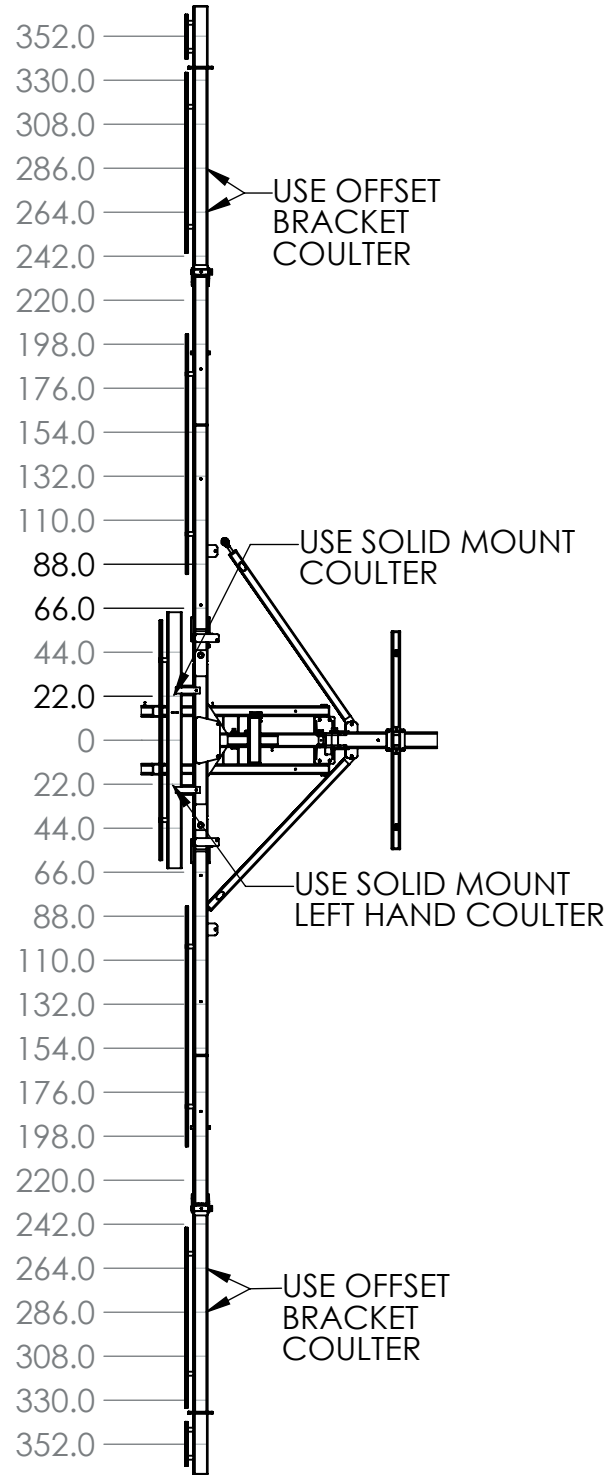
Instructions:

- Mark tool bar with marker or paint marker for locations to place row units.
- Use offset coulters units where shown to avoid interference with gauge wheel tower when outer wings folds over.

20" Row Spacing



22" Row Spacing

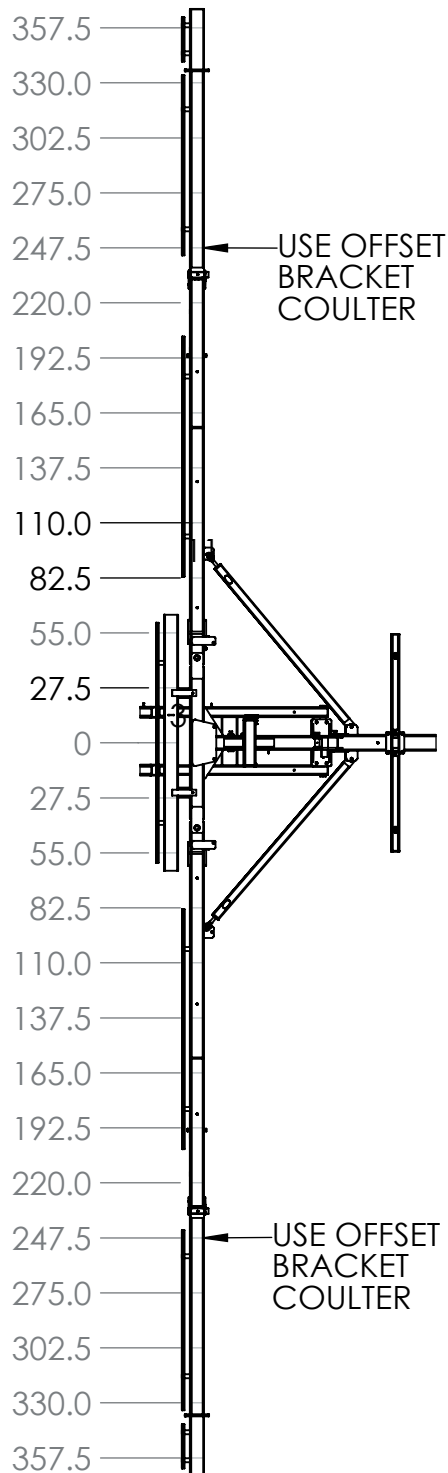


Row Unit Placement (27.5" and 28" Rows)

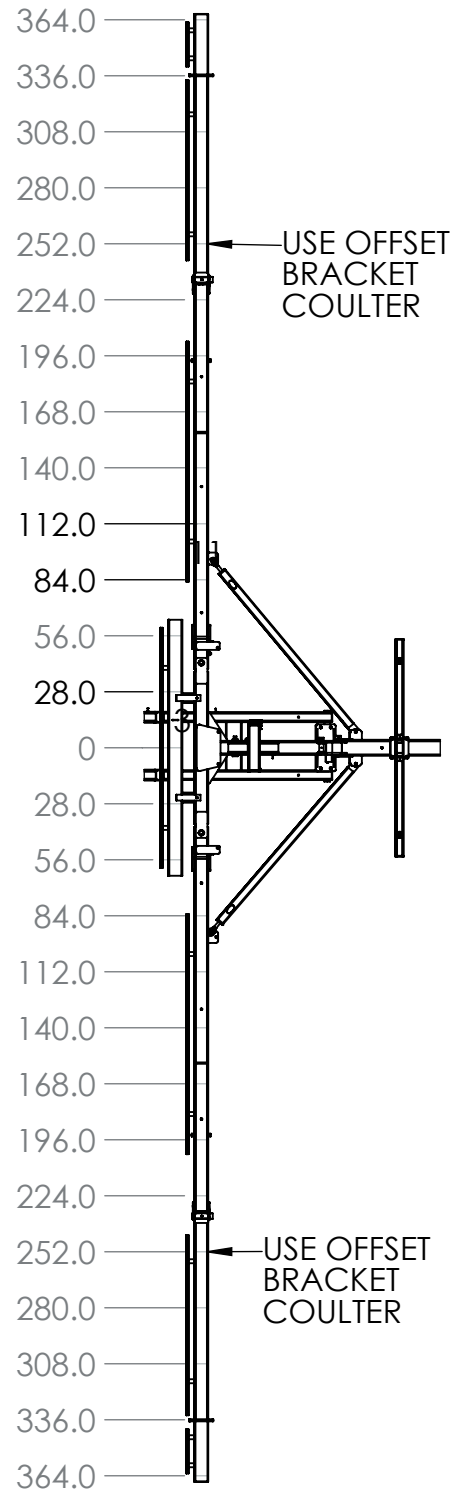
Instructions:

- Mark tool bar with marker or paint marker locations to place row units.
- Use offset coupler units where shown to avoid interference with gauge wheel tower when outer wings folds over.

27.5" Row Spacing



28" Row Spacing

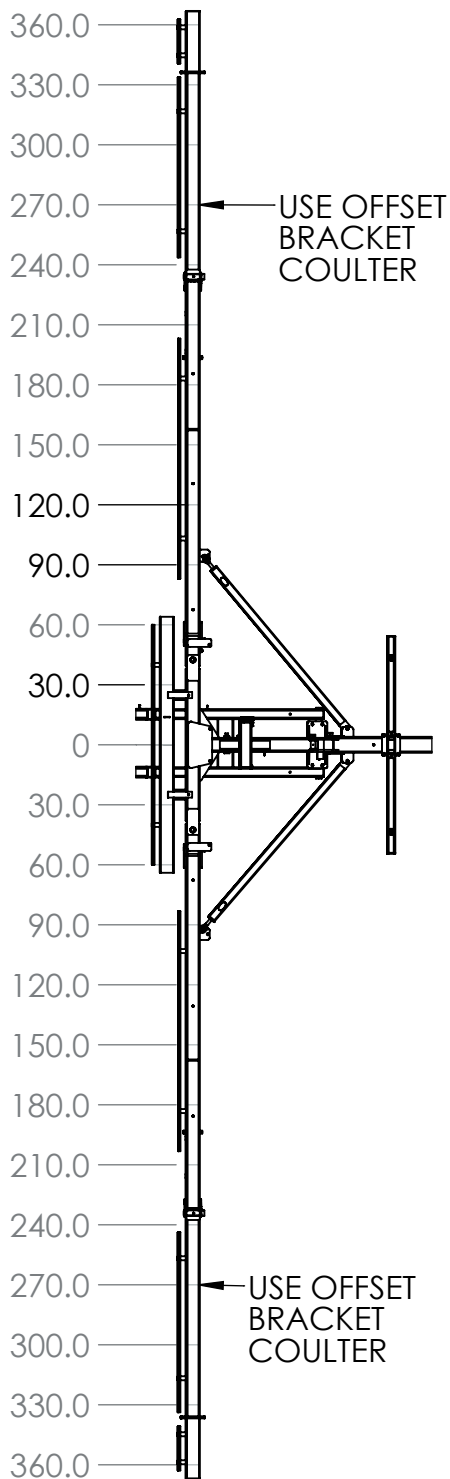


Row Unit Placement (30" and 36" Rows)

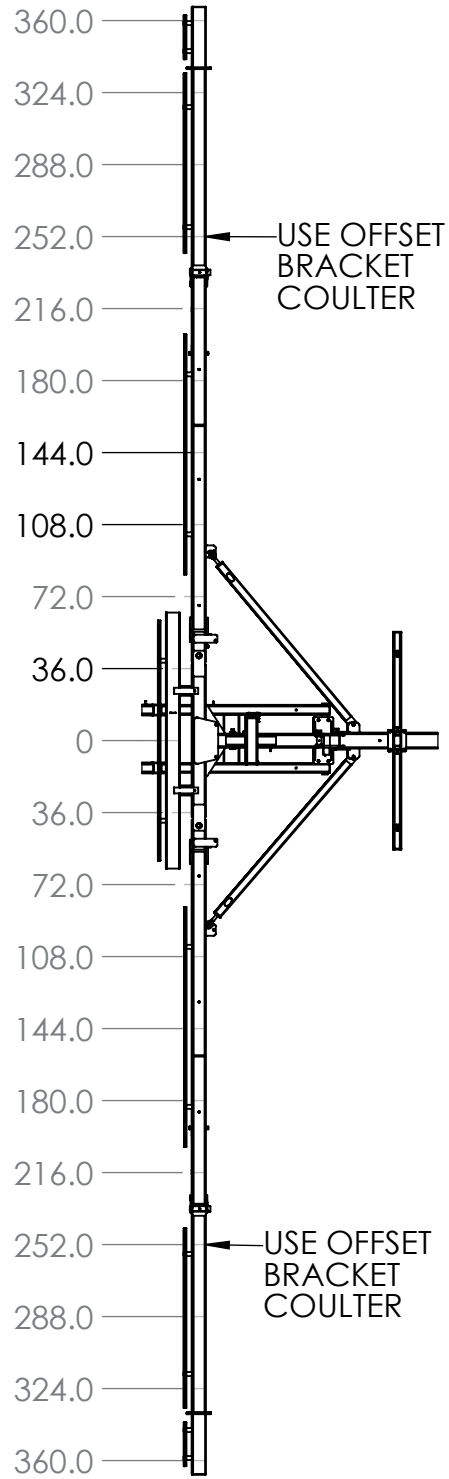
Instructions:

- Mark tool bar with marker or paint marker for locations to place row units.
- Use offset coulters units where shown to avoid interference with gauge wheel tower when outer wings folds over.

30" Row Spacing



36" Row Spacing

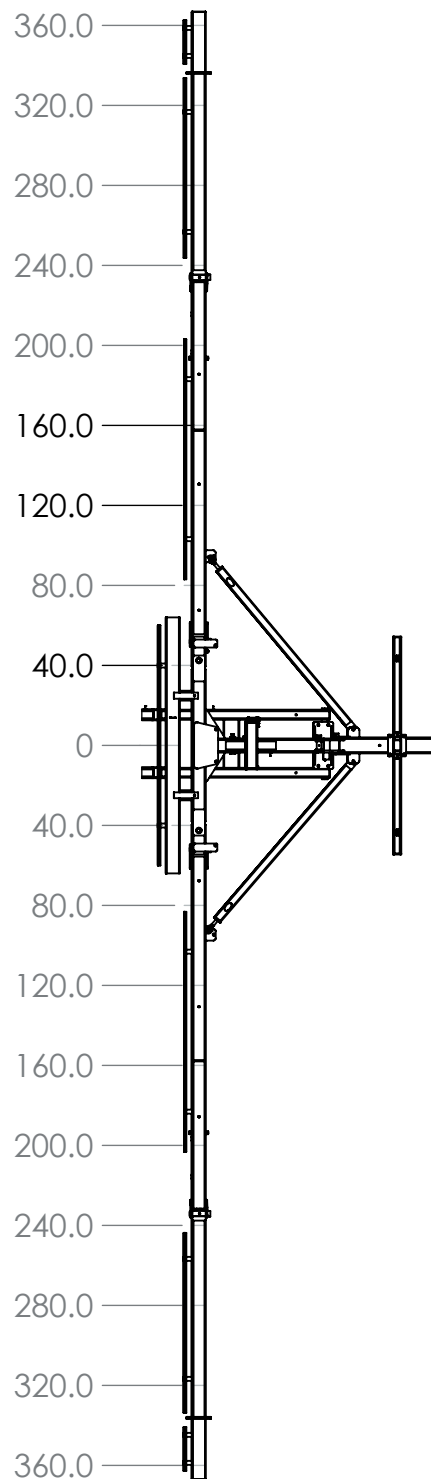


Row Unit Placement (40" Rows)

Instructions:

-Mark tool bar with marker or paint marker for locations to place row units.

40" Row Spacing



LIQUID SIDEDRESS SWIVEL COULTER ASSEMBLY-KNIFE

Instructions:

- Install sidedress coulter row units on toolbar using U-bolts and nuts as shown.
- Adjust knife according to instructions in Operator's Manual. Use shims if necessary to ensure knife is centered with coulter.

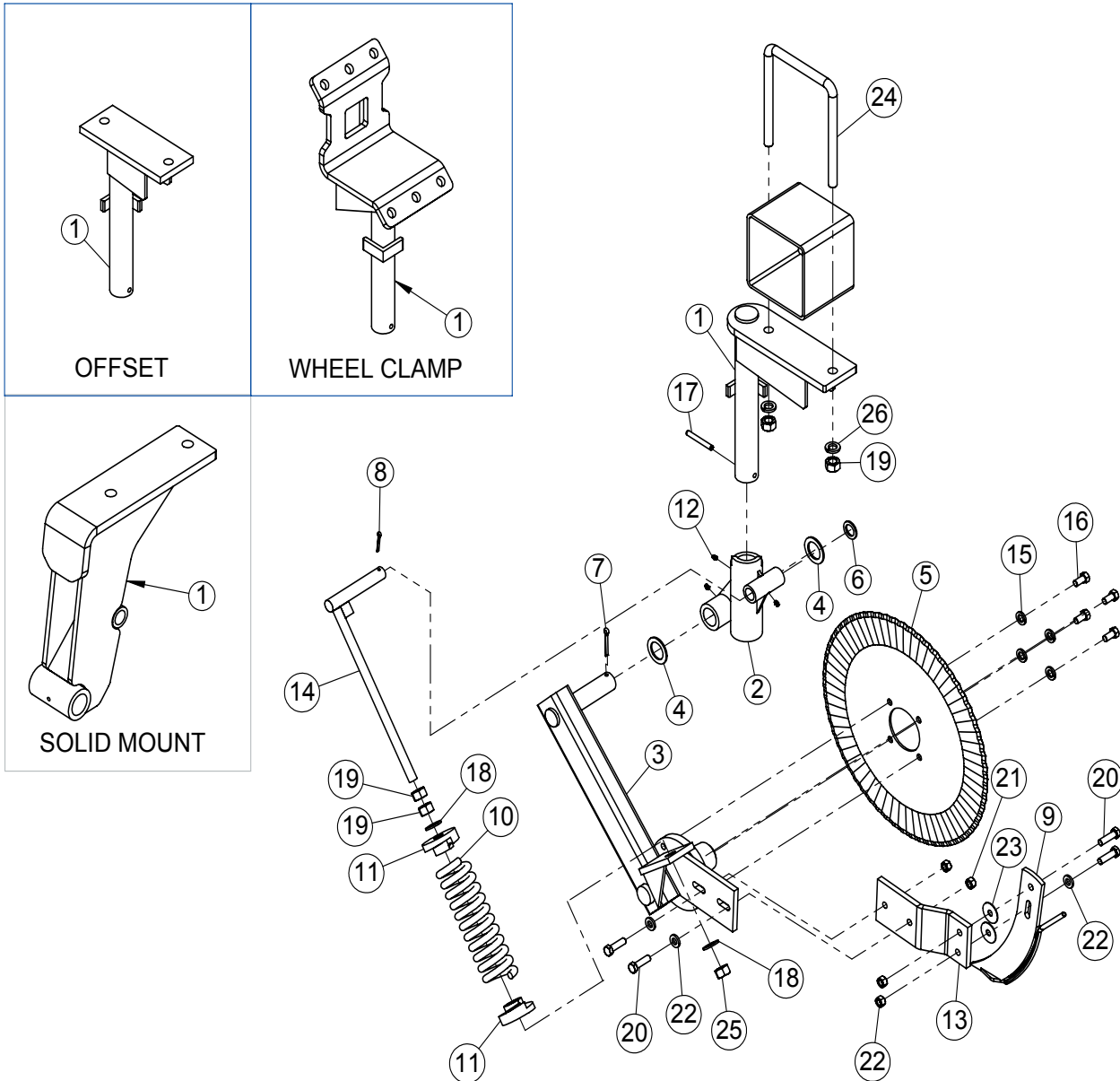
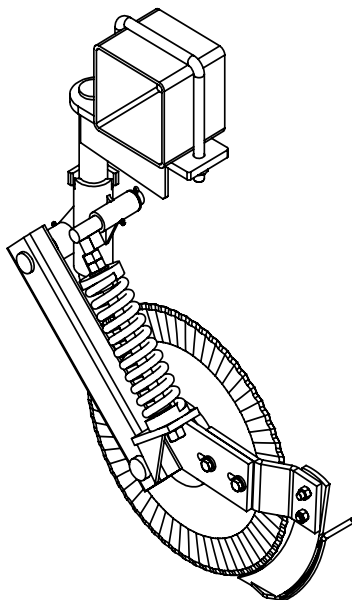


Fig.	Part no.	Qty	Description
1	76801698	1	Weldment, Swivel Coulter Mounting Bracket
-	76802076	-	Mount, Swivel Coulter Offset Mount
-	760062005	-	Weldment, Wheel Clamp
-	760062008	-	Weldment, Solid Coulter Mounting Bracket (Used on 20" & 22" Row Spacings)
2	76450063	1	Swivel, Liquid Coulter Cast
3	768017881	1	Weldment, Liquid Coulter Arm
-	760062009	-	Weldment, Liquid Coulter Arm-LH (Not Shown, Qty 1 used on 20" & 22" Row Spacings)
4	76101462	2	Washer, Machine 10 Ga. x 1-1/2"
5	76400101	1	Blade, 20" Straight Coulter-Rippled
-	76400097	-	Blade, 20" Straight Coulter-Smooth
6	76101435	1	Washer, Machine 10 Ga x 1"
7	76101265	1	Pin, Cotter 1/4" x 2"
8	76101246	1	Pin, Cotter 3/16" x 1-1/2"
9	76450078	1	Knife, Liquid Sidedress
10	76400095	1	Spring, 10-1/4" Coulter Compression
11	76400096	2	Casting, Spring
12	76101252	3	Zerk, Grease 1/4"-28 Straight
13	760000134	1	Bracket, Knife
14	76801789	1	Weldment, Tension Rod
15	600382054	4	Washer, Lock 5/8"
16	76301150	4	Bolt, Lug 1/2"-20 x 1"
17	76101425	1	Pin, Roll 3/8" x 3"
18	76101233	2	Washer, Flat 3/4"
19	600365019	4	Nut, Standard 3/4"
20	7600356139	4	Bolt, 1/2"-20 x 1-3/4" Gr. 5 (UNF)
21	7600366050	4	Nut, Stover Lock 1/2" Type C (UNF)
22	7600381055	3	Washer, Flat 1/2" (.172" Thick)
23	7600381015	2	Washer, Flat 1/2" x 1-3/4" OD x .062" Thick
24	76101316	1	U-Bolt, 3/4"-10 x 7" x 9"
25	600366024	1	Nut, Stover Lock 3/4" Type C (UNC)
26	600382055	2	Washer, Lock 3/4"



LIQUID SIDEDRESS SWIVEL COULTER ASSEMBLY-INJECTOR

Instructions:

- Install sidedress coulters row units on toolbar using U-bolts and nuts as shown.
- Adjust injector according to instructions in Operator's Manual. Use shims if necessary to ensure injector is centered with coulters.

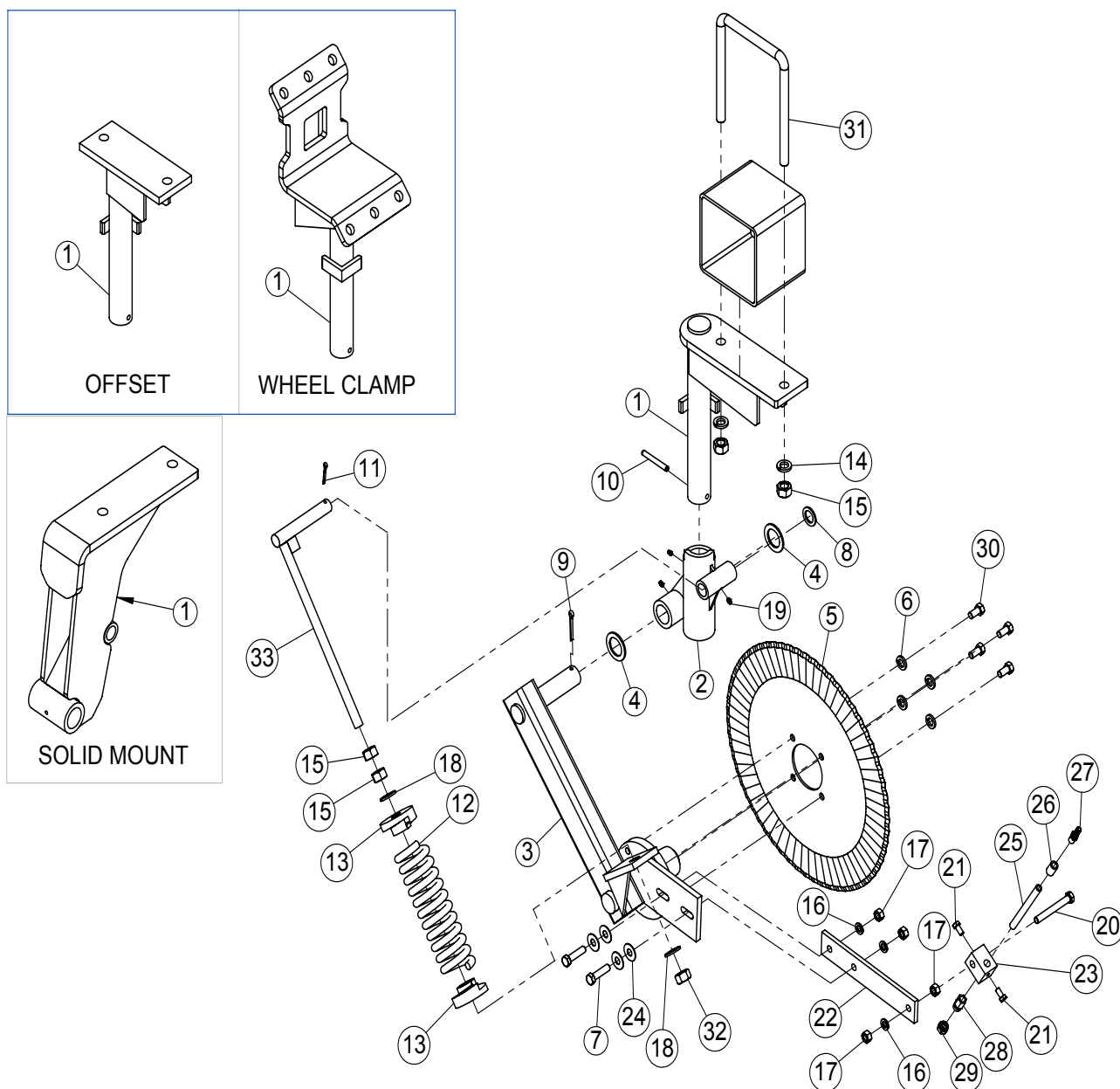
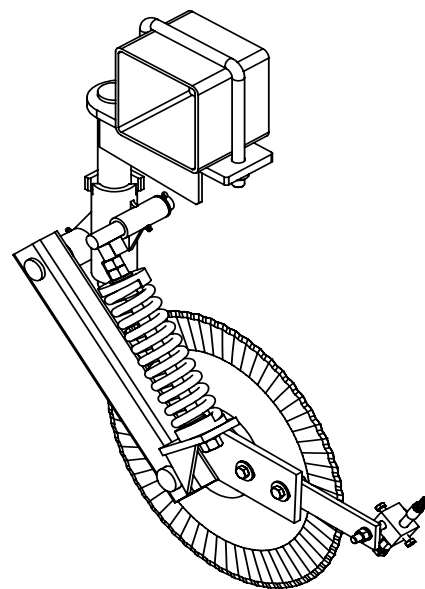


Fig.	Part no.	Qty	Description
1	76801698	1	Weldment, Swivel Coulter Mounting Bracket
-	76802076	-	Mount, Swivel Coulter Offset Mount
-	760062005	-	Weldment, Wheel Clamp
-	760062008	-	Weldment, Solid Coulter Mounting Bracket (Used on 20" & 22" Row Spacings)
2	76450063	1	Swivel, Liquid Coulter Cast
3	768017881	1	Weldment, Liquid Coulter Arm
-	760062009	-	Weldment, Liquid Coulter Arm-LH (Not Shown, Qty 1 used on 20" & 22" Row Spacings)
4	76101462	2	Washer, Machine 10 Ga. x 1-1/2"
5	76400101	1	Blade, 20" Straight Coulter-Rippled
-	76400097	-	Blade, 20" Straight Coulter-Smooth
6	600382054	4	Washer, Lock 5/8"
7	76101149SS	2	Bolt, 1/2"-13 x 2" Stainless Steel
8	76101435	1	Washer, Machine 10 Ga x 1"
9	76101265	1	Pin, Cotter 1/4" x 2"
10	76101425	1	Pin, Roll 3/8" x 3"
11	76101246	1	Pin, Cotter 3/16" x 1-1/2"
12	76400095	1	Spring, 10-1/4" Coulter Compression
13	76400096	2	Casting, Spring
14	600382055	2	Washer, Lock 3/4"
15	600365019	4	Nut, Standard 3/4"-10
16	76101222SS	3	Washer, Lock 1/2" Stainless Steel
17	76101213SS	4	Nut, Hex 1/2"-13 Stainless Steel
18	76101233	2	Washer, Flat 3/4"
19	76101252	3	Zerk, Grease 1/4"-28 Straight
20	76101153SS	1	Bolt, 1/2"-13 x 4" Stainless Steel
21	76101281SS	2	Bolt, 3/8"-16 x 3/4" Stainless Steel
22	760000136	1	Arm, Coulter Injection
23	76400103	1	Block, Injection Tube Mounting
24	76101231SS	4	Washer, Flat 1/2" Stainless Steel
25	76700279	1	Nipple, 1/4 NPT x 6 Stainless Steel
26	76700307	1	Bushing, 1/4" NPT x 6 Stainless Steel
27	76700277	1	Barb, Hose 1/4" NPT x 3/8"
28	76700289	1	Fitting, Teejet Body
29	76700288	1	Cap, Teejet S.S. -CP1325-SS
30	76301150	4	Bolt, Lug 1/2"-20 x 1"
31	76101316	1	U-Bolt, 3/4"-10 x 7" x 9"
32	600366024	1	Nut, Stover Lock 3/4" Type C (UNC)
33	76801789	1	Weldment, Tension Rod



Nozzle Assembly

Instructions:

- Assemble nozzles as shown below. Note: Hose barb is to be placed into the o ring.
- Elbow nozzles located in bag included with center coupler.
- Elbow nozzles used on outside rows, tee nozzles used on all other rows.

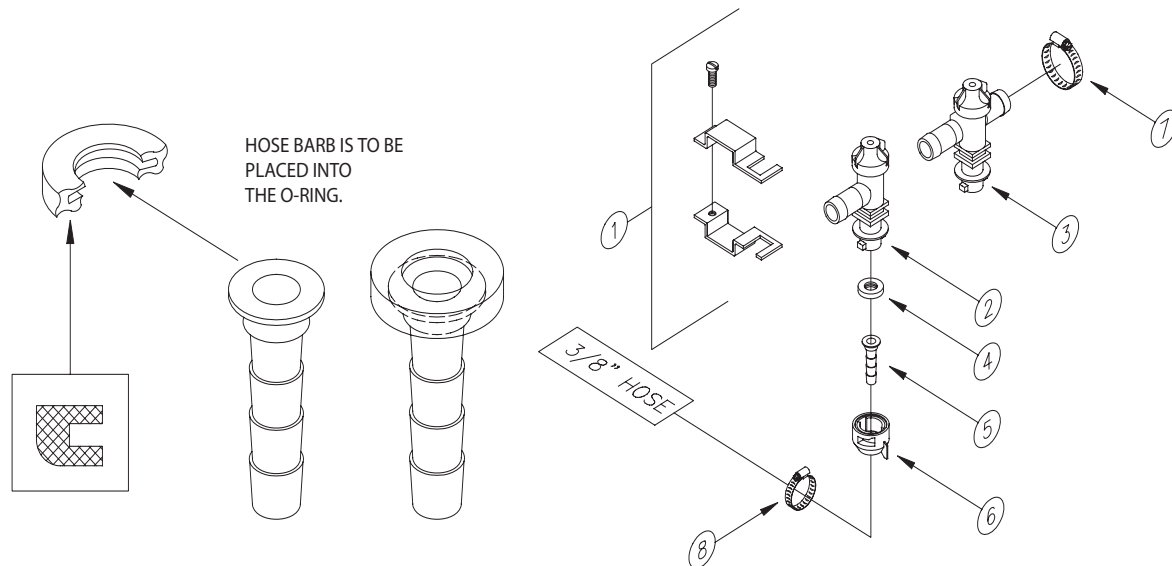


Fig.	Part no.	Qty	Description
1	76700203	1	Clamp, 1-1/4" Square Nozzle
2	76700199*	1	Elbow, 3/4" Diaphragm Nozzle
3	76700201*	1	Tee, 3/4" Diaphragm Nozzle
4	76700305	1	O-Ring, Split Hose Barb
5	76700302	1	Barb, Hose-1/4" for nozzle cap
6	76700303	1	Cap, Nozzle - Blue
7	76700127	1 or 2**	Clamp, Hose- 3/4" Stainless
8	76700126	1	Clamp, Hose -3/8-1/2" Stainless
			*Elbow used on outside rows, Tee used on all other rows.
			**One clamp for elbow, two clamps for tee fitting
			Note: Quantities listed are for one nozzle only.

Plumbing Mainframe (2 Ball Valves)

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings. Note: Make hoses longer at hinge to allow for folding of bar.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

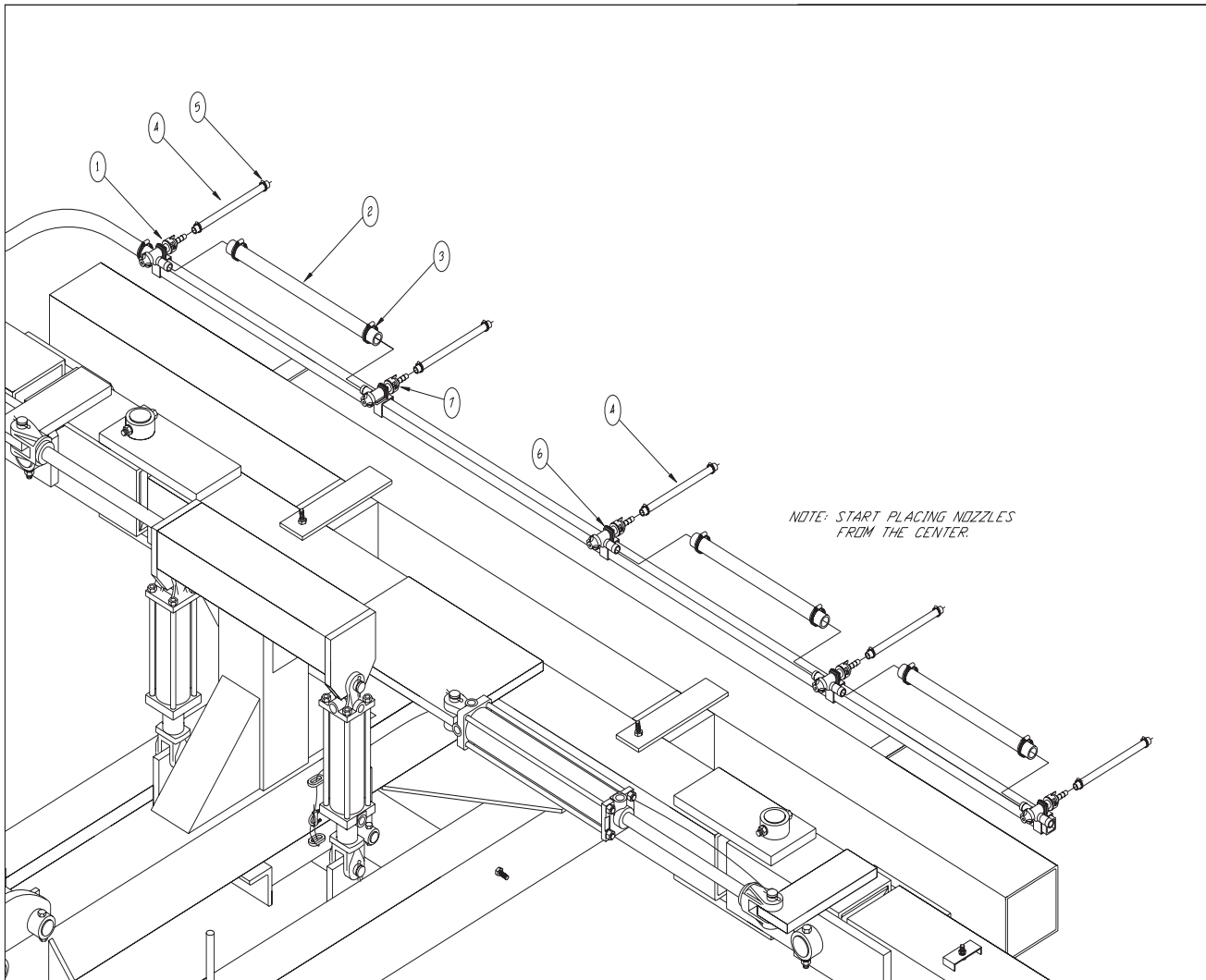


Fig.	Part no.	Qty	Description
1	767002011	**	Assy, 3/4" Diaphragm Tee (includes nozzle, o-ring, and cap)
2	76700118*	*	Hose, 3/4" EPDM
3	76700127	**	Clamp, Hose-3/4-1" Stainless
4	76700122*	*	Hose, 3/8" EPDM
5	76700126	**	Clamp, Hose -3/8-1/2" Stainless
6	767001991	2	Assy, 3/4" Diaphragm Elbow (includes nozzle, o-ring, and cap)
			*Items sold by the foot.
			**Qty depends on number of row units
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

Plumbing Mainframe (3 Ball Valves)

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings. Note: Make hoses longer at hinge to allow for folding of bar.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

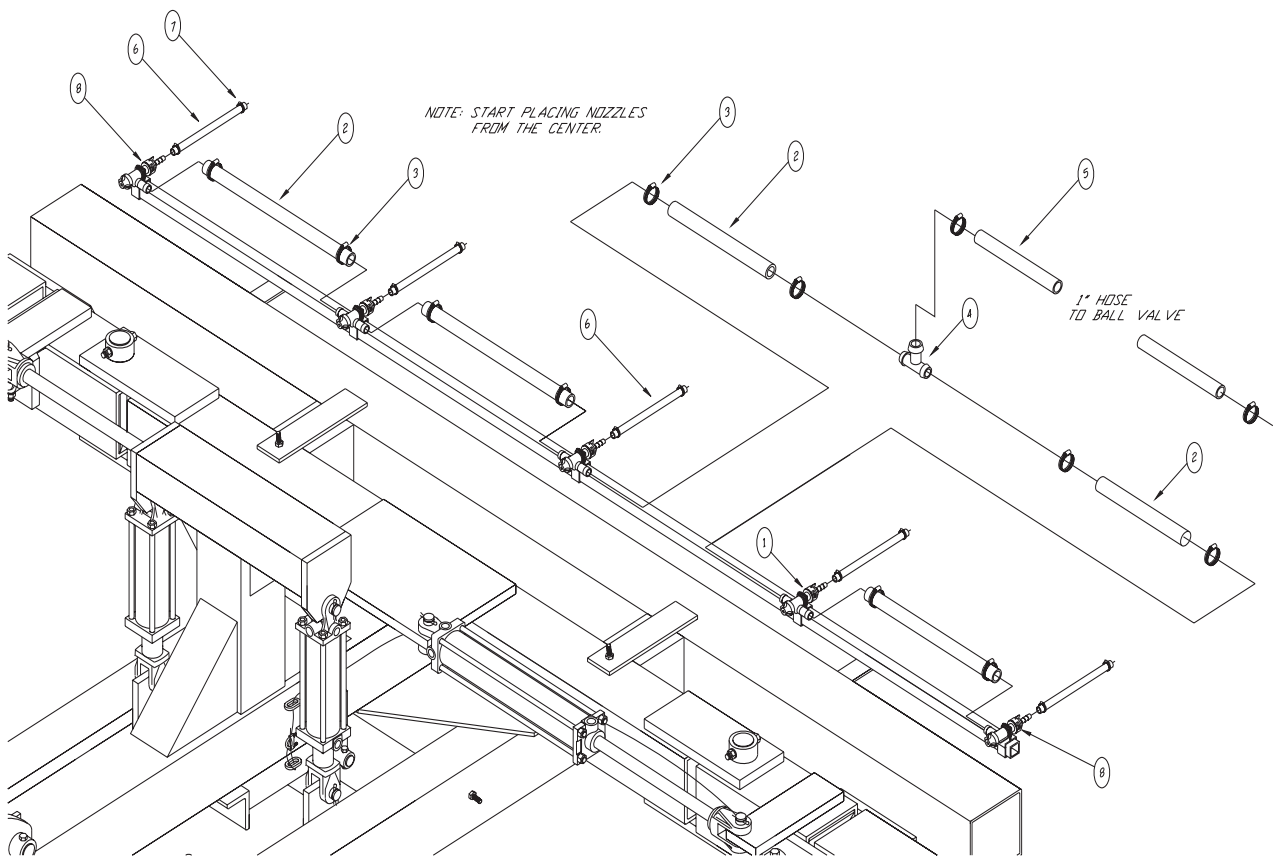


Fig.	Part no.	Qty	Description
1	767002011	**	Assy, 3/4" Diaphragm Tee (includes nozzle, o-ring, and cap)
2	76700118*	*	Hose, 3/4" EPDM
3	76700127	**	Clamp, Hose-3/4-1" Stainless
4	76700197	1	Barb, Tee 1" x 3/4" x 3/4"
5	76700119*	*	Hose, 1" EPDM
6	76700122*	*	Hose, 3/8" EPDM
7	76700126	**	Clamp, Hose -3/8-1/2" Stainless
8	767001991	2	Assy, 3/4" Diaphragm Elbow (includes nozzle, o-ring, and cap)
			*Items sold by the foot.
			**Qty depends on number of row units
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

Plumbing Inner Wing (2 Ball Valves)

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings. Note: Make hoses longer at hinge to allow for folding of bar.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

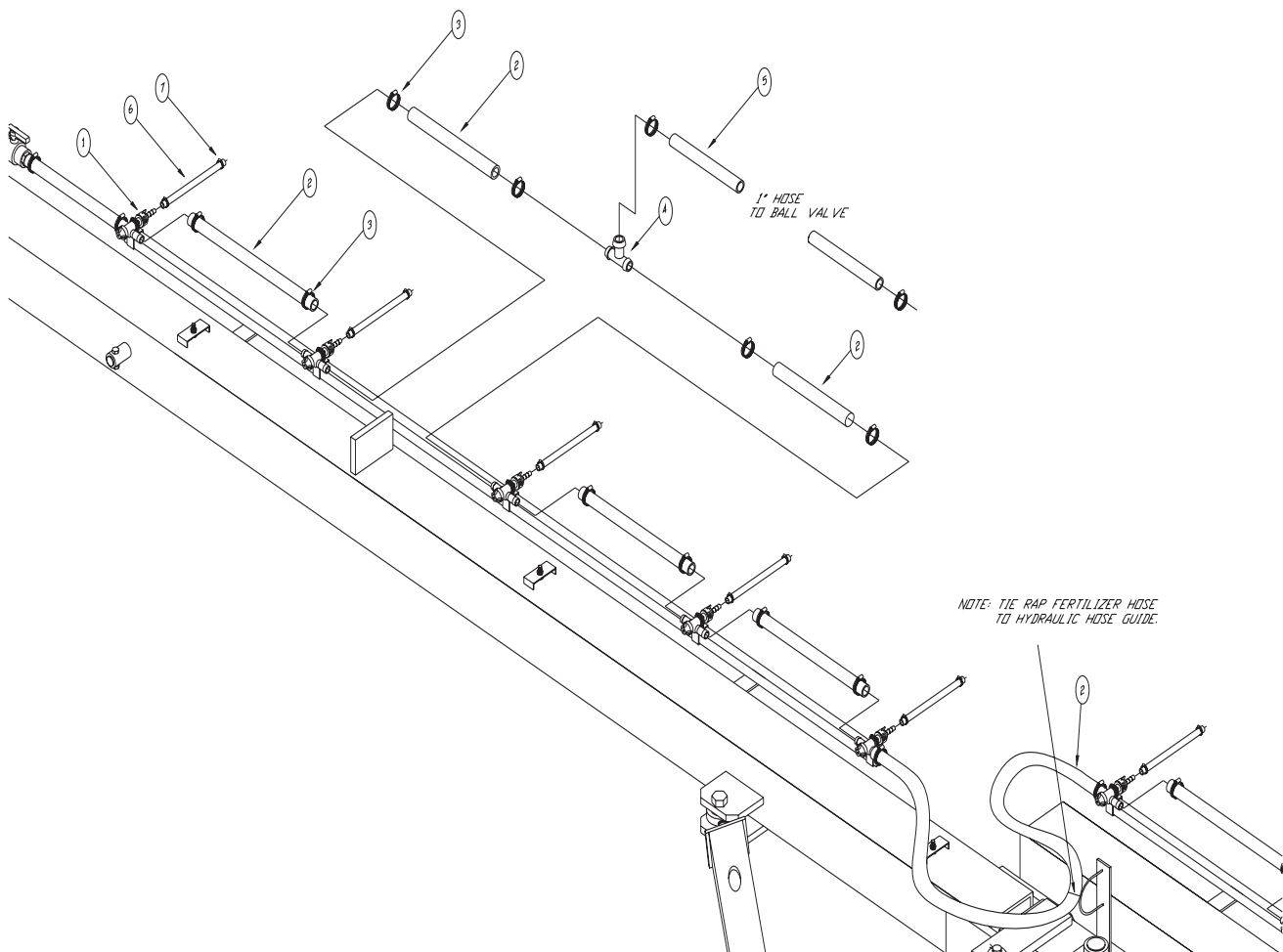


Fig.	Part no.	Qty	Description
1	767002011	**	Assy, 3/4" Diaphragm Tee (includes nozzle, o-ring, and cap)
2	76700118*	*	Hose, 3/4" EPDM
3	76700127	**	Clamp, Hose-3/4-1" Stainless
4	76700197	1	Barb, Tee 1" x 3/4" x 3/4"
5	76700119*	*	Hose, 1" EPDM
6	76700122*	*	Hose, 3/8" EPDM
7	76700126	**	Clamp, Hose -3/8-1/2" Stainless
			*Items sold by the foot.
			**Qty depends on number of row units
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

Plumbing Inner Wing (3 Ball Valves)

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

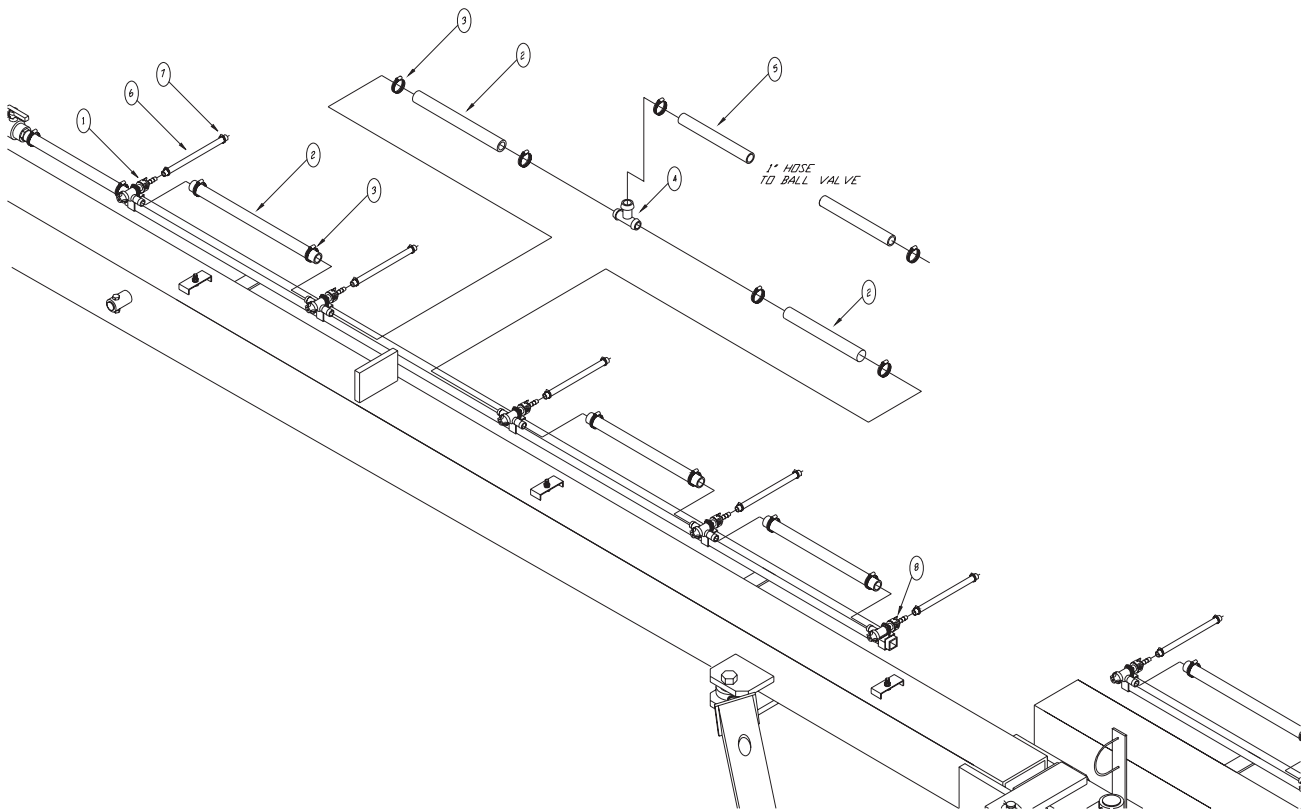


Fig.	Part no.	Qty	Description
1	767002011	**	Assy, 3/4" Diaphragm Tee (includes nozzle, o-ring, and cap)
2	76700118*	*	Hose, 3/4" EPDM
3	76700127	**	Clamp, Hose-3/4-1" Stainless
4	76700197	1	Barb, Tee 1" x 3/4" x 3/4"
5	76700119*	*	Hose, 1" EPDM
6	76700122*	*	Hose, 3/8" EPDM
7	76700126	**	Clamp, Hose -3/8-1/2" Stainless
8	767001991	1	Assy, 3/4" Diaphragm Elbow (includes nozzle, o-ring, and cap)
			*Items sold by the foot.
			**Qty depends on number of row units
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

Plumbing OuterWing

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings. Note: Make hoses longer at hinge to allow for folding of bar.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

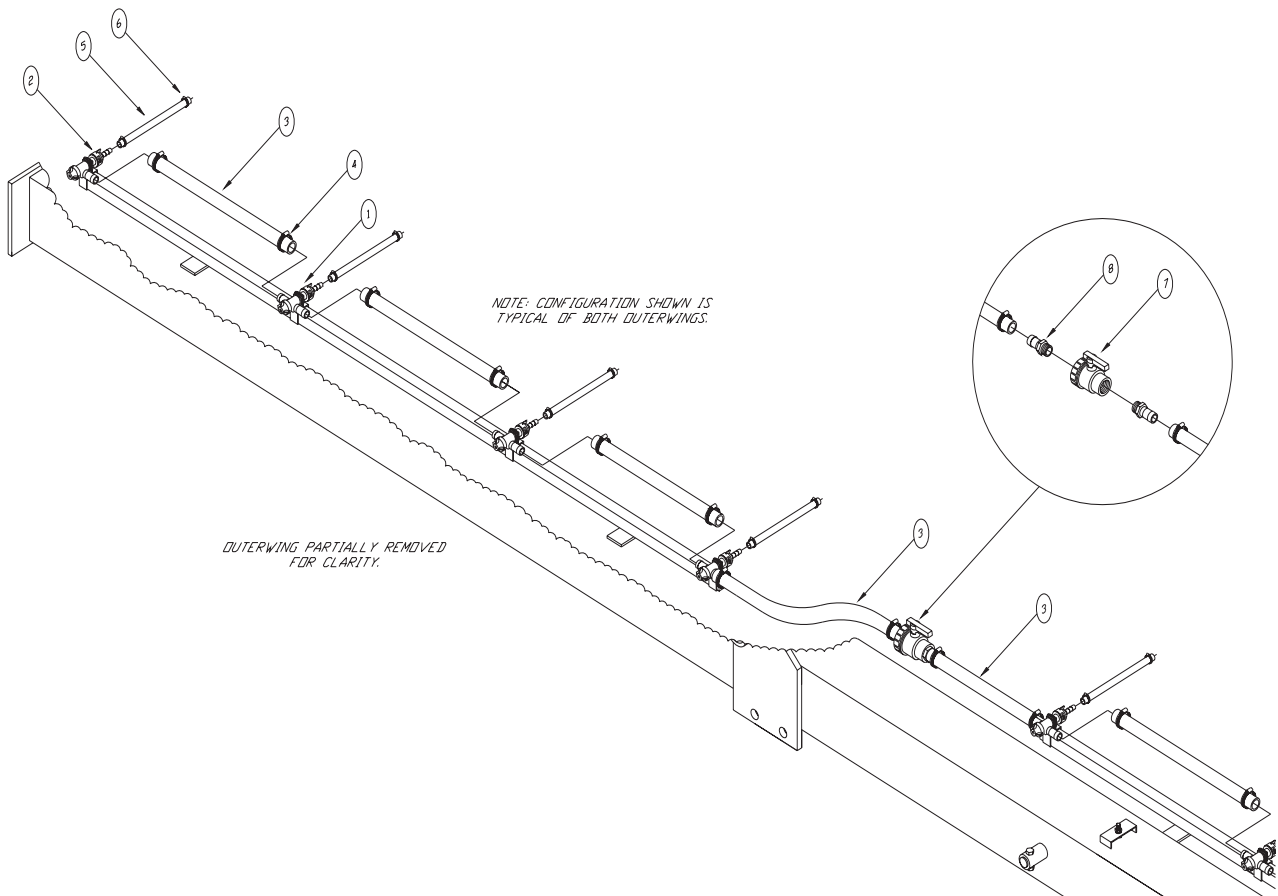


Fig.	Part no.	Qty	Description
1	767002011	**	Assy, 3/4" Diaphragm Tee (includes nozzle, o-ring, and cap)
2	767001991	***	Assy, 3/4" Diaphragm Elbow (includes nozzle, o-ring, and cap)
3	76700118*	*	Hose, 3/4" EPDM
4	76700127	**	Clamp, Hose-3/4-1" Stainless
5	76700122*	*	Hose, 3/8" EPDM
6	76700126	**	Clamp, Hose -3/8-1/2" Stainless
7	76700168	1	Valve, 3/4" Poly Gate
8	7670005	2	Fitting, 3/4" MNPT x 3/4" Hose Barb-Straight
			*Items sold by the foot.
			**Qty depends on number of row units
			***Use Tee Assy in place of Elbow Assy if using outer stub wings
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

Plumbing Outer Stub Wing (Option)

Instructions:

- Install nozzles on sub-boom as close to row units as possible.
- Cut 3/4" EPDM hoses to length to fit between fittings.
- Cut 3/8" EPDM hoses to length ensuring enough hose to allow coulters to swivel.
- Install hoses and secure with hose clamps.

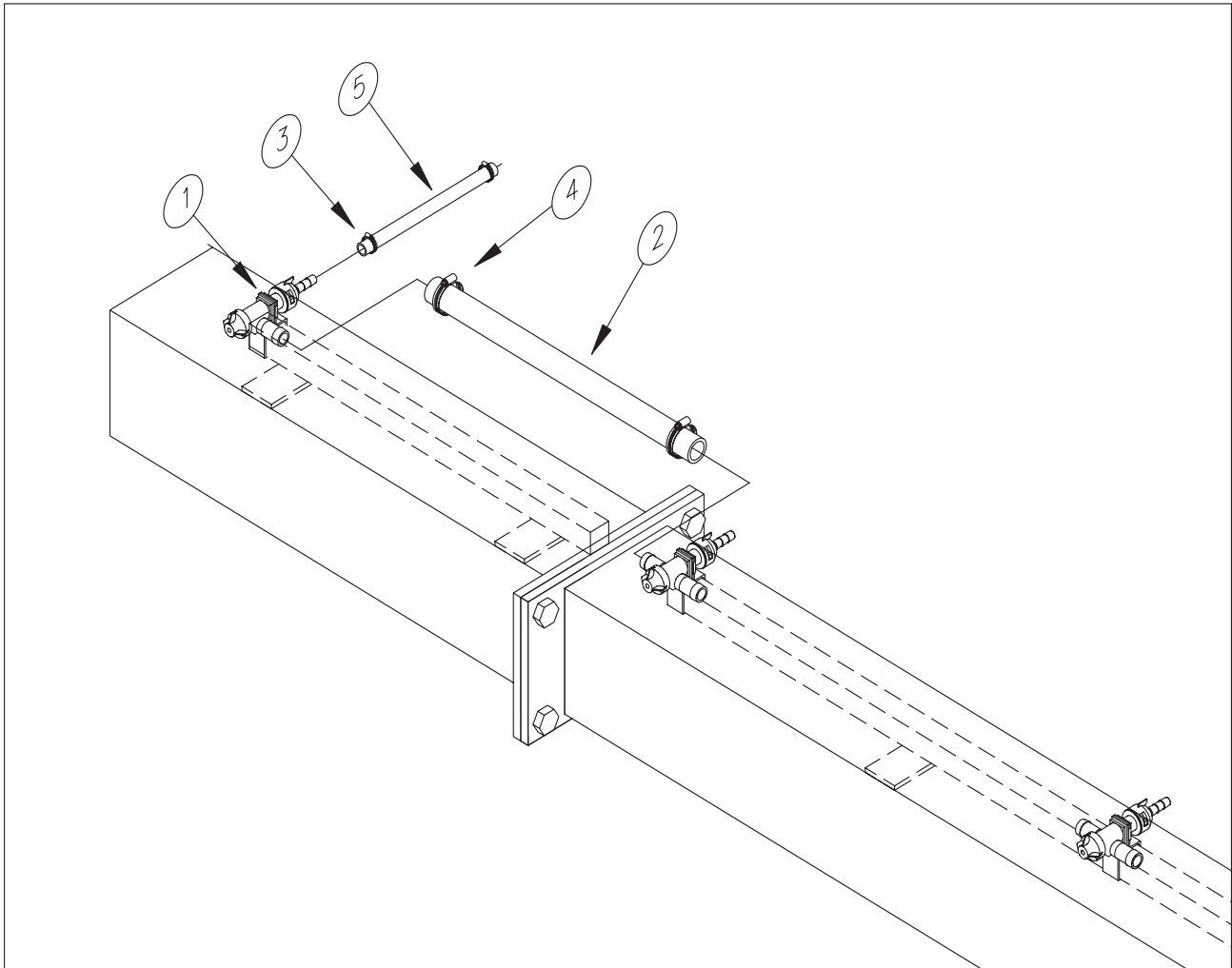


Fig.	Part no.	Qty	Description
2	767001991	1	Assy, 3/4" Diaphragm Elbow (includes nozzle, o-ring, and cap)
3	76700118*	*	Hose, 3/4" EPDM
5	76700122*	*	Hose, 3/8" EPDM
4	76700127	**	Clamp, Hose-3/4-1" Stainless
6	76700126	**	Clamp, Hose -3/8-1/2" Stainless
			*Items sold by the foot.
			**Qty depends on number of row units
			One 3/4" clamp per elbow, two 3/4" clamps per tee fitting
			Two 3/8 clamps per row unit

ATTACHING WASH TANK

Instructions:

- Install wash tank mount bracket to mount plate at rear of tank frame using hardware shown.
- Insert wash tank into bracket before installing fittings and hose.
- Install fittings and hose to wash tank.

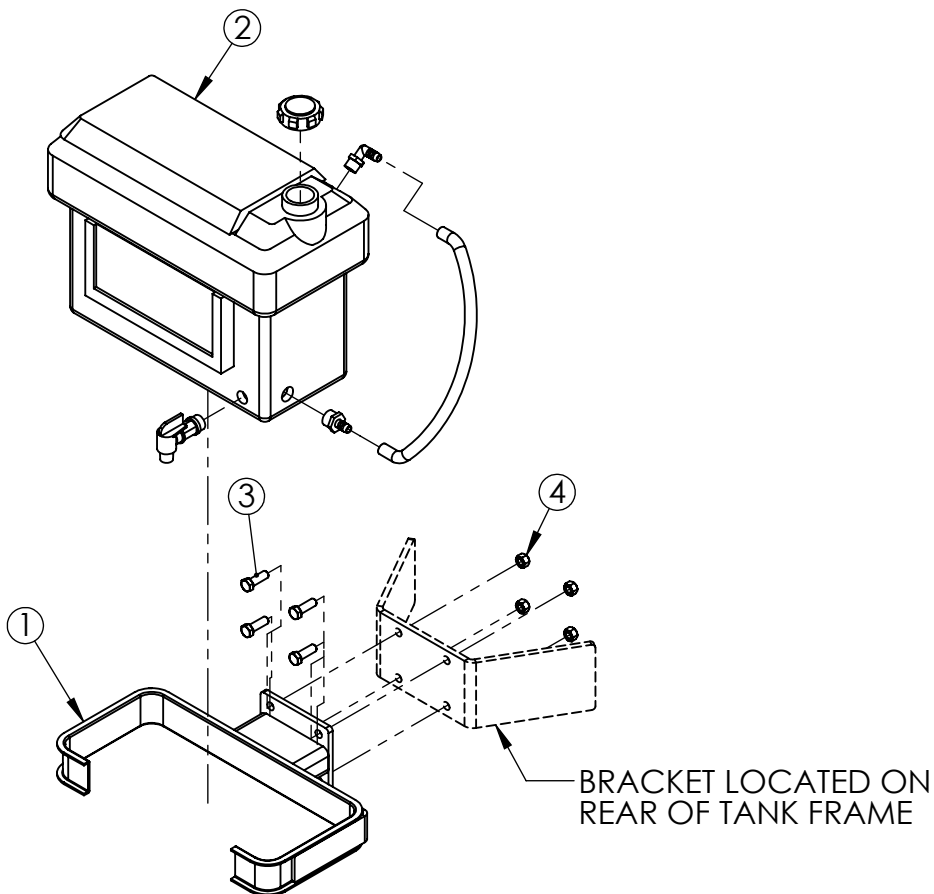


Fig.	Part no.	Qty	Description
1	762450078	1	Bracket, Wash Tank Mount
2	767500030	1	Tank, Wash (includes cap, fittings, and hose)
3	600356109	4	Bolt, 1/2"-13 x 1-1/2" Gr. 5
4	600366030	4	Nut, Top Lock 1/2"-13

Speed Sensor Assembly and Wiring Diagram

Instructions:

- Install speed sensor on left wheel spindle. Place mounting bracket so sensor is approximately 1/8" from wheel hub. Secure bracket with hose clamp around spindle.
 - Attach 13' main extension cable to 26' main cable.
 - Mount junction box on ball valve mount plate.
 - Run main cable into left pull arm through cut out, and pull arm and along tongue to hitch.
 - Route remaining wires to ball valves, pressure regulator, flow meter, and speed sensor.
- NOTE: If using TeeJet 844E Monitor Kit, 12' power cable (767800041, TeeJet #45-20009) included in kit is not used. Power cable 767800039 (TeeJet #45-20243) is to be hooked to battery and cables disconnected at main cable junction when disconnecting bar from tractor.

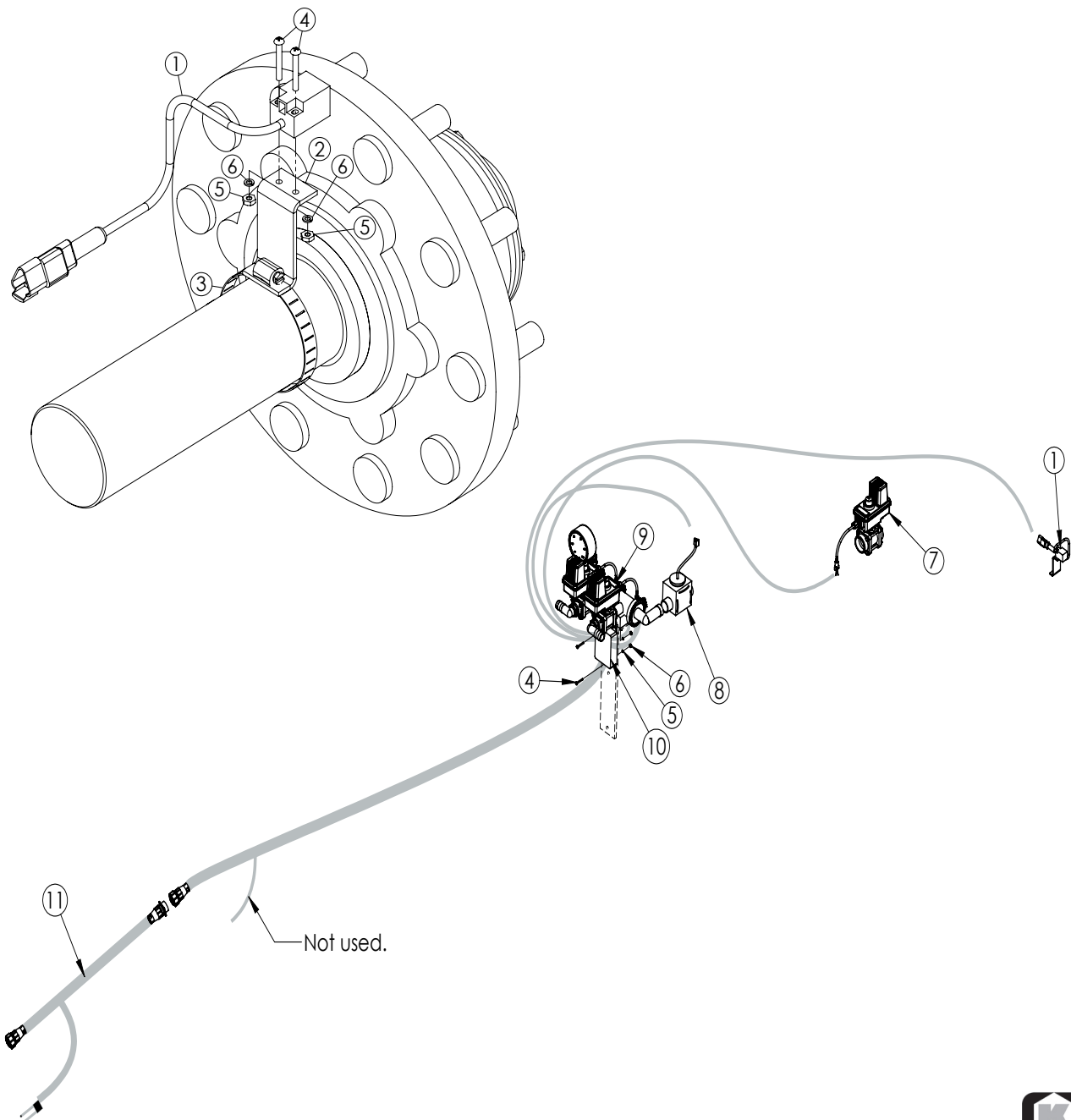


Fig.	Part no.	Qty	Description
1	76780034	1	Sensor, Speed
2	764004632	1	Bracket, Speed Sensor Mounting
3	76700131	1	Clamp, 3" Stainless Steel Hose
4	7600373130	2	Screw, Machine #8 x 1-1/4" UNC
5	600365021	2	Nut, Machine #8
6	7600382103	2	Washer, Lock #8
7	76780038	1	Regulator, 1" Teejet 344
8	767800371	1	Meter, Flow 1-1/4" Teejet 801
9	76700364	1	Valves, Ball (2)-452
10	767800333	1	Cable, Main 26'
11	767800039	1	Cable, Main Extension w/ Power - 15'
	Options		
-	767805256	-	Kit, TeeJet 844E Monitor
-	767805257	-	Kit, Kongkilde ISOBUS Solution
-	767805259	-	Adapter, TeeJet to Raven

DECAL PLACEMENT

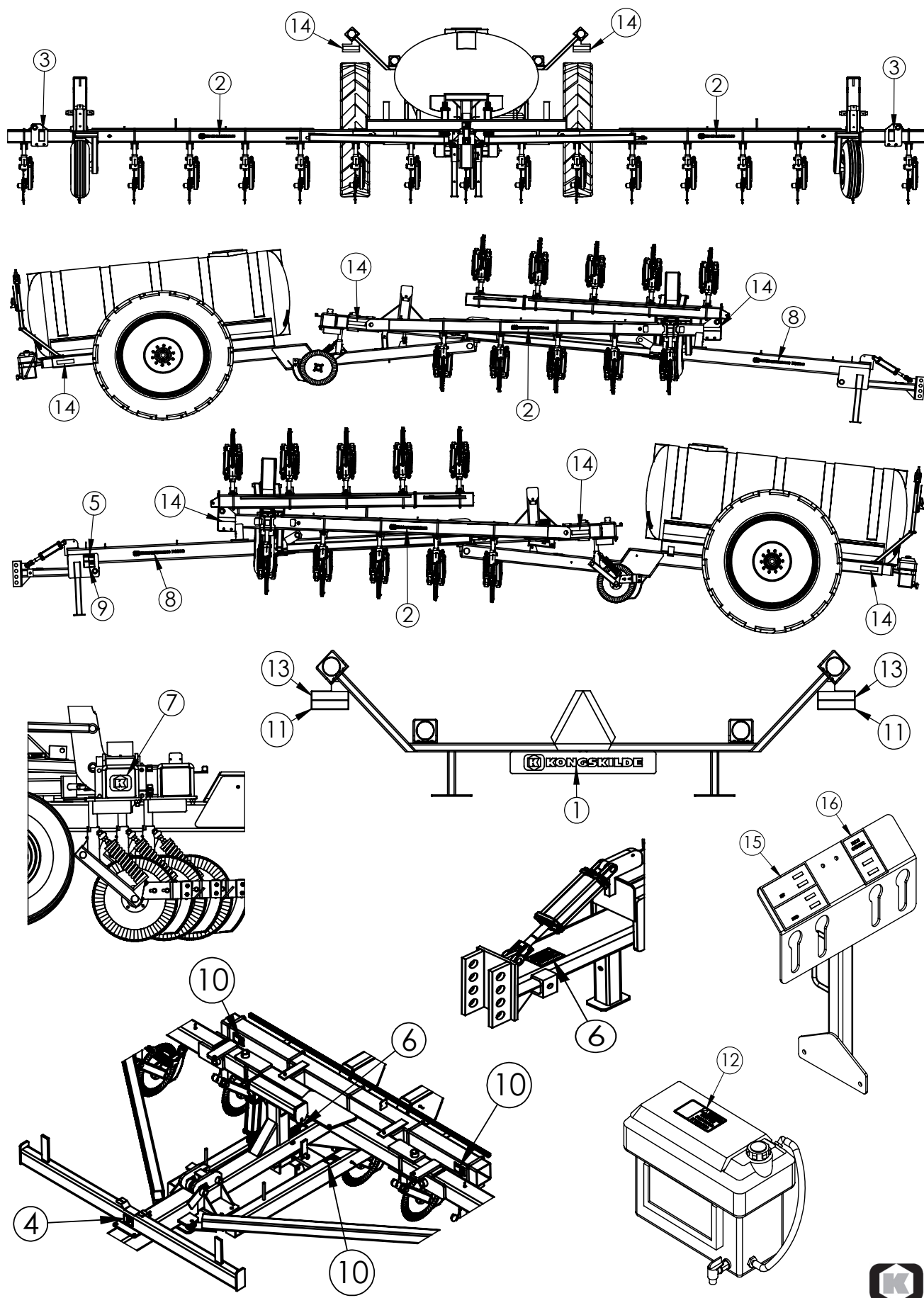


Fig.	Part no.	Qty	Description
1	7600475267	1	Decal, Kongskilde - White 4" x 30"
2	600475237	4	Decal Kongskilde - White 3" x 20"
3	600475039	2	Decal, Wing Safety
4	7600475276	1	Decal, Read Operator's Manual
5	600475170	1	Decal, Max Speed
6	76900804	2	Decal, Transport Lock
7	7600475272	2	Decal, Kongskilde K Logo - White
8	7600475270	2	Decal, Kongskilde F3500
9	600475160	1	Decal, Tipping Hazzard
10	7600475273	3	Decal, Pinch Point Warning
11	600475178	2	Strip, Red-Orange Fluorescent
12	7600475274	1	Decal, PPE Fertilizer Warning
13	600475179	2	Strip, Red Reflective
14	600475180	8	Strip, Yellow Reflective
15	7600475277	1	Decal, Hose Color Code
16	7600475280	1	Decal, Hitch Cylinder Hose Color
-	760063002	-	Kit, Complete F3500 Decal (Includes all items 1-16)

HEAVY DUTY 4 BOLT COULTER HUB & SPINDLE

Instructions:

- Install bearing cups into hub casting.
- Pack bearing cones with grease, insert inner bearing and seal.
- Slide hub onto spindle ensuring proper bearing and seal seating.
- Install outer bearing, washer and nut.
- Spin hub and fully tighten nut by hand. Tighten with wrench 1/4 turn while aligning castellated nut with hole in spindle.
- Install cotter pin.
- Place grease in dust cap and tap into place ensuring it is fully seated.

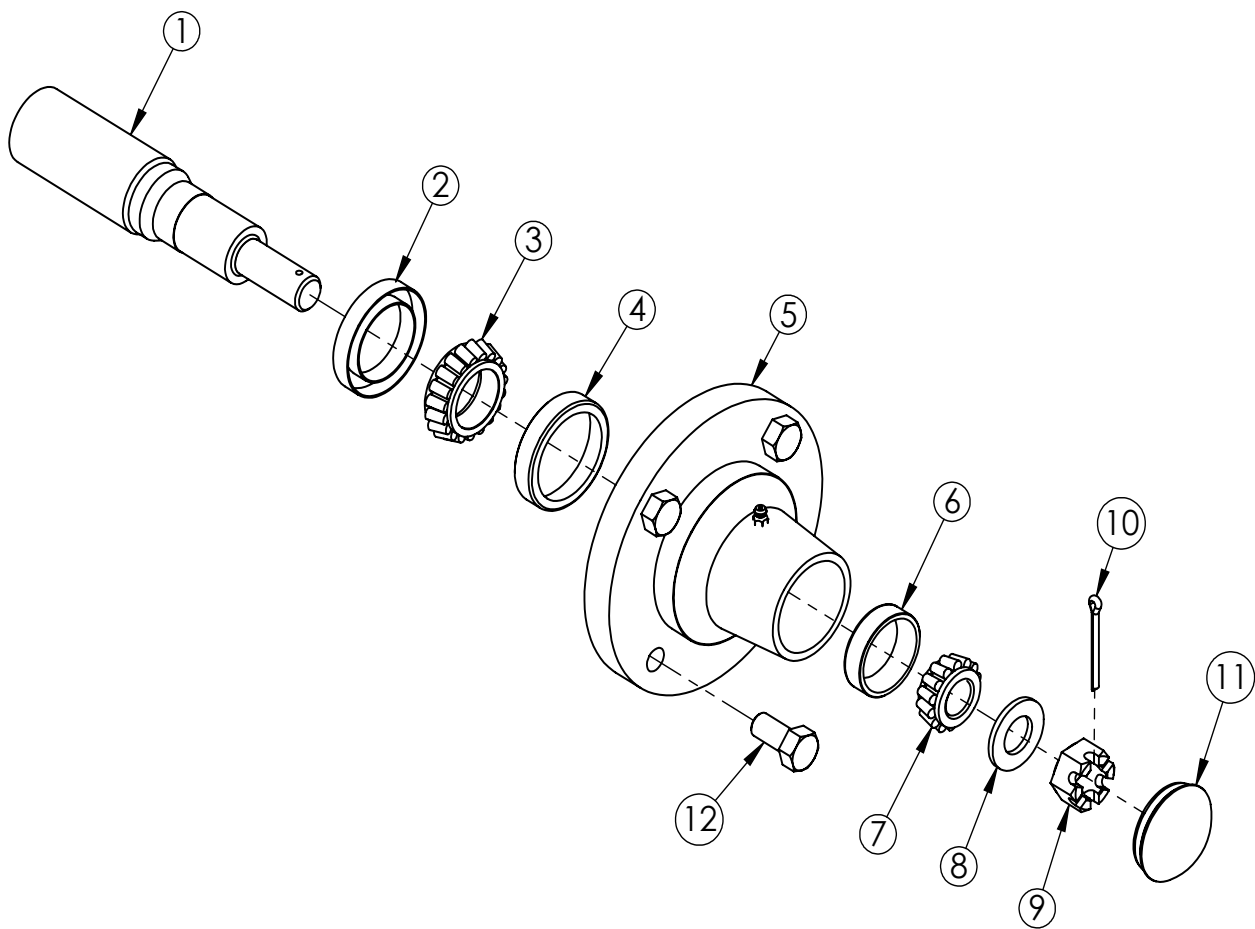


Fig.	Part no.	Qty	Description
-	76301188	-	Assy, Spindle (includes items 1, 8, 9, 10)
-	76301187	-	Assy, Hub (includes items 2-7, 11, 12)
1	76301181	1	Spindle, 1.625" x 8.0"
2	76301183	1	Seal, CR 14975
3	76301132	1	Cone, Bearing LM67048
4	76301134	1	Cup, Bearing LM67010
5	76301182	1	Hub, 4 Bolt W/ 5" Bolt Circle
6	76301184	1	Cup, Bearing LM11910
7	76301185	1	Cone, Bearing LM11949
8	76301142	1	Washer, Thrust 1.5" OD x .8125" ID
9	76301153	1	Nut, Castellated 3/4-16 (UNF)
10	76301152	1	Pin, Cotter 5/32" x 1-3/4"
11	76301186	1	Cap, Dust
12	76301150	4	Bolt, Lug 1/2"-20 x 1" (UNF)

2.25" X 14" 8 BOLT HUB & SPINDLE

Instructions:

- Install bearing cups into hub casting.
- Pack bearing cones with grease, insert inner bearing and seal.
- Slide hub onto spindle ensuring proper bearing and seal seating.
- Install outer bearing, washer and nut.
- Spin hub and fully tighten nut by hand. Tighten with wrench 1/4 turn while aligning castellated nut with hole in spindle.
- Install cotter pin.
- Place grease in dust cap and tap into place ensuring it is fully seated.

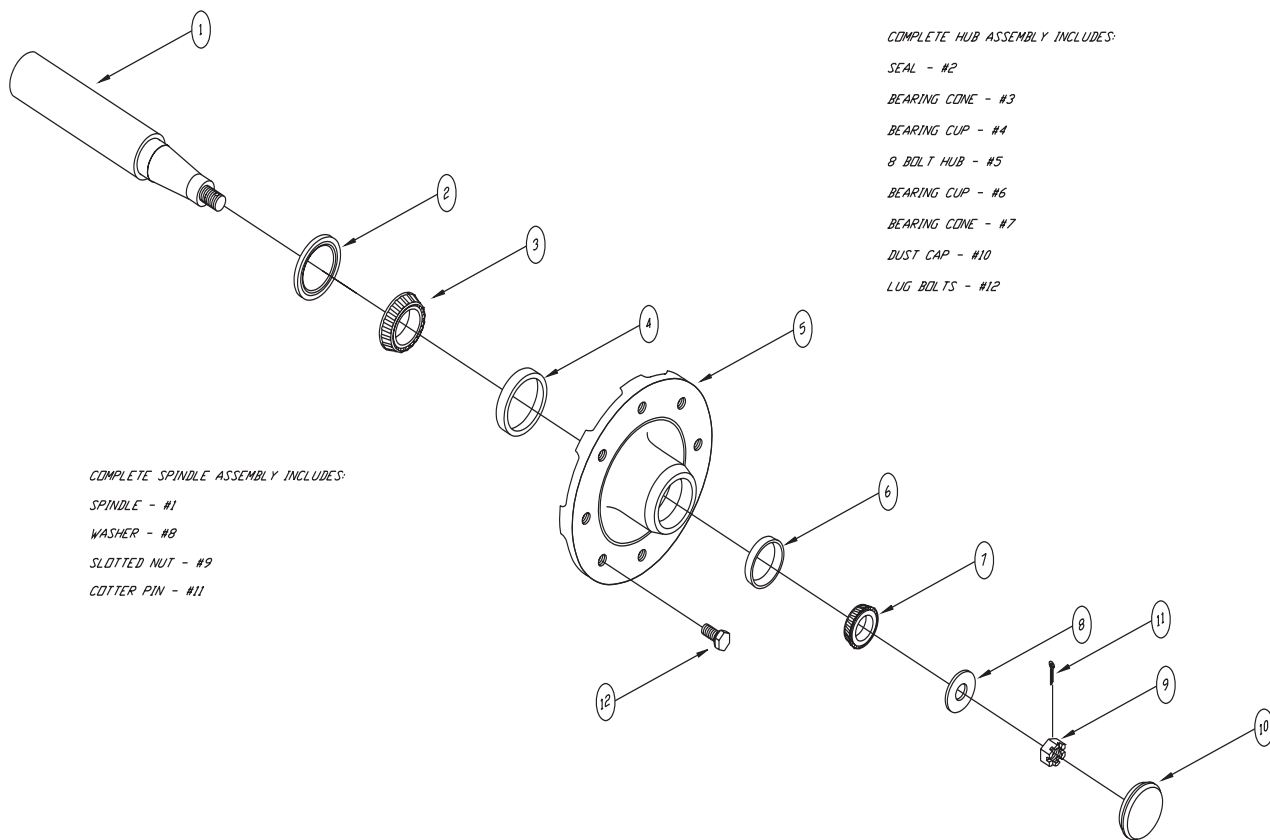


Fig.	Part no.	Qty	Description
-	76301165	-	Assy, Spindle (includes items 1, 8, 9, 11)
-	76301161	-	Assy, Hub (includes items 2-7, 10, 12)
1	76301124	1	Spindle, 2.25" x 14"
2	76301155	1	Seal, CR 22392
3	76301130	1	Cone, Bearing LM603049
4	76301136	1	Cup, Bearing LM 603011
5	76301127	1	Hub, 8 Bolt W/ 8" Bolt Circle
6	76301134	1	Cup, Bearing LM67010
7	76301132	1	Cone, Bearing LM67048
8	76301157	1	Washer, Thrust 2" OD x 13/16" ID
9	76301153	1	Nut, Slotted 3/4"-16
10	76301143	1	Cap, Dust
11	76101249	1	Pin, Cotter 5/32" x 1-3/4"
12	76301153	8	Bolt, Lug 9/16"-18 x 1-1/8"

10 BOLT HUB & SPINDLE

Instructions:

- Install bearing cups into hub casting.
- Pack bearing cones with grease, insert inner bearing and seal.
- Slide hub onto spindle ensuring proper bearing and seal seating.
- Install outer bearing, washer and nut.
- Spin hub and fully tighten nut by hand. Tighten with wrench 1/4 turn while aligning castellated nut with hole in spindle.
- Install cotter pin.
- Place grease in dust cap and install with hardware shown.

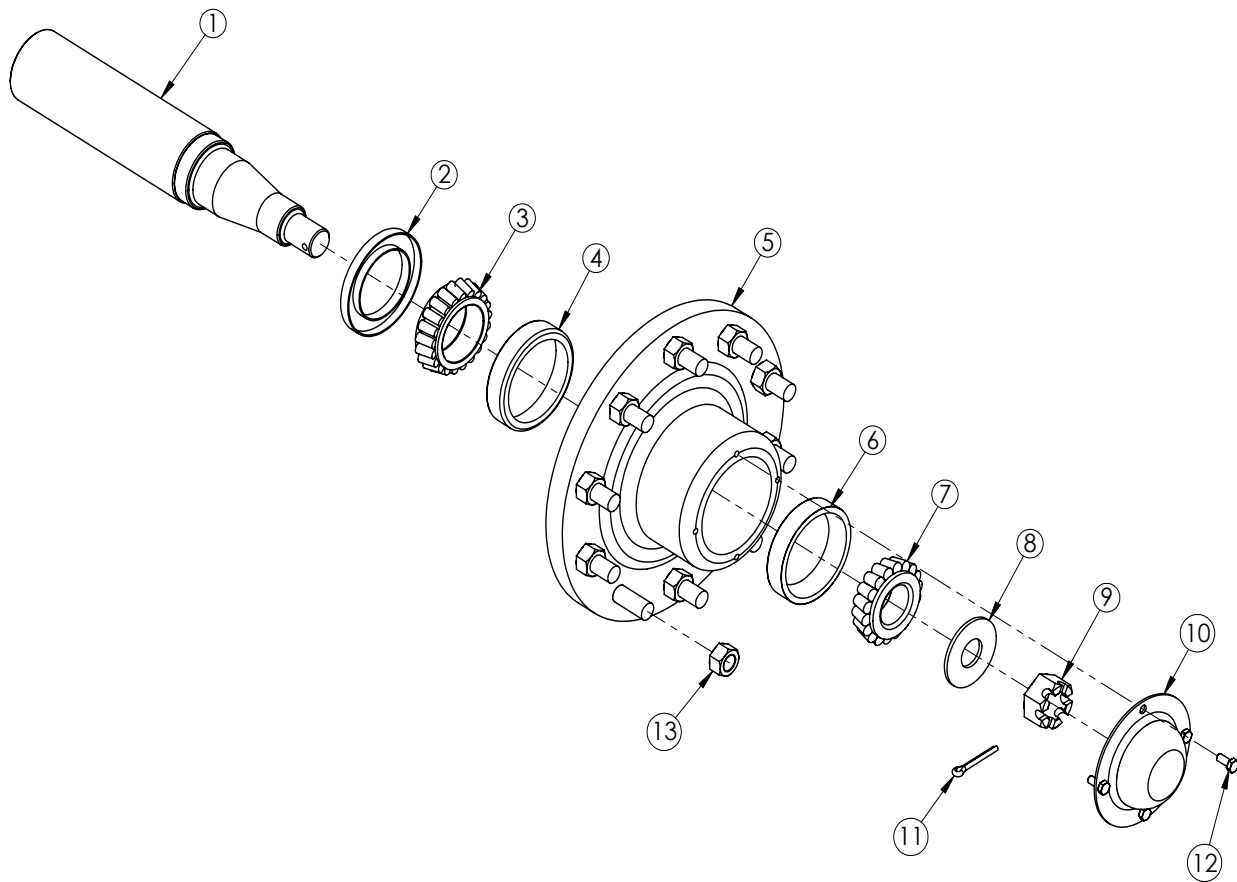


Fig.	Part no.	Qty	Description
-	76301166	-	Assy, Spindle (includes items 1, 8, 9, 11)
-	76301162	-	Assy, Hub (includes items 2-7, 10, 12, 13)
1	76301171	1	Spindle, 3-1/8" x 17-3/8"
2	76301156	1	Seal, TCM 30454SA
3	76301172	1	Cone, Bearing TAM39585
4	76301173	1	Cup, Bearing 69520
5	76301174	1	Hub, 10 Bolt
6	76301175	1	Cup, Bearing Timken 453A
7	76301176	1	Cone, Bearing Timken 460
8	76301177	1	Washer, Thrust 3" OD x 1-1/4" ID x .160"
9	76301178	1	Nut, Slotted 1-1/4-12 (UNF)
10	76301179	1	Cap, Dust
11	76101265	1	Pin, Cotter 1/4" x 2"
12	76101113	4	Bolt, Hex 5/16"-18 x 3/4"
13	76301189	10	Nut, Lug 3/4"-16

LION 2500 TL SERIES 3" X 8" CYLINDER

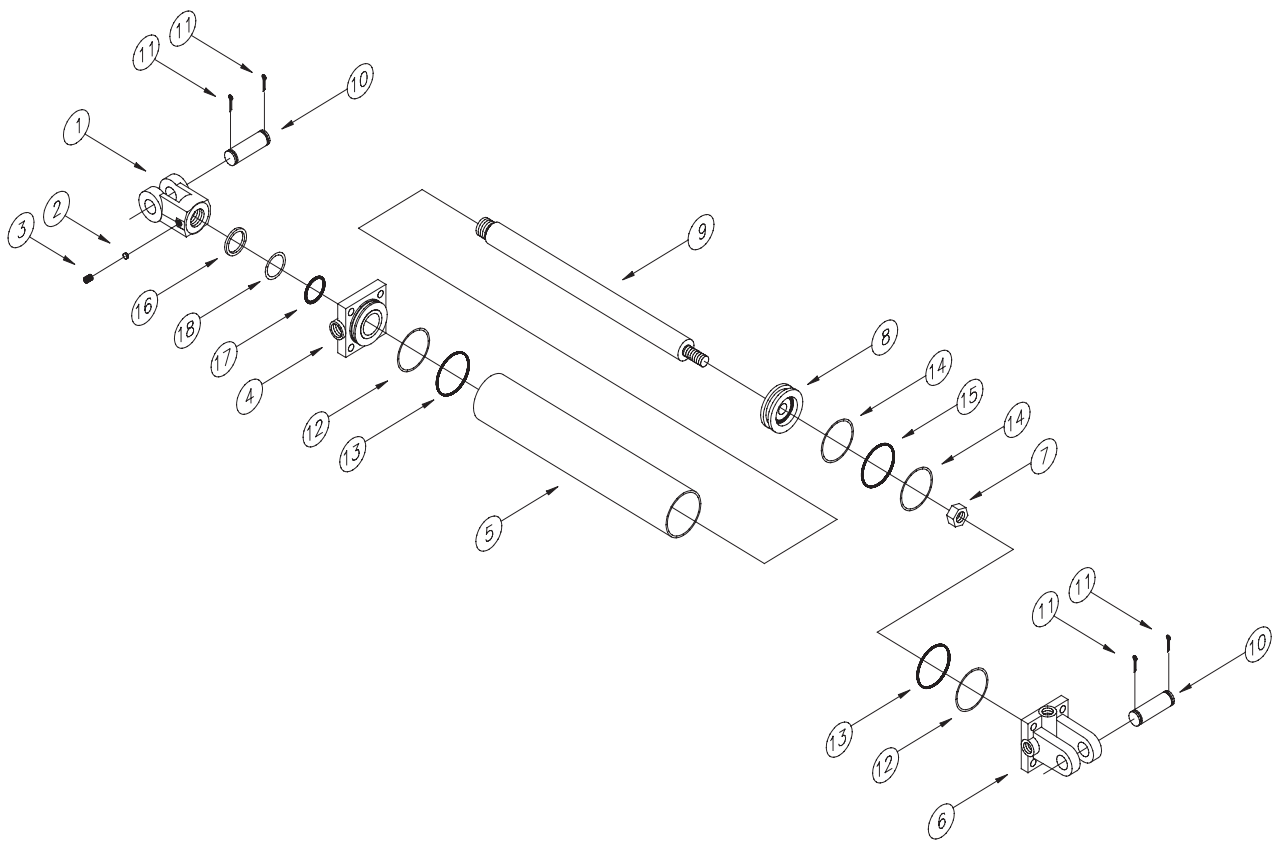


Fig.	Part no.	Qty	Description
-	76204002	-	Cylinder, 3" x 8"
1	76205100	1	Clevis, Rod - 492652
2	76205101	1	Lock, Thread - 498006
3	76205102	1	Screw, Set 3/8"-16 - 148390
4	76205103	1	Cap, Rod - 492812
5	76205163	1	Sleeve, Cylinder - 491738
6	76205105	1	Cap, Clevis - 492810
7	76205106	1	Nut, Lock 1-1/2"-12 - 129110
8	76205107	1	Piston - 492520
9	76205162	1	Rod, Cylinder - 492700
10	76602112	2	Pin, Cylinder 1" x 3-3/8"
11	600383058	4	Pin, Cotter 5/32" x 2"
12	76205017	2	O-Ring, B.U. - #40
13	76205018	2	O-Ring - #10
14	76205019	2	O-Ring, B.U. - #14
15	76205020	1	O-Ring - #12
16	76205021	1	Wiper - #13
17	76205022	1	O-Ring, Rod - #11
18	76205023	1	B.U., Rod - #24
-	76205016	-	Kit, Complete Seal

LION 2500 SERIES 4" X 16" CYLINDER

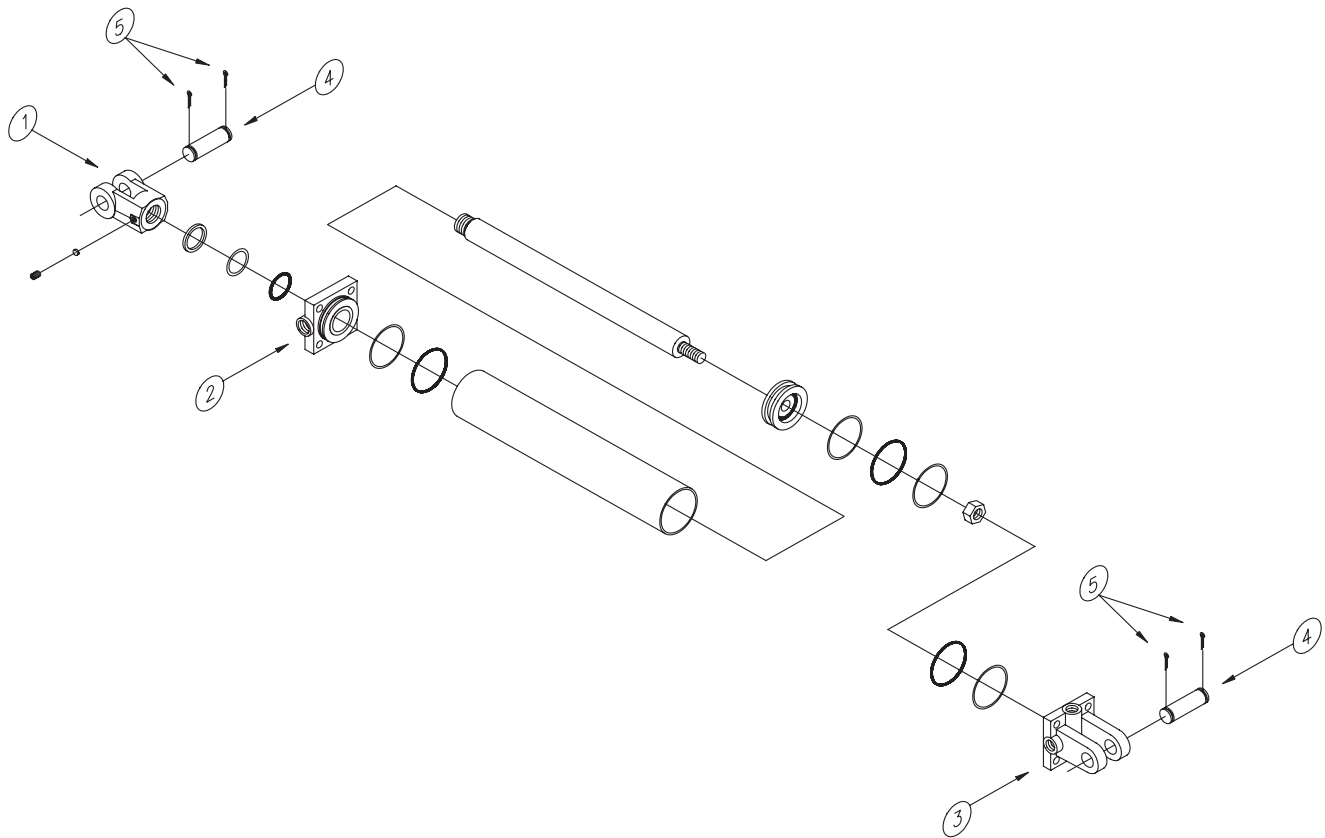


Fig.	Part no.	Qty	Description
-	76204007	-	Cylinder, 4" x 16"
1	76205100	1	Clevis, Rod - 492652
2	76205176	1	Cap, Rod
3	76205177	1	Cap, Clevis
4	76602112	2	Pin, Cylinder 1" x 3-3/8"
5	600383058	4	Pin, Cotter 5/32" x 2"
-	76205175	1	Kit, Complete Seal

3-1/4" X 10" REPHASE CYLINDER

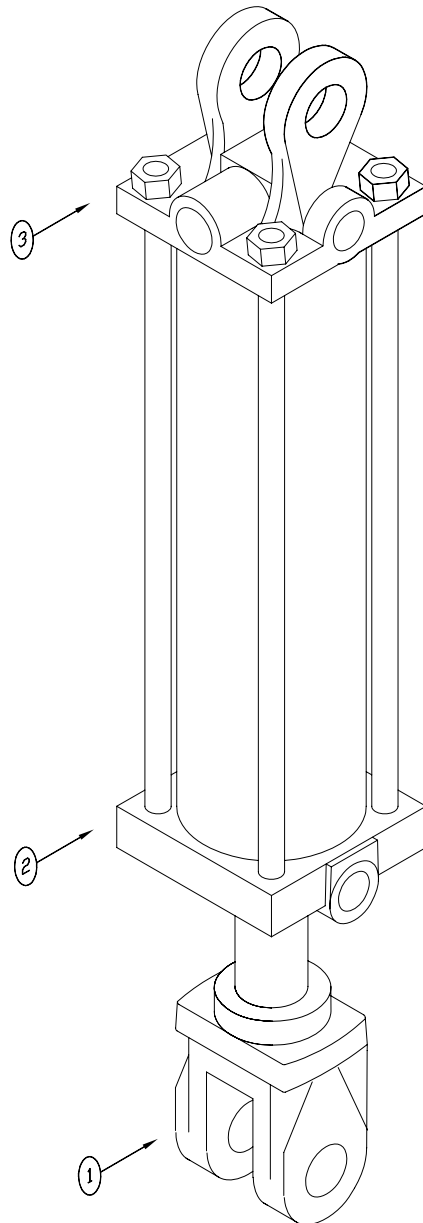


Fig.	Part no.	Qty	Description
-	76204015	-	Cylinder, Rephase 3-1/4" x 10"
1	76205181	1	Clevis, Rod
2	76205182	1	Cap, Rod
3	76205183	1	Cap, Clevis
-	76205178	1	Kit, Complete Seal

3-1/2" X 10" REPHASE CYLINDER

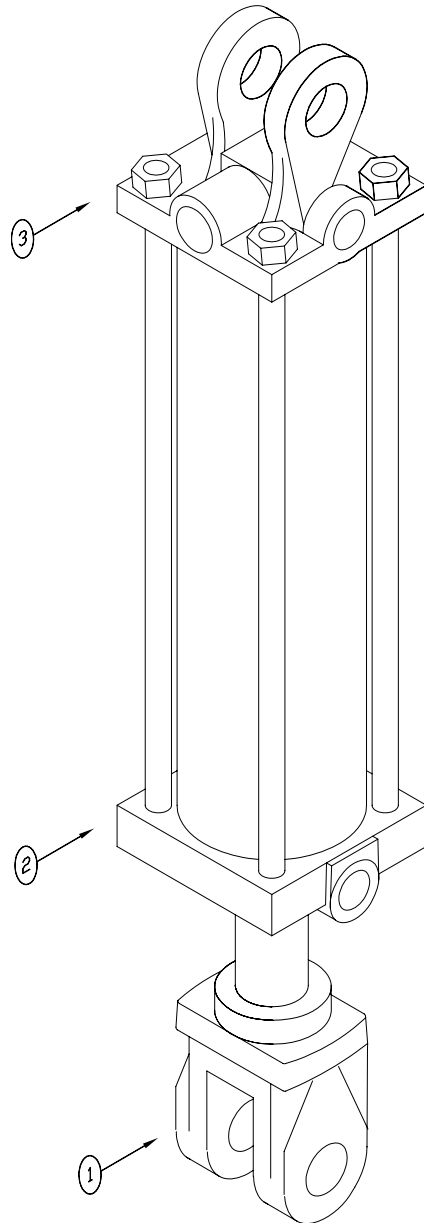


Fig.	Part no.	Qty	Description
-	76204016	-	Cylinder, Rephase 3-1/2" x 10"
1	76205184	1	Clevis, Rod
2	76205185	1	Cap, Rod
3	76205186	1	Cap, Clevis
-	76205179	1	Kit, Complete Seal

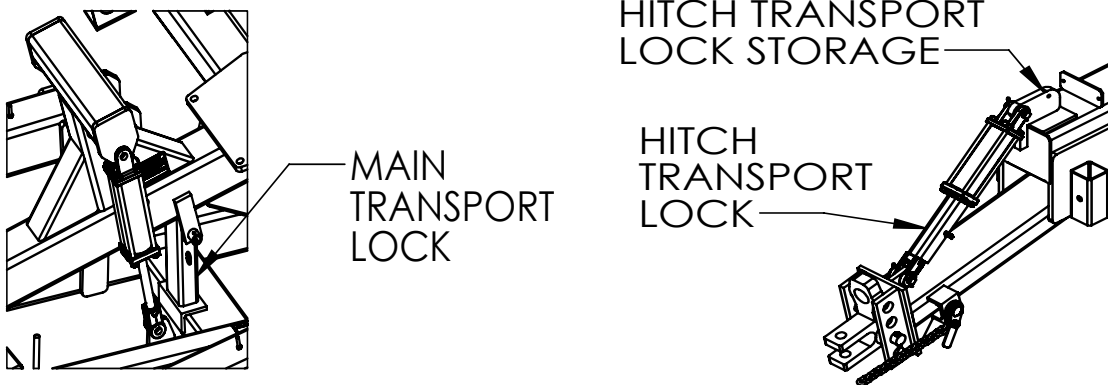
Assembly Completion

After assembly is complete, charge the lift cylinders with a tractor or hydraulic unit, fully extending and retracting the cylinders several times. Hold the hydraulic lever open at the end of the stroke to purge the air from the system.

The wing fold cylinders must be charged with oil before attempting to fold the bar. Disconnect the cylinder rod clevis from the wings. Extend and retract the cylinders several times with a tractor or hydraulic unit, holding the lever at the end of the stroke to purge the air from the system. After fold cylinders are charged, re-connect them to the wings.

See Operator's Manual for detail folding instructions. Fold bar into transport position, ensuring main transport lock falls into place. Install the transport safety lock onto the hitch cylinder.

CAUTION: ALWAYS ENSURE THE MAIN TRANSPORT LOCK FALLS INTO PLACE WHEN THE IMPLEMENT IS PLACED IN THE RAISED POSITION FOR TRANSPORT, MAINTENANCE OR STORAGE.



NOTE: Main Transport Lock Engages Automatically

CAUTION: ALWAYS ENSURE THE WINGS ARE PROPERLY SEATED ON CROSSBAR WHEN THE IMPLEMENT IS FOLDED FOR TRANSPORT, MAINTENANCE OR STORAGE.

CAUTION: Never transport the implement on public road ways without installing the transport safety chain and SMV sign.

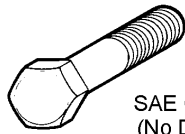
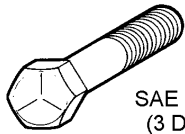
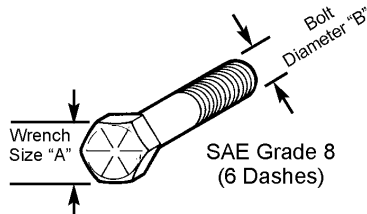
Refer to the Owners Manual for further safety information before attempting to operate or service the unit.

Final Inspection

When the machine is fully assembled, verify all nuts, bolts and other connections are secure. Be sure to read the Owners Manual before attempting to operate the unit. The Owners Manual provides important instructions and safety precautions that must be followed before attempting to hook up and move the unit after assembly.

Torque Chart

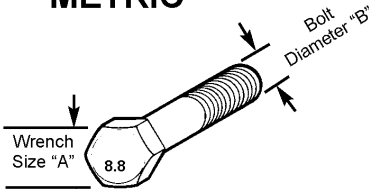
TORQUE SPECIFICATIONS

AMERICAN
Bolt Head MarkingsSAE Grade 2
(No Dashes)SAE Grade 5
(3 Dashes)SAE Grade 8
(6 Dashes)

Proper torque for American fasteners.
Recommended Torque in Foot Pounds (Newton Meters).*

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)
5/8	7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1 - 8 UNC	250 (339)	644 (873)	909 (1232)
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)
1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288 (1745)
1-11/16	1-1/8 - 12 UNF	397 (538)	890 (1206)	1444 (1957)
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)
2-1/16	1-3/8 - 12 UNF	746 (1011)	1672 (2266)	2712 (3675)
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)

METRIC



Numbers appearing on bolt heads
indicate ASTM class.

*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

Proper torque for Metric fasteners.
Recommended torque in Foot Pounds (Newton Meters).*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

Notes: _____

[illegible]

