

# 2008 40' DISC DRILL

**ASSEMBLY AND PARTS MANUAL** 



**SDD 4063** 

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### SALFORD RECOMMENDED TORQUE VALUES







BOLT SIZE	GRA	DE 2	GRA	DE 5	GRADE 8	
BOLT SIZE	ft-lbs	Nm	ft-lbs	Nm	ft-lbs	Nm
1/2"NC	50	68	75	102	105	142
5/8"NC	90	122	150	203	210	285
3/4"NC	160	217	270	366	375	508
7/8"NC	145	197	395	536	610	827
1"NC	210	285	590	800	910	1234

**NOTES:** These recommended torque values are applicable when applied to the nut only. These recommended torque values are approximate only. The torque-tension relationship is affected by lubrication, surface finish, thread fit, plating, lock-washers, etc.

**DO NOT** use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

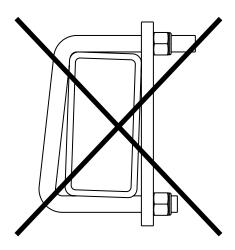
Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Fasteners should be replaced with the same or higher grade. If higher-grade fasteners are used, these should only be tightened to the strength of the original.

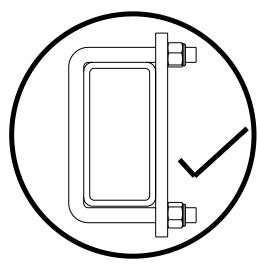
Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

### WARNING

Do not tighten one side of the u-bolt before the other side.



Both sides of the u-bolt must be tightened equally.



### **GENERAL SAFETY & PRECAUTIONS**



Read Operators manual before using.

Ensure operator is fully familiar with all operational features and safety items of the implement.



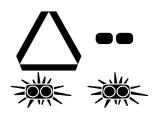
⚠ Observe all safety and warning decals and practice safe operation of equipment, this will help prevent accidents and save lives, Safety is first.



A Keep area free from bystanders while hooking to tractor, failure to do so may result in fatal injury. Hitch machine securely with draw pin and safety locking pin and safety chain, failure to do so may cause machine to disconnect from tractor and cause fatal injury.



⚠ Ensure safety lighting is operational, slow moving vehicle sign is installed, slow moving objects are a hazard on the roads, they are sometimes hard to see, especialy at night.



⚠ Use all safety locks and safety equipment when in transport when transporting equipment on public roadways, watch for overhead wires or objects, link tractor brake pedals, do not exceed 20 mph, if road is rough keep speed to minimum, speed may cause machinery to start swerving or tip over.



Adapt operating speed to ground conditions, never assume that you can make a turn at full speed, always use turn signals and slow down, when going down hills shift down to a lower gear.



Always lift machinery out of ground before turning

▲ Lower all equipment on to ground before leaving tractor

Always lock parking stand in place before unhitching from tractor

▲ Exercise extreme caution when changing wearing parts!

⚠ When working on the implement, be sure it is supported with safety stands to prevent any part of the machine from falling on to the operator.

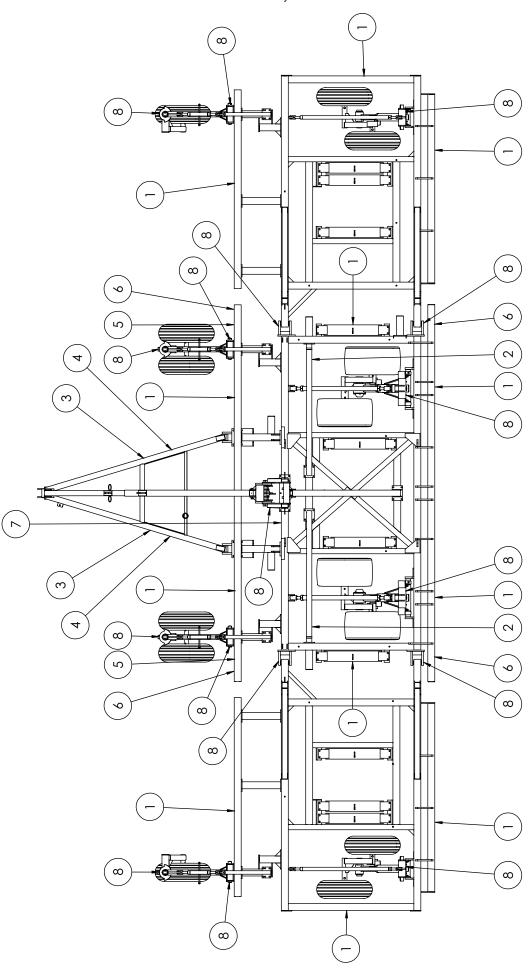


Absolutely no riders allowed at any time, rider can fall off the implement and get seriously injured or killed.



⚠ Do not dismount tractor when tractor is still running, always engage parking brake before dismounting tractor.





2008 40' AIR DRILL SAFETY DECAL INSTALLATION

### SAFETY DECAL INSTALLATION



(1) "SALFORD" – large GD100 Place on frame tubes as shown



(2) "SALFORD" – small GD101 Both sides of wing rests



(3) "www.salfordmachine.com" GD102 Place on tongue



(4) "MADE IN CANADA" GD1209
On tongue beside www.salford



(5) "WARNING" GD110

Main frame front beam at corners



(6) "DANGER" GD111
All four corners of main frame



(7) "ATTENTION" GD112
On main frame beside serial number



(8) Grease 10 hours GD10810 Place near grease fittings in visible spot

# Place wing lock pins through lugs when wings are raised to hold wings in raised position for transport or storage -Place wing lock pins in holders when not in use Wing lock pins at front only 4 **AIR DRILL WING INSTALLATION** 4 $\infty$ 0 9 9 က Note: cylinder has 2 ports at rod end down as shown, this will eliminate breakage of the hydraulic fitting. 凉 of cylinder, Install cylinder so that ports at rod end of cylinder face

#### AIR DRILL WING INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	HS3536	3 1/2" BORE x 36" STROKE HYD. CYLINDER
2	4	GP1600314H04	PIN 1" DIA. x 3 1/4" LG. WITH HEAD
3	4	GP1600512A05	PIN 1" DIA. x 5 1/2" LG 2 HOLES
4	8	BF16S	1" SAE WASHER
5	4	BSC0415	1/4" x 1 1/2" COTTER PIN
6	8	BSC0515	5/16" x 1 1/2" COTTER PIN
7	2	GP1600614C03	1" x 6 1/4" ORANGE HITCH PIN
8	4	GPSPEC24080	1 1/2" x 8 1/4" LG. WING HINGE PIN
9	4	BL10	5/8" LOCKWASHER
10	4	B1015	5/8 X 1 1/2" PLATED BOLT
11	4	GF1610	1/8" NPT GREASE FITTING

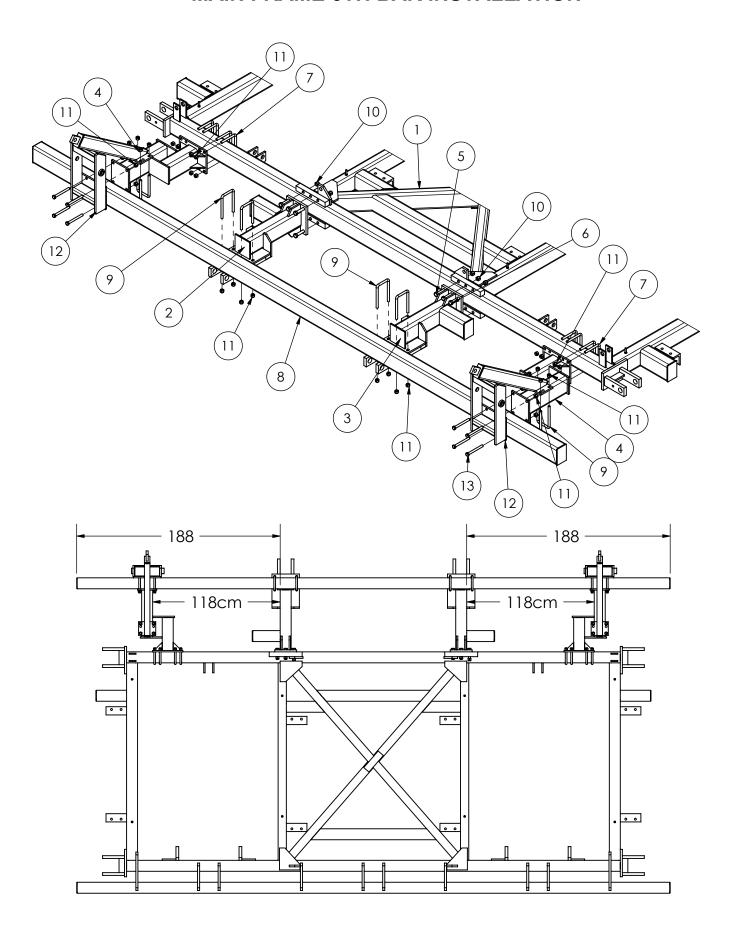
- 1. Position main frame on stands. Use adequately strong stands or heavy wood blocks to support the main frame about 36" above the floor of the assembly area. Make sure the frame is stable, secure and reasonably level.
- 2. Install grease fittings (11) into wings at hinge points.
- 3. Install LH & RH wings. Lubricate the hinge pins (8) with grease and install as shown. Retain the pin to the frame with a 5/8 x1 1/2" hex bolt (10) and lock washer (9).
- 4. Attach barrel ends of cylinders to lugs on main frame with 1" x 3 1/4" head pins (2) and 1/4" x 1 1/2" cotter pins (5). Install cylinders so that the ports on the rod end are facing down.



Connect hoses and charge the wing cylinders with fluid following the procedure in the wing fold hydraulics section of this manual before connecting rod ends of the cylinders.

- 5. Attach rod ends of cylinders to lugs on wings with 1"  $\times$  5 1/2" pins (3), 1" SAE washers (4), and 5/16"  $\times$  1 1/2" cotter pins (6). Washers go between lugs and cotter pins.
- 6. Place wing lock pin (7) in holders provided under wing cylinder lugs and retain pin with included #9 hairpin. Wing lock pins are under the front two wing cylinders only.
- 7. Apply grease to all fittings.

# **MAIN FRAME 5TH BAR INSTALLATION**

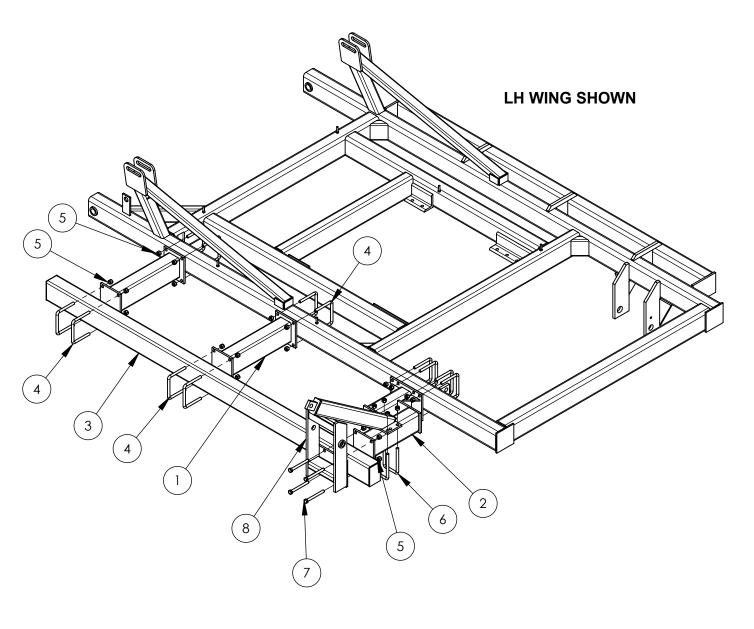


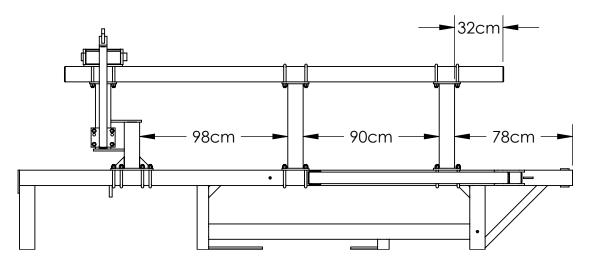
### MAIN FRAME 5TH BAR INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00186	AIR DRILL MAINFRAME
2	1	T00187R	RH AIR DRILL TONGUE MOUNT
3	1	T00187L	LH AIR DRILL TONGUE MOUNT
4	2	T00410	AIR DRILL OFFSET 23" EXTENSION
5	2	B1240	3/4"NC x 4" LG. HEX BOLT GR. 5
6	10	B1235	3/4 x 3 1/2" GR.5 HEX BOLT PLATED
7	8	BU1061	U-BOLT 5/8" x 6" x 5 1/2"
8	1	UC40605216	CAPPED TUBE 4" x 6" x 5/16"W x 216" LG.
9	8	BU1046	U-BOLT 5/8" x 4" x 7 1/2" LG.
10	12	BN12L	3/4" NC NYLOCK NUT
11	40	BN10L	5/8" NYLOCK NUT NC
12	2	T00415	BOGEY WHEEL TOWER
13	8	B1060	5/8"NC x 6" LG. HEX BOLT

- 1. Locate tongue mount on mainframe as shown in layout making sure the proper side is installed as shown in layout, retain with 5/8 x 3 1/2" and 5/8 x 4" bolts and 5/8" locknuts and tighten according to torque specifications sheet in front of book.
- 2. Install both 23" lg offset extensions as shown making sure they are oriented properly, retain with  $5/8 \times 6 \times 5 \times 1/2$ " u-bolts and 5/8" locknuts, do not tighten at this time, measure carefully to position the extension exactly in the location shown in picture, tighten both extensions on the end of the mainframe.
- 3. Position mainframe 5th bar tube capped 216" lg on tongue mounts and center on machine, retain with 5/8 x 4 x 7 1/2" lg u-bolts on tongue mounts and 5/8 x 6 x 5 1/2" u-bolts on offset extensions.
- 4. On outer most extension attach caster wheel tower (12) and attach to front of extension with hex bolt 5/8" x 6" lg (13) and 5/8" lock nuts (11). install 5/8" x 4" x 7 1/2" ubolts (9) and 5/8" lock nuts, tighten all remaining loose nuts and bolts.

### WING FIFTH BAR INSTALLATION





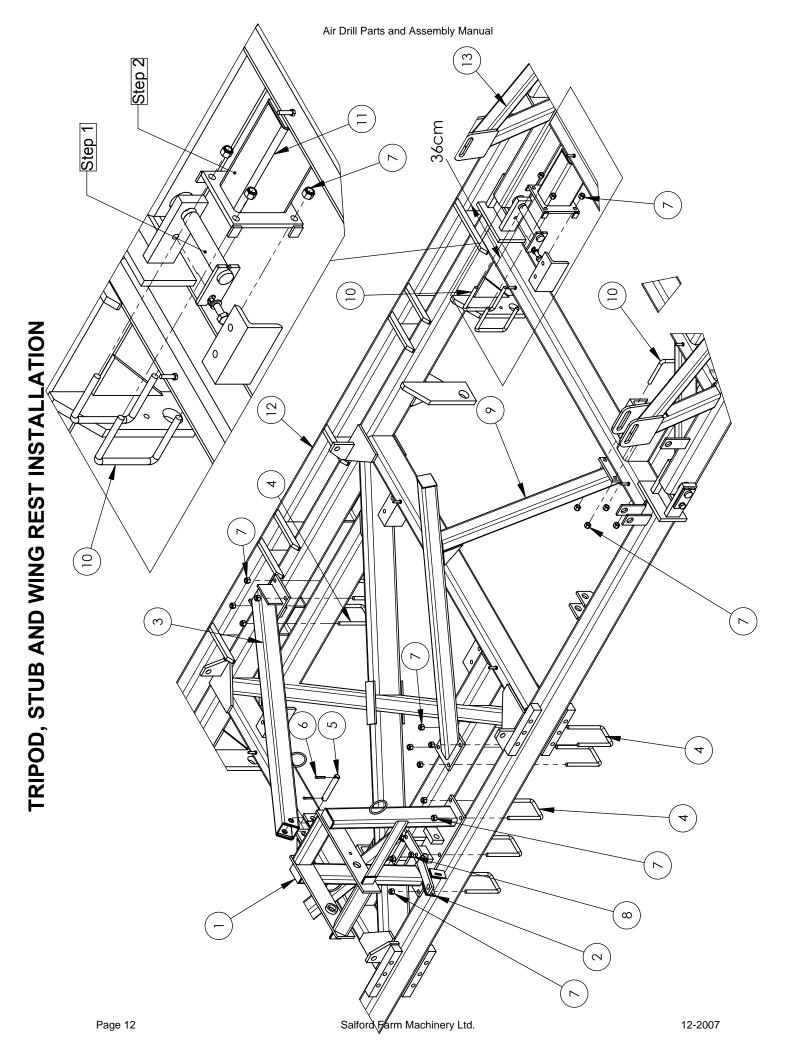
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### WING FIFTH BAR INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	T00075	23" EXTENSION
2	1	T00410	AIR DRILL OFFSET 23" EXTENSION
3	1	UC40604114	CAPPED TUBE 4" x 6" x 1/4"W x 290 LG.
4	12	BU1061	U-BOLT 5/8" x 6" x 5 1/2"
5	32	BN10L	5/8" NYLOCK NUT NC
6	2	BU1046	U-BOLT 5/8" x 4" x 7 1/2" LG.
7	4	B1060	5/8"NC x 6" LG. HEX BOLT
8	1	T00415	BOGEY WHEEL TOWER

Note: quantities shown are for fifth bar installation on one side only. Double quantities for complete wing 5th bar installation.

- 1. Install fifth bar extensions (1 & 2) on wings at locations shown, Retain with wide u-bolt (4) and 5/8" lock nuts (5). Do not tighten bolts at this time.
- 2. Attach wing fifth bar tube (3) to extensions with wide u-bolts (4) and 5/8" lock nuts (5). Verify locations of extensions and fifth bars, then tighten all bolts.
- 3. On outer most extension attach caster wheel tower (8) and attach to front of extension with hex bolt (7) and 5/8" lock nuts (5). Attach to middle of extension with narrow u-bolts (6) and 5/8" lock nuts.



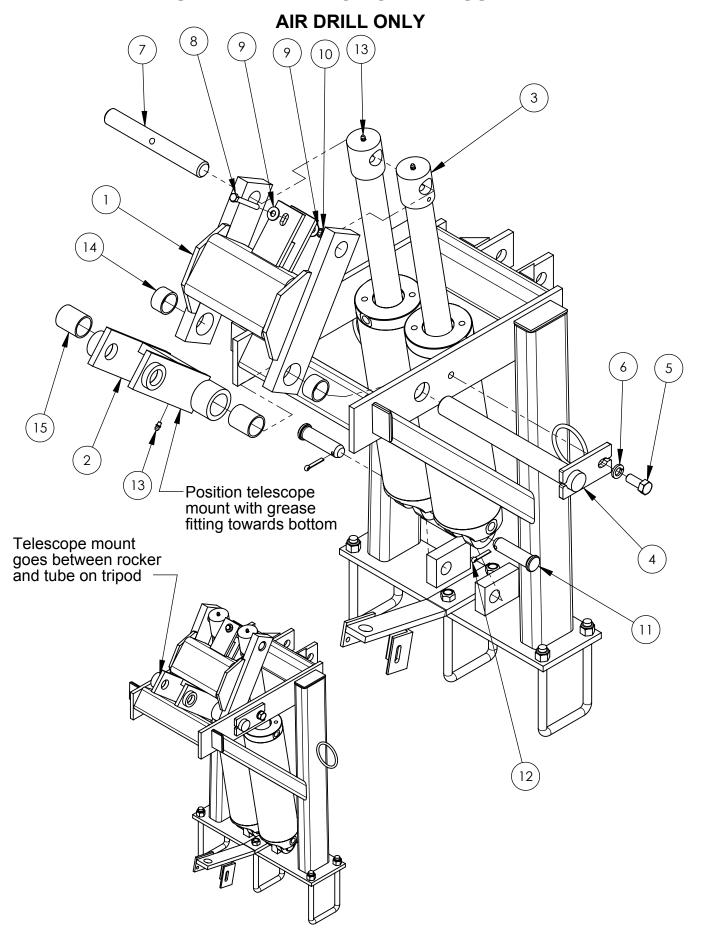
### TRIPOD, STUB AND WING REST INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00426	2007 AIR SEEDER TRIPOD TOWER
2	1	T00044	AIR SEEDER POPPET VALVE BRACKET
3	1	T00170	580 TRIPOD BRACE
4	9	BU1046	U-BOLT 5/8" x 4" x 7 1/2" LG.
5	1	GP1600614A05	PIN 1" DIA. x 6 1/4" LG 2 HOLES
6	2	BSC0520	5/16" x 2" COTTER PIN
7	32	BN10L	5/8" NYLOCK NUT NC
8	2	BN10S	5/8" NC STOVER LOCK NUT
9	2	T00417	Air drill wing rest
10	8	BU1061	U-BOLT 5/8" x 6" x 5 1/2"
11	2	T00413	4 x 6 X 11" BOLT ON STUB
12	1	T00186	AIR DRILL MAINFRAME
13	1	T00188L	AIR DRILL 40' WING

- 1. Mount tripod tower (1) to middle of front beam of main frame. Attach with 5/8" x 4" x 7 1/2" u-bolts (4) and 5/8" lock nuts (7) in outer holes. In middle set of holes, position depth control bracket (2) over holes as shown, and retain with 5/8" x 4" x 7 1/2" u-bolt (4) and 5/8" stover lock nuts (7). **NOTE:** Do not tighten bolts until tripod brace is installed.
- 2. Attach tripod brace (3) to tower with 1" x 6 1/4" pin (5) and 5/16" x 2" cotter pins (6). Attach tripod brace to main frame with 5/8" x 4" x 7 1/2" u-bolt (4) and 5/8" lock nuts (7).
- 3. Make sure tripod tower and brace are centered on frame, then tighten all bolts.
- 4. Mount wing rests (9) to main frame in line with 2nd tube. Bolt to middle tube with 5/8" x 4" x 7 1/2" u-bolts (4) and 5/8" lock nuts. Bolt to outer tubes with 5/8" x 6" x 5 1/2" u-bolts (10) and 5/8" lock nuts.
- 5. Mount 11" stubs (11) to sides of main frame, using 5/8" x 6" x 5 1/2" u-bolts (10) and 5/8" locknuts. Mount stub 36 cm from rear tube on main frame. **IMPORTANT**: Attach wing to main frame with 1 1/2" x 8" flatbar pin before attaching stubs.

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# Air Drill Parts and Assembly Manual SELF LEVELLING TOWER ASSEMBLY



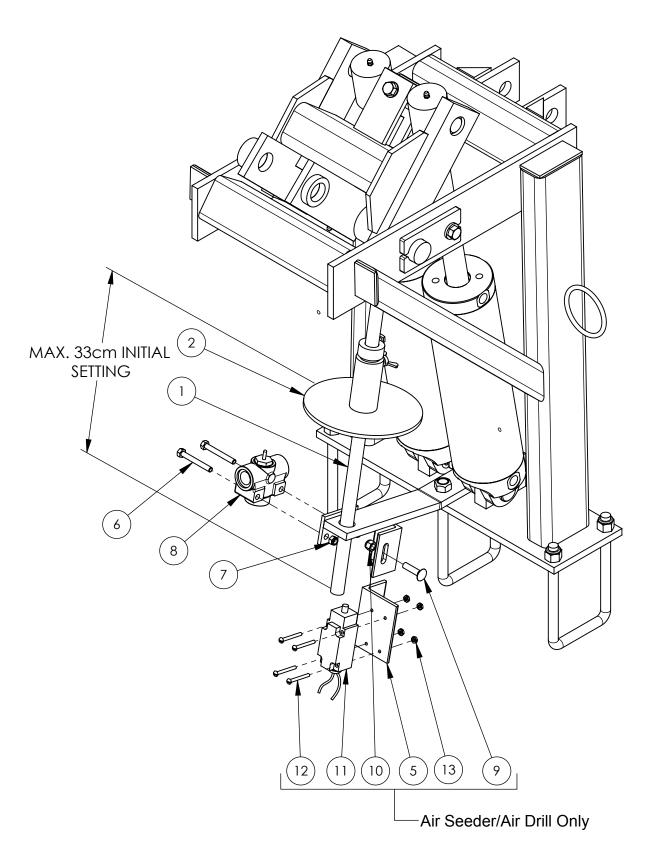
# SELF LEVELLING TOWER ASSEMBLY AIR DRILL ONLY

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00436	2007 AIR DRILL ROCKER WELDMENT
2	1	T00428	2007 AIR SEEDER TELESCOPE MOUNT BRCT.
3	2	HSR4512-1	4 1/2" BORE x 12" STROKE HYD. CYLINDER
4	1	GPH2401312F	1 1/2" x 13 7/8" LG. AXLE PIN - HARDENED
5	1	B1015	5/8 X 1 1/2" PLATED BOLT
6	1	BL10	5/8" LOCKWASHER
7	1	GPSPEC200934	Ø1 1/4" x 9 3/4" CENTRE HOLE PIN
8	1	B0630	3/8"NC x 3" HEX BOLT
9	2	BF06	3/8" FLATWASHER
10	1	BN06L	3/8"-16NC LOCK NUT
11	2	GP1600312H04	PIN 1" DIA. x 3 1/2" LG. WITH HEAD
12	2	BSC0415	1/4" x 1 1/2" COTTER PIN
13	3	GF641	1/4"-28NF GREASE FITTING
14	2	GBB175150100	1 3/4" x 1 1/2" x 1" LG. HARD BUSHING
15	2	GBB175150200	1 3/4" x 1 1/2" x 2" LG. HARD BUSHING

- 1. Line up telescope mount (2) and rocker (1) with holes on tripod. Insert 1 1/2" x 13 1/2" flatbar pin (4) through tripod, rocker, and telescope mount. Retain pin with 5/8" x 1 1/2" hex bolt (5) and 5/8" lockwasher (6). Position the telescope mount so the grease fitting is at the bottom.
- 2. Attach base end of 4 1/2" bore x 12" stroke hydraulic cylinders (3) to tripod with 1" x 3 1/2" head pin (11) and 1/4" x 1 1/2" cotter pin (12). Note: cylinder ports should point towards wings of machine.
- 3. Attach cylinder rods to rocker with 1 1/4" x 9 3/4" centre hole pin (7). Retain pin to rocker with 3/8" x 3" hex bolt (8), 3/8" flatwashers (9) top and bottom, and 3/8" locknut (10).
- 4. Insert 1/8" NPT grease fittings (13) into telescope mount and 1/4"-28 grease fittings (14) into cyinder rod ends if not already done. Grease all fittings.

Note: replaceable bushings (15 & 16) are preinstalled from the factory.

### 580/AIR SEEDER/AIR DRILL DEPTH CONTROL INSTALLATION



#### 580/AIR SEEDER/AIR DRILL DEPTH CONTROL INSTALLATION

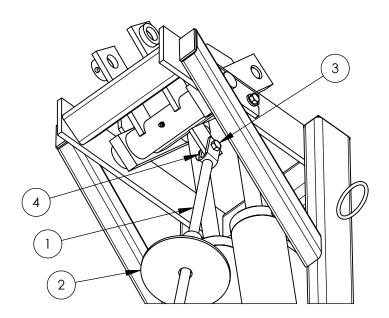
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00047	AIR SEEDER DEPTH CONTROL ROD - 28"
2	1	C1008	DETENT ADJUSTABLE STOP
3	1	B0820	1/2"NC x 2" LG. HEX BOLT
4	1	BN08L	1/2" NYLOCK NUT NC
5	1	T00172B	580 CLUTCH SWITCH MOUNT 1 OF 2
6	2	B0525	5/16"NC x 2 1/2" HEX BOLT
7	2	BN05L	5/16" LOCK NUT
8	1	HPMSC10	STROKE CONTROL VALVE
9	1	BC0615	3/8" x 1 1/2" CARRAIGE BOLT GR.2 PLATED
10	1	BN06L	3/8"-16NC LOCK NUT
11	1	T00119	LIMIT SWITCH LS45M11B11
12	4	B0217	#10-24 x 1 3/4" MACHINE SCREW
13	4	BN02	#10-24 HEX NUT

1. Insert depth control rod (1) through adjustable stop disc (2). Insert assembly through hole in depth control mount.



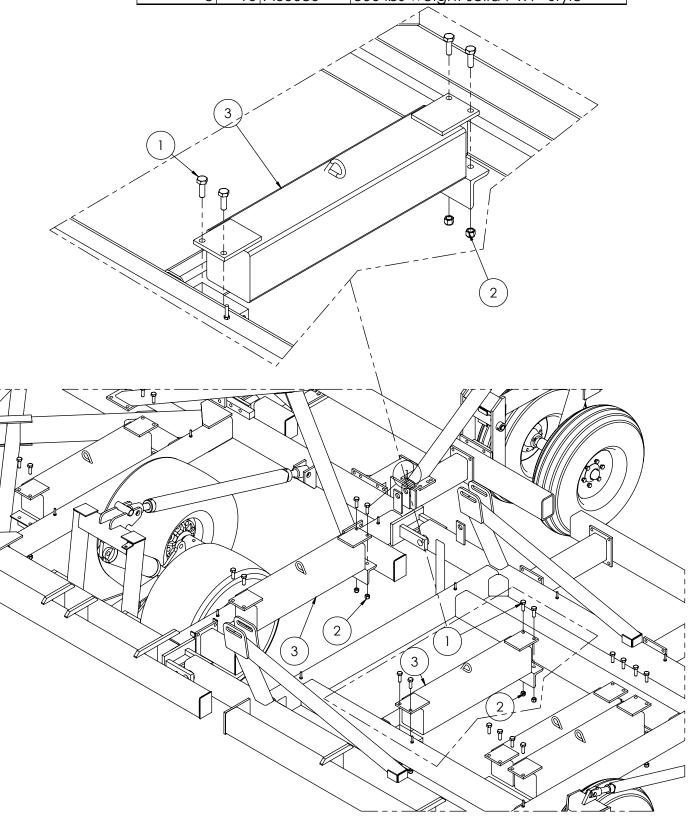
Do not put stop disc more than 33cm from the end of the depth control rod. If it is too high it can damage hoses or contact the cylinder and bend the depth control rod. Final position can be set when performing final field set up adjustments.

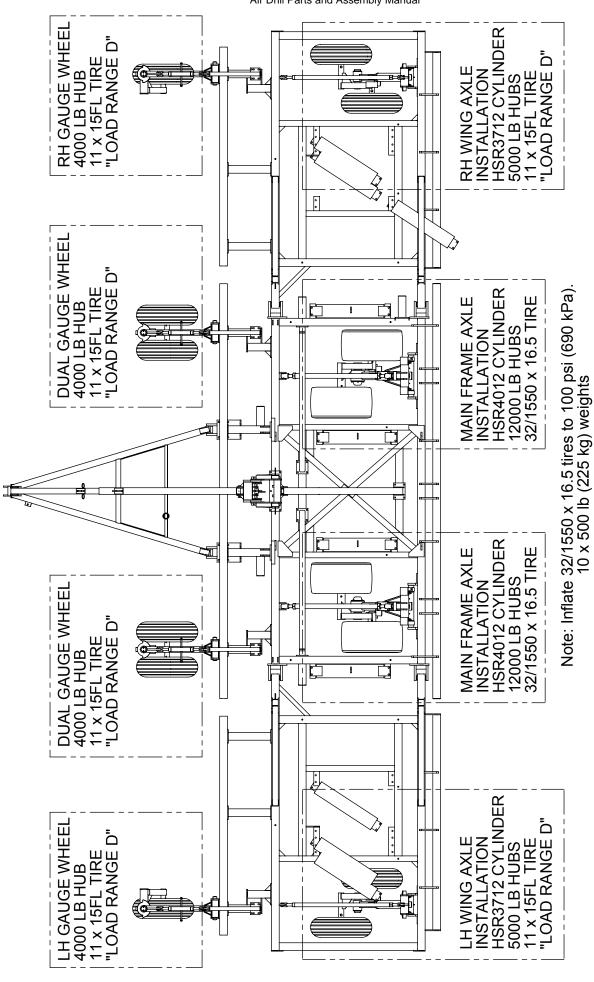
- 2. Attach depth control rod to lug on bottom of rocker with 1/2" x 2" hex bolt (3) and 1/2" locknut (4).
- 3. Mount stroke control valve (8) to depth control bracket with 5/16" x 2 1/2" hex bolts (6) and 5/16" locknuts (7). Plunger on valve should point upwards.
- 4. Attach limit switch mount (5) to depth control bracket with 3/8" x 1 1/2" carriage bolt (9) and 3/8" locknut (10). Mount limit switch (11) to bracket with #10-24 x 1 3/4" machine screws (12) and #10-24 hex nuts (13). Adjust limit switch to same height as stroke control valve.



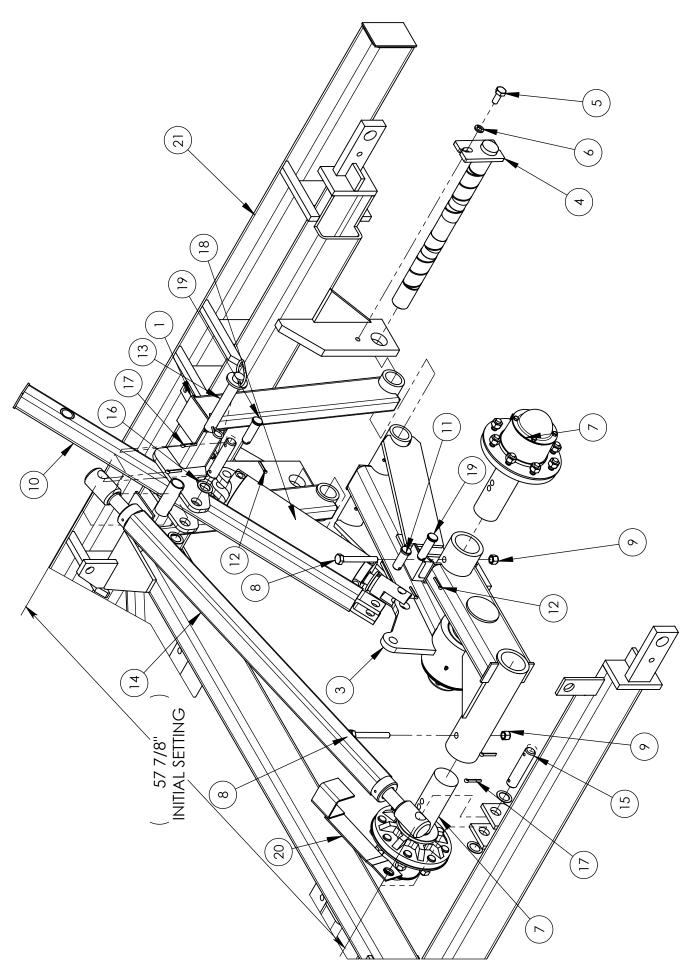
# **WEIGHT KIT INSTALLATION**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	40	B1020	5/8"NC x 2" HEX BOLT
2	40	BN10L	5/8" NYLOCK NUT NC
3	10	A60080	500 lbs weight solid 7 x 7" style





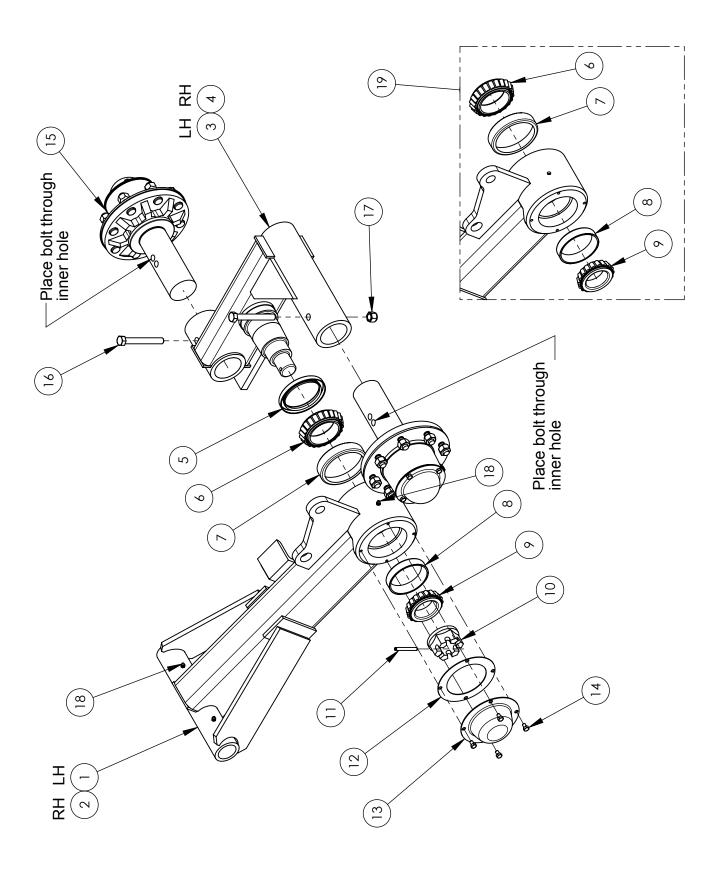
# 2008 40' AIR DRILL WHEEL AND AXLE LAYOUT WEIGHT KIT LAYOUT



#### AIR DRILL MAINFRAME AXLE INSTALLATION

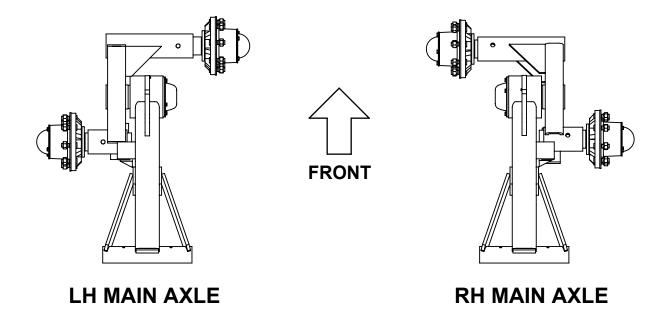
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	C00060R	AIR DRILL AXLE TOWER
2	1	C00079R	16000 LB RH AIR DRILL AXLE
3	1	C00079L	16000 LB LH AIR DRILL AXLE
4	2	GPSPEC32025	2" x 25" LG. AXLE PIN
5	2	B1015	5/8"NC x 1 1/2" HEX BOLT
6	2	BL10	5/8" LOCKWASHER
7	4	GW12000A15	12000 LB HUB AND 15" SPINDLE ASSEMBLY
8	4	B1050	5/8 x 5" HEX BOLT
9	4	BN10L	5/8" NYLOCK NUT NC
10	2	A60043	AIR DRILL TRANSPORT LOCK
11	2	GP1600258H04	PIN 1" DIA. x 2 5/8" LG. WITH HEAD
12	6	BSC0415	1/4" x 1 1/2" COTTER PIN
13	2	GP20007C04	1 1/4" x 7" ZINC PLATED PIN
14	2	A60028	TURNBUCKLE 2 1/2" x 45"
15	4	GP2000512A05	1 1/4" x 5 1/2" PIN - 2 HOLES
16	8	GM30	1 1/4" MACHINE BUSHING
17	8	BSC0520	5/16" x 2" COTTER PIN
18	2	HSR4012	4" BORE x 12" STROKE HYD. CYLINDER
19	4	GP1600314H04	PIN 1" DIA. x 3 1/4" LG. WITH HEAD
20	2	C10716	570 MAINFRAME TURNBUCKLE LOCK

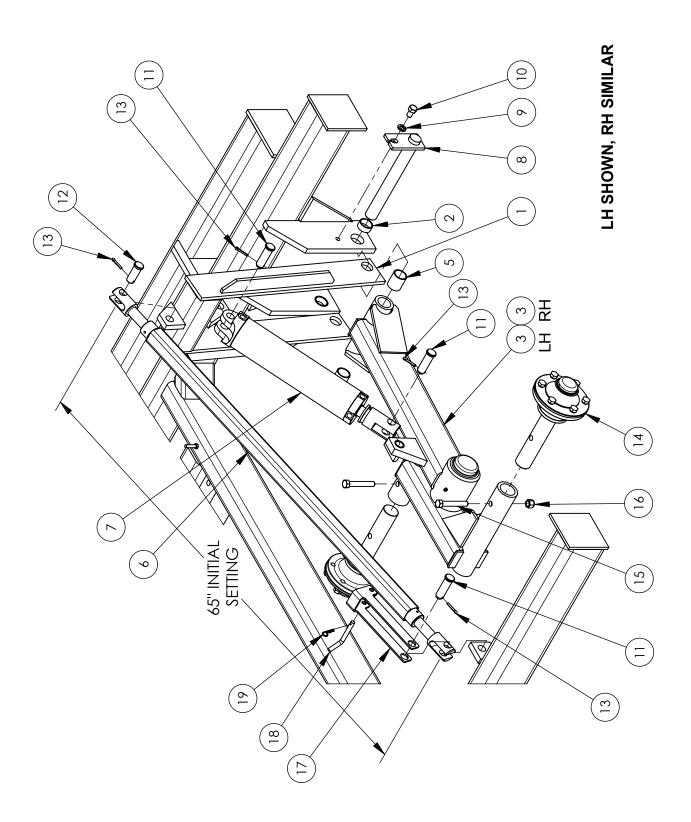
- 1. Align axle tower (1), upright of tandem axle assembly (2, 3) with lugs on main frame. Insert 2" x 25" flatbar pin (4) through tower and axle. Retain pin with 5/8" x 1 1/2" hex bolt (5) and 5/8" lockwasher (6). Note orientation of lugs on axle towers.
- 2. Set mainframe turnbuckle (14) to 68" long pin to pin. Place turnbuckle lock (20) over turnbuckle and attach turnbuckle to frame with 1 1/4" x 5 1/2" pin (15), 1 1/4" machine bushings (16), and 5/16" x 2" cotter pins (17). Attach turnbuckle to axle tower with 1 1/4" x 5 1/2" pin (15), 1 1/4" machine bushings (16), and 5/16" x 2" cotter pins (17). Note: bushings go between plates and cotter pins.
- 3. Attach 4" bore x 12" stroke hydraulic cylinder (19) to axle tower and axle beam with 1"  $\times$  3 1/4" head pins (20) and 1/4"  $\times$  1 1/2" cotter pins (13). Connect hoses and charge lift axle cylinders with fluid following the procedure in the hydraulics installation before connecting rod ends of the cylinders and the transport locks.
- 4. Slide transport lock (10) thru opening between plates and pin on axle tower. Attach transport lock to axle cyl lug with 1"  $\times$  2 5/8" head pin (11) and 1/4"  $\times$  1 1/2" cotter pin (12). Insert 1 1/4"  $\times$  7" transport lock pin (13) into tube on transport lock and retain with included hairpin.
- 5. Install 12000 lb hub and spindle assemblies (7) into walking axles and retain with 5/8" x 5" hex bolts (8) and 5/8" locknuts (9).
- Apply grease to all fittings.



### **AIR DRILL MAIN FRAME AXLE**

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	1	C00054L	AIR DRILL MAIN AXLE UPRIGHT - LH
2	1	C00054R	AIR DRILL MAIN AXLE UPRIGHT - RH
3	1	C00076L	AIR DRILL MAIN AXLE WALKER - LH
4	1	C00076R	AIR DRILL MAIN AXLE WALKER - RH
5	1	GW16110	16000 LB GREASE SEAL
6	1	GB47620	16000 LB INNER CONE
7	1	GB47687	16000 LB INNER CUP
8	1	GB39585	16000 LB OUTER CUP
9	1	GB39520	16000 LB OUTER CONE
10	1	BN28SF	1 3/4" NF SLOTTED FLANGE NUT
11	1	BSR0527	5/16" x 2 3/4" ROLL PIN
12	1	GW16112S	16000 LB DUST CAP SEAL
13	1	GW16112	16000 LB DUST CAP
14	4	B0505	5/16"NC x 1/2" LG. HEX BOLT
15	2	GW12000A15	12000 LB HUB AND 15" SPINDLE ASSEMBLY
16	2	B1050	5/8"NC x 5" LG. HEX BOLT
17	2	BN10L	5/8" NYLOCK NUT NC
19	1	GW16111	16000 LB BEARING KIT FOR TANDEM
18	3	GF1610	1/8" NPT GREASE FITTING



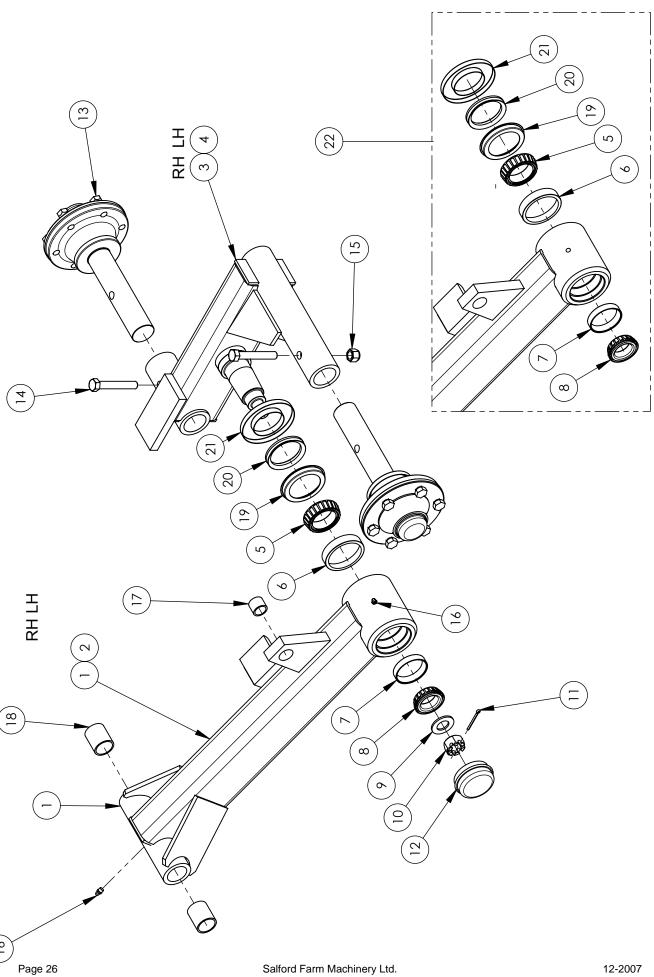


### AIR DRILL WING AXLE INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00200	AIR DRILL AXLE TOWER
2	2	GBB175150075	1 3/4" x 1 1/2" x 3/4" LG. HARD BUSHING
3	1	C00080L	AIR DRILL WING AXLE - LH
4	1	C00080R	AIR DRILL WING AXLE - RH
5	2	GBB175150200	1 3/4" x 1 1/2" x 2" LG. HARD BUSHING
6	1	A60025	AIR SEEDER WING TURNBUCKLE
7	1	HSR3712	3 3/4" BORE x 12" STROKE HYD. CYLINDER
8	1	GPH2401312F	1 1/2" x 13 7/8" LG. AXLE PIN - HARDENED
9	1	BL10	5/8" LOCKWASHER
10	1	B1010	5/8"NC x 1" HEX BOLT
11	3	GP1600314H04	PIN 1" DIA. x 3 1/4" LG. WITH HEAD
12	1	GP1600258H04	PIN 1" DIA. x 2 5/8" LG. WITH HEAD
13	4	BSC0415	1/4" x 1 1/2" COTTER PIN
14	2	GW5000A	5000 LB HUB AND SPINDLE ASSEMBLY
15	2	B1040	5/8"NC x 4" LG. HEX BOLT
16	2	BN10L	5/8" NYLOCK NUT NC
17	1	FL00051	LIGHT TURNBUCKLE LOCK
18	1	GP0800312L03	1/2" x 3 1/2" PARKING STAND PIN
19	1	GHP11	#11 HAIR PIN

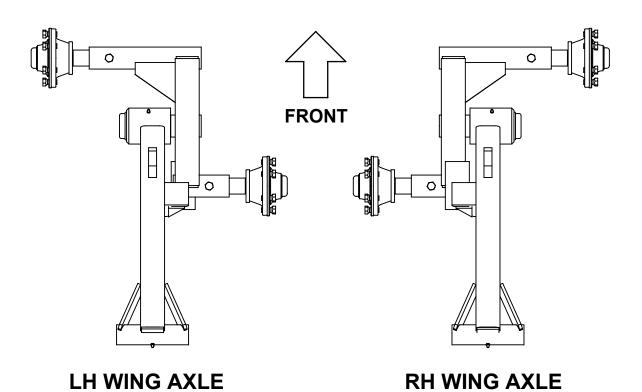
Note: quantities shown are for wing axle installation on one side only. Double quantities for complete machine wing axle installation.

- 1. Insert hard bushing (2) into wing axle lug, line up axle tower (1) and upright of tandem axle assembly (3, 4) with lugs on wing frames. Insert axle flatbar pin (8) through tower and axle. Retain pin with 5/8" x 1" hex bolt (10) and 5/8" lockwasher (9). Note orientation of lugs on axle towers.
- 2. Set wing turnbuckle (6 to 65" long pin to pin. Attach turnbuckle to axle tower with 1" x 2 5/8" head pins (12) and 1/4" x 1 1/2" cotter pins (13). Place turnbuckle lock (17) over turnbuckle and attach to frame with 1" x 3 1/4" head pin (11) and 1/4" x 1 1/2" cotter pin (13). Secure turnbuckle lock to turnbuckle with 1/2" x 3 1/2" L-pin (18) and #11 hairpin (19).
- 3. Attach 3 3/4" x 12" hydraulic cylinder (7) to axle tower and axle beam with 1" x 3 1/4" head pins (11) and 1/4" x 1 1/2" cotter pins (13). Connect hoses and charge lift axle cylinders with fluid following the procedure in the hydraulics installation before connecting rod ends of the cylinders.
- 4. Insert 5000 lb hub and spindle assemblies (14) into axles and retain with 5/8" x 4" hex bolts (15) and 5/8" locknuts (16).
- Apply grease to all fittings.

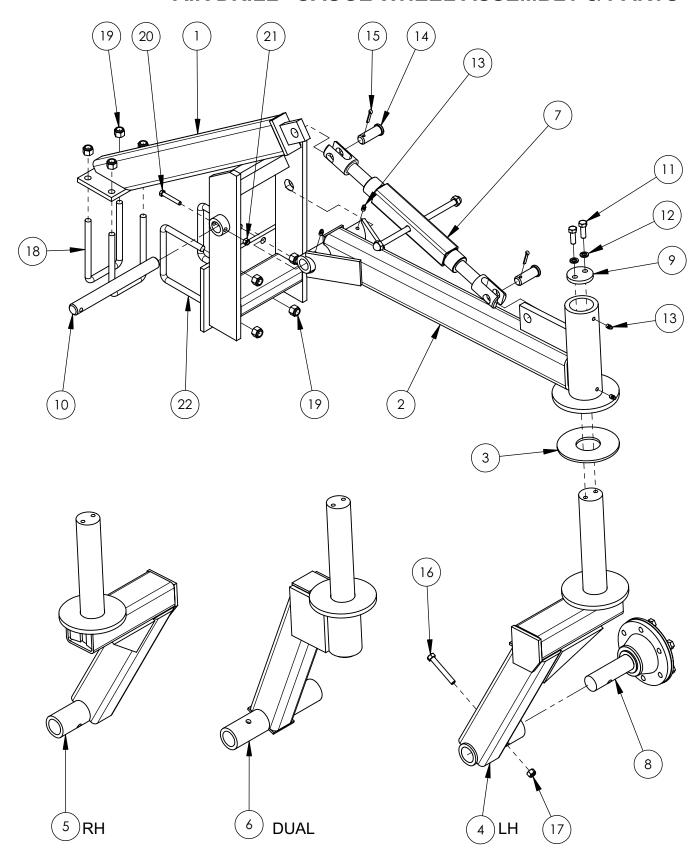


### AIR DRILL WING AXLE ASSEMBLY

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	C00028R	AIR DRILL WING AXLE UPRIGHT - RH
2	1	C00028L	AIR DRILL WING AXLE UPRIGHT - LH
3	1	C00077R	AIR DRILL WING AXLE WALKER - RH
4	1	C00077L	AIR DRILL WING AXLE WALKER - LH
5	1	GB506849	8000 INNER CONE
6	1	GB506810	8000 INNER CUP
7	1	GB501310	8000 OUTER CUP
8	1	GB501349	8000 OUTER CONE
9	1	BF16S	1" SAE WASHER
10	1	BN16S	1" SLOTTED HEX NUT
11	1	BSC0320	3/16" x 2" COTTER PIN
12	1	GW8112	8000 DUST CAP
13	2	GW5000A	5000 LB HUB AND SPINDLE ASSEMBLY
14	2	B1040	5/8"NC x 4" LG. HEX BOLT
15	2	BN10L	5/8" NYLOCK NUT NC
16	2	GF1610	1/8" NPT GREASE FITTING
17	1	GBB125100100	1 1/4" x 1" x 1" LG. HARD BUSHING
18	2	GBB175150200	1 3/4" x 1 1/2" x 2" LG. HARD BUSHING
19	1	GW8110VC	8000 LB V-SEAL COUNTERFACE
20	1	GW8110VS	8000 LB V-SEAL
21	1	GW8110VW	8000 LB V-SEAL GRASS WRAP GUARD
22	1	GW8111	8000 LB BEARING KIT FOR TANDEM



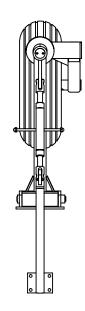
# "AIR DRILL" GAUGE WHEEL ASSEMBLY & PARTS

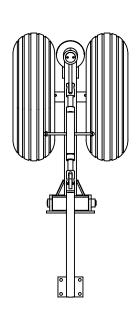


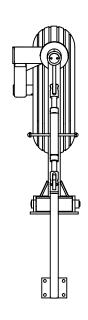
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# "AIR DRILL" GAUGE WHEEL ASSEMBLY & PARTS

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	T00415	AIR DRILL CASTER WHEEL TOWER
2	1	C10708	LAND HUGGER GAUGE WHEEL
3	1	T00314	WEAR PLATE
4	1	T00151	WING BOGEY WHEEL - LH
5	1	T00152	WING BOGEY WHEEL - RH
6	1	T00158	A-S MAIN BOGEY WHEEL
7	1	A50010	TURNBUCKLE
8	1	GW4000A	4000 LB HUB AND SPINDLE ASSEMBLY
9	1	FL00037	3/8 X 2 3/4" BOGEY WHEEL CAP
10	1	GP2001214B07	1 HOLE PIN
11	2	B0815	1/2 X 1 1/2" GR. 5 PLATED BOLT
12	2	BL08	1/2" SPRING WASHER
13	4	GF1610	1/8" NPT GREASE FITTING
14	2	GP1600258H04	PIN 1" DIA. x 2 5/8" LG. WITH HEAD
15	2	BSC0415	1/4" x 1 1/2" COTTER PIN
16	1	B0835	1/2 X 3 1/2" BOLT
17	1	BN08L	1/2" NYLOCK NUT NC
18	2	BU1046	U-BOLT 5/8" x 4" x 7 1/2" LG.
19	8	BN10L	5/8" NYLOCK NUT NC
20	1	B0625	3/8"NC x 2 1/2" LG. HEX BOLT
21	1	BN06L	3/8"-16NC LOCK NUT
22	2	BU1061	U-BOLT 5/8" x 6" x 5 1/2"



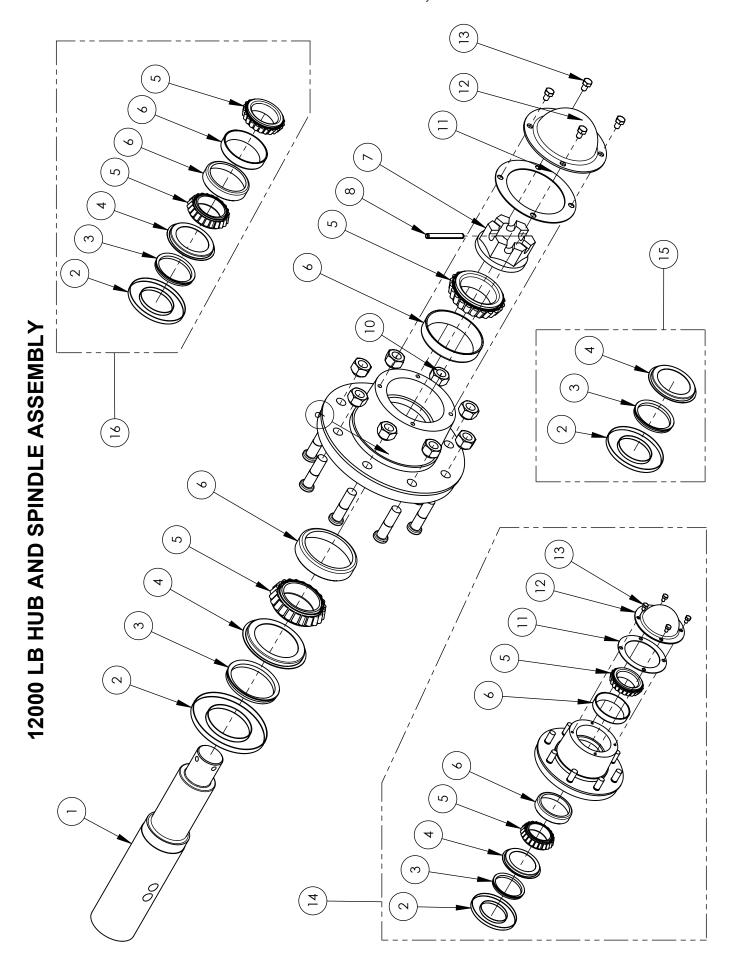




LH GAUGE WHEEL

DUAL GAUGE WHEEL

RH GAUGE WHEEL

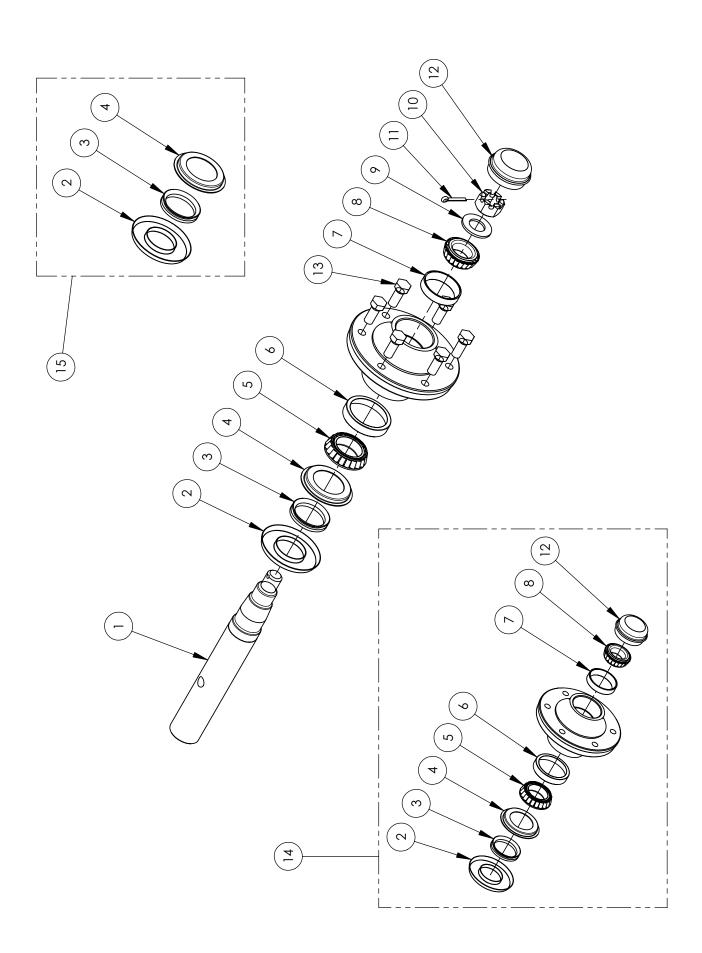


### 12000 LB HUB AND SPINDLE ASSEMBLY

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	GW12015	12000 LB SPINDLE - 15" LONG
2	1	GW12110VW	10000/12000 LB GRASS WRAP GUARD
3	1	GW12110VS	10000/12000 LB V-SEAL
4	1	GW12110VC	10000/12000 LB COUNTERFACE
5	2	GB28995	12000 LB CONE, 10000 LB INNER CONE
6	2	GB28921	12000 LB CUP, 10000 LB INNER CUP
7	1	BN28SF	1 3/4" NF SLOTTED FLANGE NUT
8	1	BSR0527	5/16" x 2 3/4" ROLL PIN
9	8	BW1020	5/8" x 2" PRESS-IN WHEEL STUD
10	8	BW10	5/8" WHEEL LUG NUT
11	1	GW12112S	12000 LB DUST CAP SEAL
12	1	GW12112	12000 LB DUST CAP
13	4	B0505	5/16"NC x 1/2" LG. HEX BOLT
14	1	GW12000	12000 LB HUB WITH BEARINGS, SEAL, & DUST CAP
15	1	GW12110V	10000/12000 LB V-SEAL KIT
16	1	GW12111V	12000 LB BEARING WITH V-SEAL KIT

Entire assembly available as part number GW12000A15 (includes hub, spindle, bearings, seal, dust cap, and hardware).

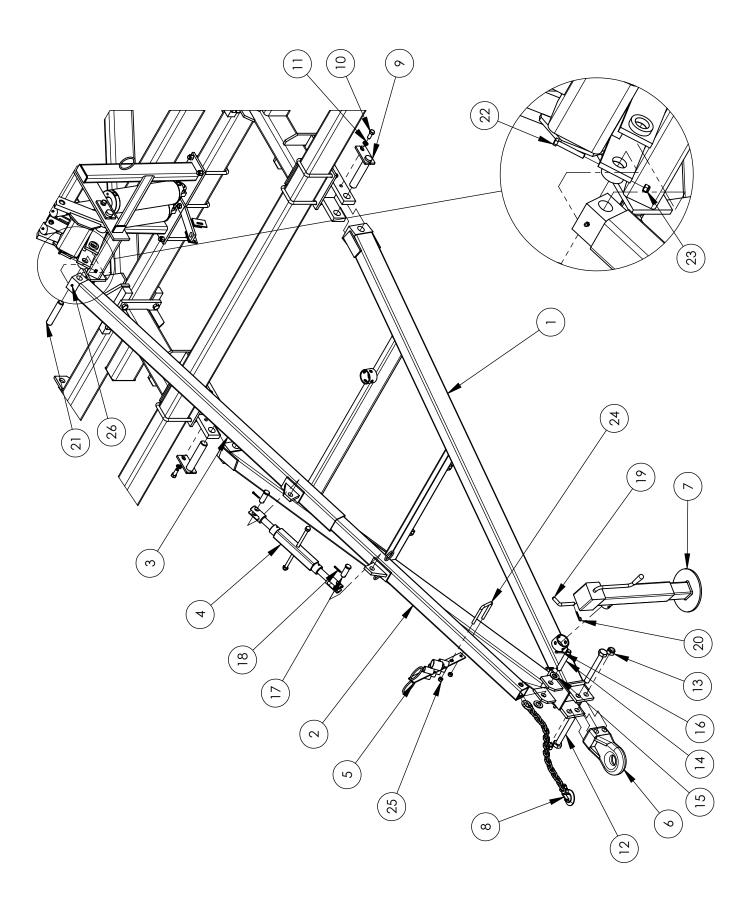
**IMPORTANT ALWAYS USE THREAD LOCK ON LUGNUTS** 



### **5000 LB HUB AND SPINDLE ASSEMBLY**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	GW5014	5000 LB SPINDLE-14 IN. LG
2	1	GW5110VW	5000 LB SEAL GRASS WRAP
3	1	GW5110VS	5000 LB V-SEAL
4	1	GW5110VC	5000 LB SEAL COUNTERFACE
5	1	GB603049	5000/5500 LB INNER CONE
6	1	GB603011	5000/5500 LB INNER CUP
7	1	GB48510	5000/5500 LB OUTER CUP, 3000 LB INNER CUP
8	1	GB48548	5000/5500 LB OUTER CONE, 3000 LB INNER CONE
9	1	BF16S	1" SAE WASHER
10	1	BN16S	1" SLOTTED HEX NUT
11	1	BSC0320	3/16 X 2" COTTER PIN
12	1	GW5112	5000/5500 LB DUST CAP
13	6	BW0912	9/16"-18 x 1 1/4" WHEEL BOLT
14	1	GW5000B	5000 LB HUB WITH BEARINGS, SEAL, & DUST CAP
15	1	GW5110V	5000 LB V-SEAL KIT

Complete assembly available as part number GW5000A (includes hub, spindle, bearings, seals, dust cap, and hardware).



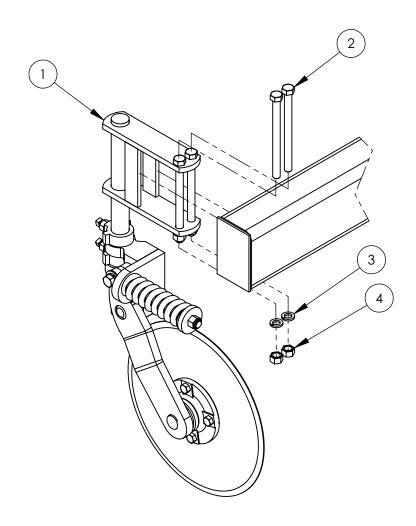
### **TONGUE INSTALLATION**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	2225C	550-570-580 CAST CLEVIS TONGUE
2	1	A60041	570-580-860-870-9700 INNER TELESCOPE
3	1	A60066	3 1/2 X 3 1/2 X 3/16"W OUTER TELESCOPE
4	1	A50010	TURNBUCKLE
5	1	T00340	AIR SEEDER HOSE HOLDER
6	1	PPI-42XL	CAT 4 CAST IRON HITCH
7	1	GJ8002	8000 LB TONGUE JACK
8	1	GJ652027	20,000 LB SAFETY CHAIN
9	2	GPSPEC24080	1 1/2" x 8 1/4" LG. WING HINGE PIN
10	2	B1015	5/8 X 1 1/2" PLATED BOLT
11	2	BL10	5/8" LOCKWASHER
12	2	B1680H	1" x 8" NC HEX BOLT GR. 8
13	2	BN16L	1-8 NC NYLOCK NUT
14	1	GP1600512A05	PIN 1" DIA. x 5 1/2" LG 2 HOLES
15	2	BF16S	1" SAE WASHER
16	2	BSC0515	5/16" x 1 1/2" COTTER PIN
17	2	GP1600258H04	PIN 1" DIA. x 2 5/8" LG. WITH HEAD
18	2	BSC0415	1/4" x 1 1/2" COTTER PIN
19	1	GP10004L03	L-PIN 5/8" DIA. x 4" LG.
20	1	GHP11	#11 HAIR PIN
21	1	GP2000614B07	PIN 1 1/4" DIA. x 6 1/4" LG 1 HOLE
22	1	B0625	3/8"NC x 2 1/2" LG. HEX BOLT
23	1	BN06L	3/8"-16NC LOCK NUT
24	1	BU0830	1/2" x 3" x 4 1/2" U-BOLT
25	2	BN08L	1/2" NYLOCK NUT NC
26	1	GF641	1/4"-28NF GREASE FITTING

- 1. Attach tongue (1) to frame assembly using 1 1/2" x 8" flatbar pins (9). Retain pins with 5/8" x 1 1/2" hex bolt (10) and 5/8" lockwasher (11).
- 2. Insert inner telescope (2) into outer telescope (3). Attach turnbuckle (4) to telescope with 1" x 2 5/8" head pins (17) and 1/4" x 1 1/2" cotter pins (18). Install grease fitting (26) in end of outer telescope.
- 3. Attach top of telescope assembly to self-levelling assembly with 1 1/4" x 6 1/4" pin (21). Retain pin with 3/8" x 2 1/2" hex bolt (22) and 3/8" locknut (23).
- 4. Attach bottom of telescope assembly and safety chain (8) to tongue with 1" x 5 1/2" pin (14), 1" SAE washers (15), and 5/16" x 1 1/2" cotter pins (16). Note: pin goes through chain link in centre of tube. Washers go between plate and cotter pin.
- 5. Install hitch (6) in end of tongue with 1" x 8" Grade 8 hex bolts (12) and 1" lock nuts (13). Insert bolts from opposite sides as shown. Add 1" washers between hitch and mounting plates if any play or clearance exists.
- 6. Install jack (7) onto tongue with 5/8" x 4" L-pin (19) and #11 hairpin (20).
- 7. Install hose holder (5) onto telescope approximately 16" from the end of the telescope. Retain hose holder with 1/2" x 3" x 4 1/2" u-bolt (24) and 1/2" locknuts (25).

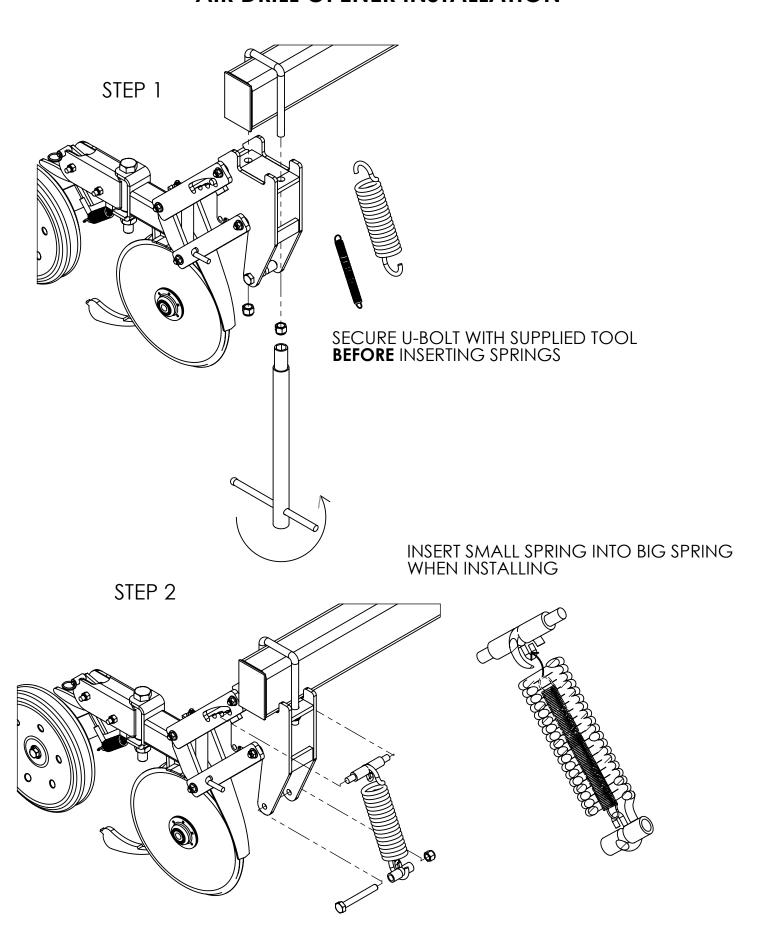
### AIR DRILL NO-TILL COULTER INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION	
1	1	T00401R	RIGHT HAND NO-TILL COULTER	
2	2	B1080	5/8 NC X 8 HEX BOLT GR.5 PLATED	
3	2	BL10	5/8" LOCKWASHER	
4	2	BN10H	5/8" NC HEX NUT GR.8	



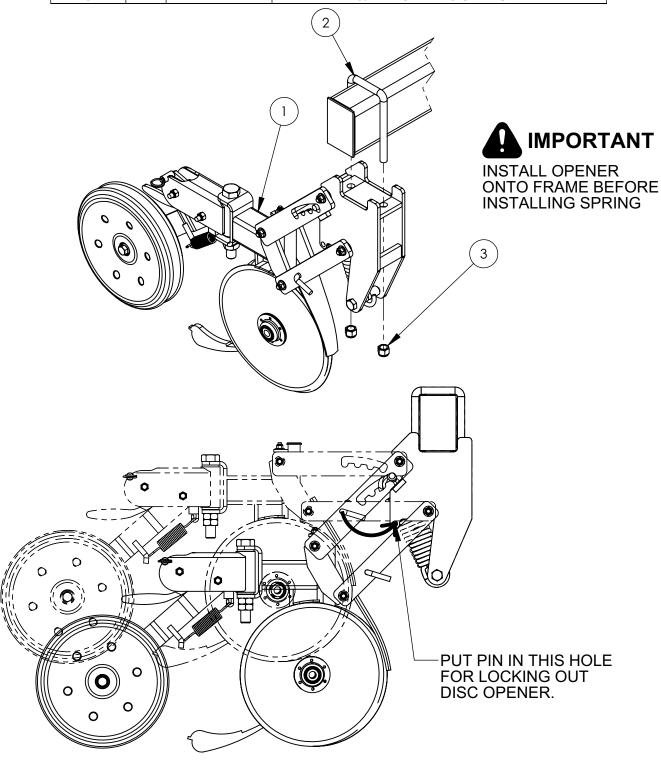
Place coulter on 4" x 6" tubes on mainframe and wings, insert 5/8" x 8" bolts into holes on coulter, retain with 5/8" lockwashers and 5/8" hex nuts, once all bolts are in place position the coulter to location shown on layout and tighten all bolts according to torque spec. sheet in manual.

# AIR DRILL OPENER INSTALLATION

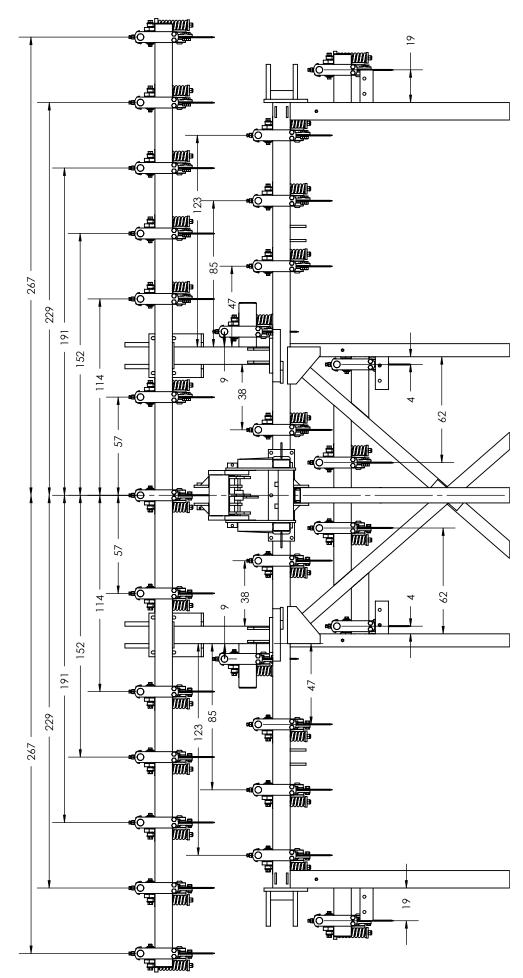


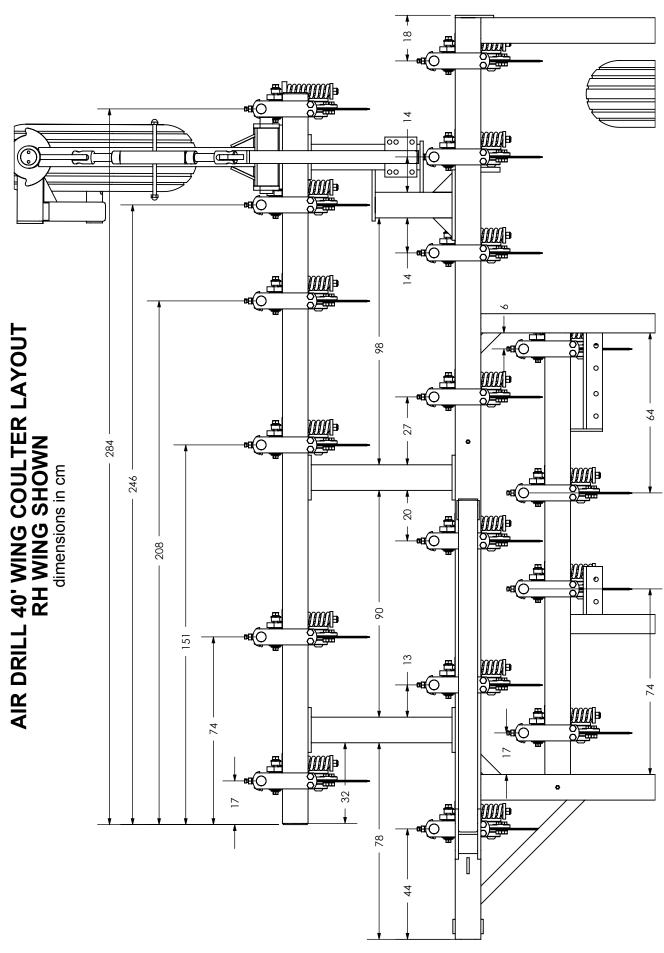
### AIR DRILL OPENER INSTALLATION

	ITEM NO.	QTY.	PART NO.	DESCRIPTION
	1	1	T00443	SALFORD OPENER
	2	1	BU1246	U-BOLT 3/4" x 4" x 8" LG.
ſ	3	2	BN12L	3/4" NC NYLOCK NUT

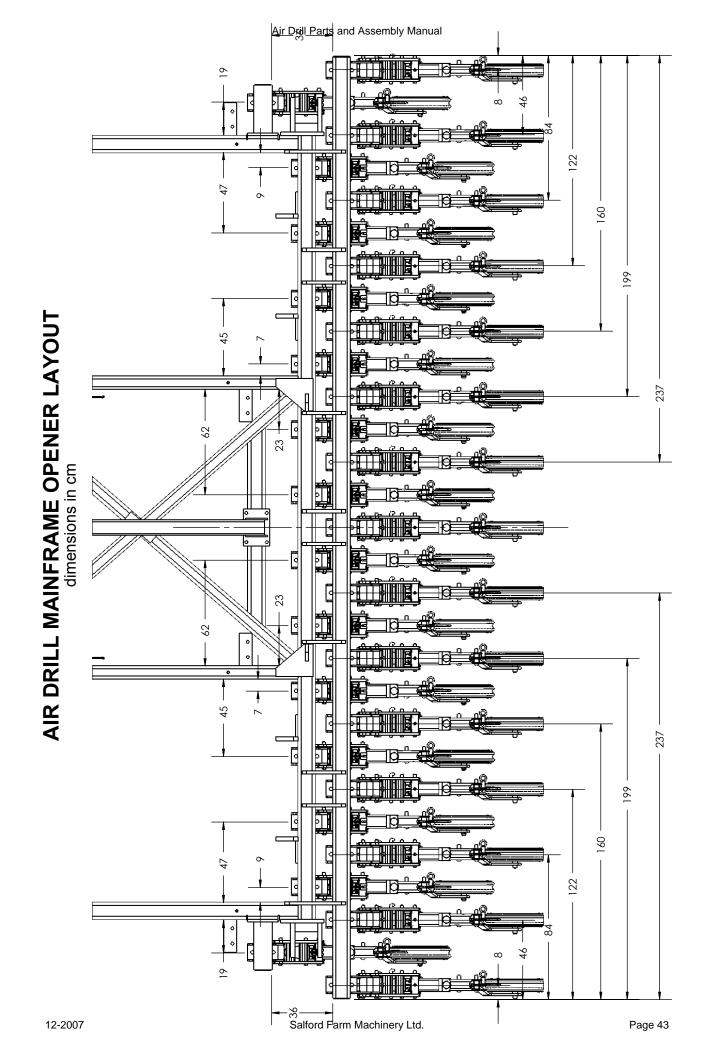


# AIR DRILL MAINFRAME COULTER LAYOUT dimensions in cm

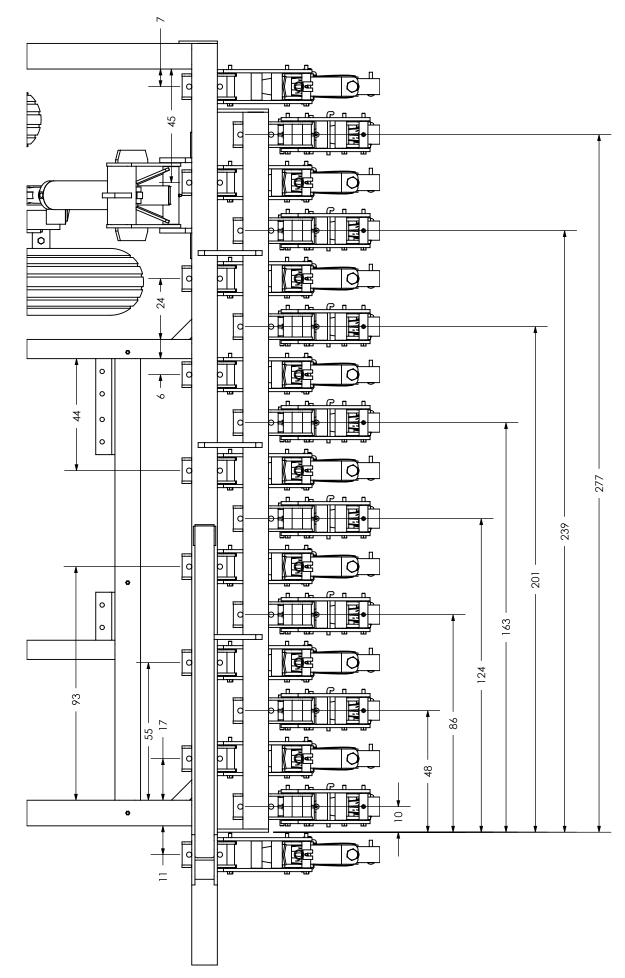




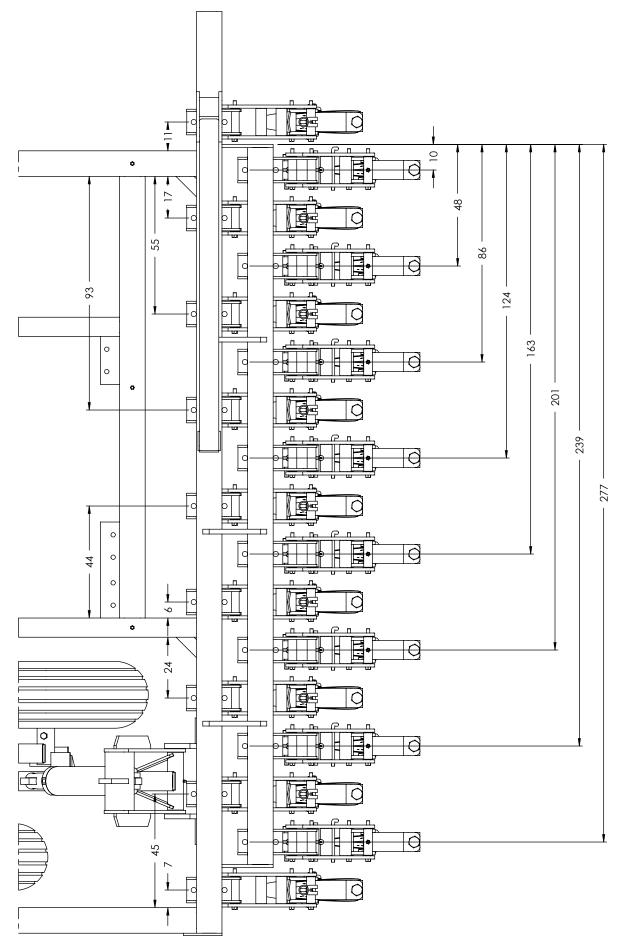
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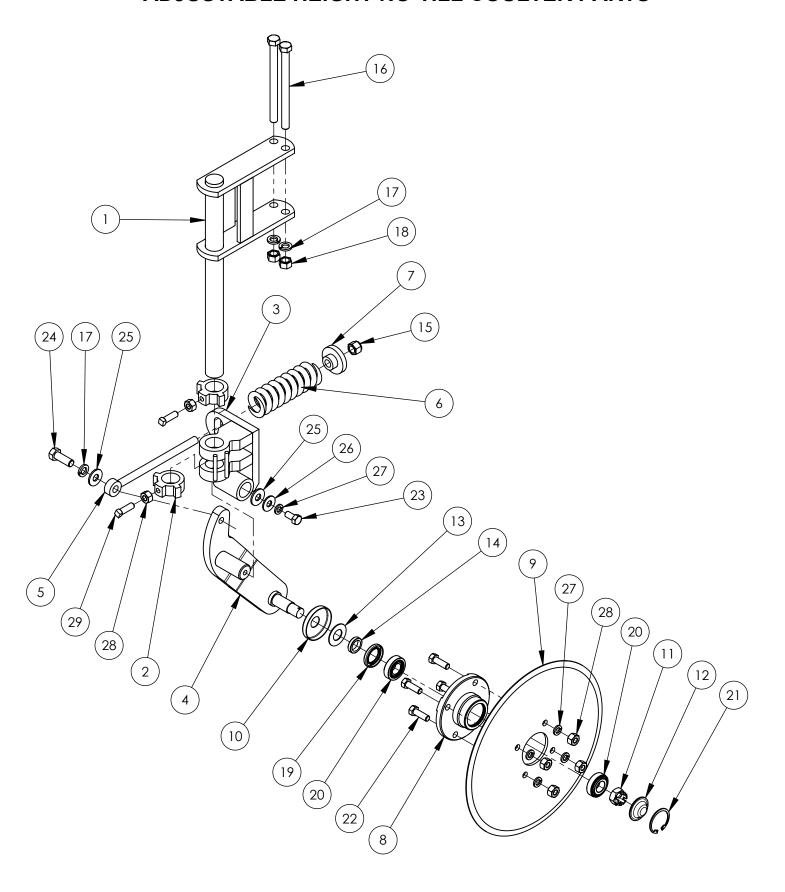
# AIR DRILL 40' WING OPENER LAYOUT RH WING SHOWN dimensions in cm



# AIR DRILL 40' WING OPENER LAYOUT LH WING SHOWN dimensions in cm



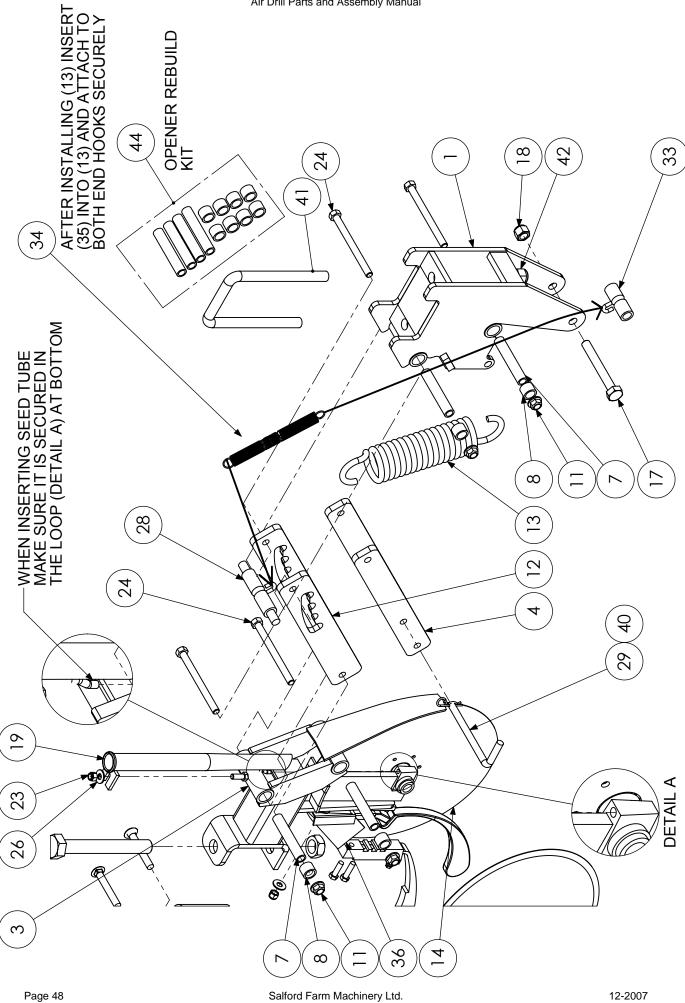
# **ADJUSTABLE HEIGHT NO-TILL COULTER PARTS**



# **ADJUSTABLE HEIGHT NO-TILL COULTER PARTS**

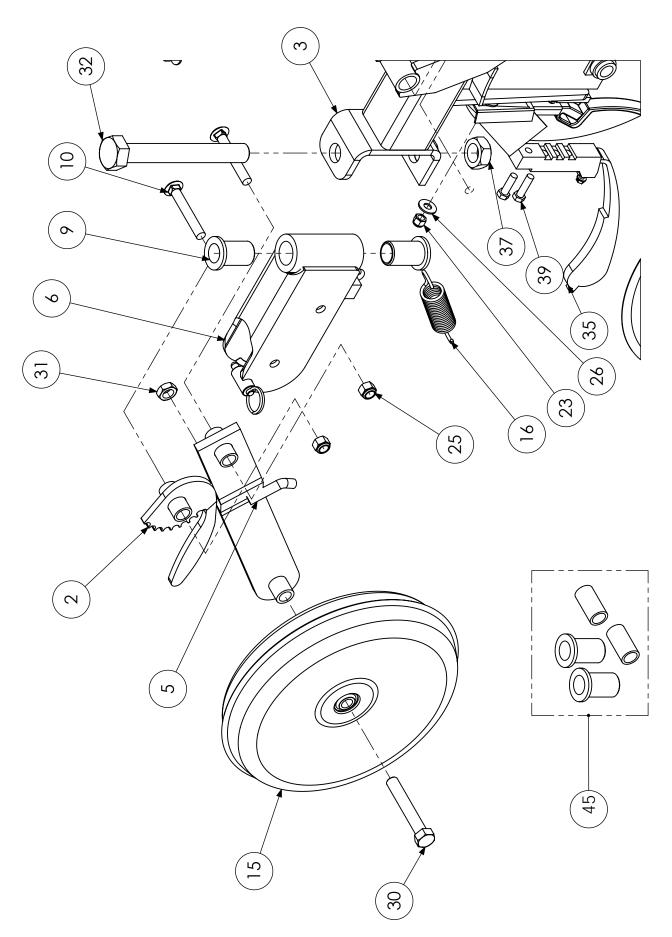
ITEM NO.	QTY.	PART NO.	DESCRIPTION	
1	1	T00401AA	ADJUSTABLE HEIGHT COULTER MOUNT	
2	2	T00401AB	ADJUSTABLE HEIGHT LOCK	
3	1	T00401AC	COULTER PIVOT	
4	1	T00401AD	COULTER ARM	
5	1	T00401AE	COULTER SPRING BOLT	
6	1	T00401AF	COULTER SPRING	
7	1	T00401AG	COULTER SPRING WASHER	
8	1	T00401AH	NO-TILL COULTER HUB	
9	1	T00401AJ	16" NO-TILL COULTER BLADE	
10	1	T00401AK	COULTER HUB GRASS WRAP GUARD	
11	1	T00401AL	COULTER SPINDLE CASTLE NUT	
12	1	T00401AM	COULTER HUB DUST CAP	
13	1	T00401AN	GRASS WRAP WASHER	
14	1	T00401AP	COULTER SEAL RACE	
15	1	BN10L	5/8" NYLOCK NUT NC	
16	2	B1080	5/8 NC X 8 HEX BOLT GR.5 PLATED	
17	3	BL10	5/8" LOCKWASHER	
18	2	BN10H	5/8" NC HEX NUT GR.8	
19	1	CR34x52x7.5	CR34x52x7.5 COULTER SEAL	
20	2	30205 J2-Q	30205 TAPERED BEARING & CONE SET	
21	1	BR3000-212	2 1/8" INTERNAL SNAP RING	
22	4	B0815	1/2 X 1 1/2" GR. 5 PLATED BOLT	
23	1	B0810	1/2 X 1" BOLT	
24	1	B1017	5/8"NC x 1 3/4" LG. HEX BOLT	
25	2	BF10HS	5/8" FLAT WASHER	
26	1	BF08	1/2" FLATWASHER	
27	5	BL08	1/2" SPRING WASHER	
28	6	BN08H	1/2"NC HEAVY HEX NUT	
29	2	B0815S	1/2"NC x 1 1/2" LG. SQUARE HEAD SET SCREW	

Complete adjustable height no-till coulter assembly available as part number T00401 Gross weight is: 68 lbs.



# **OPENER FRONT SECTION PARTS LIST**

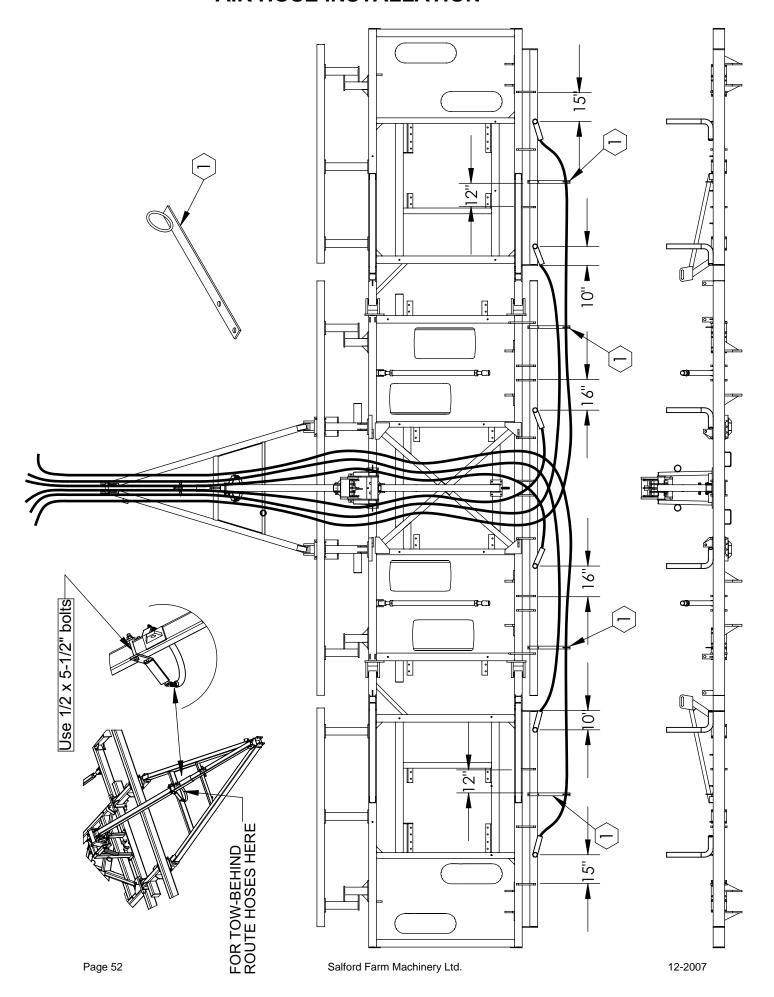
TEM NO	htv	PART NO.	DESCRIPTION	
	_			
1		T00451	OPENER MOUNTING WELDMENT	
3		T00448	OPENER MAIN BODY WLDMNT	
4		T00444	OPENER BOTTOM PARALLEL LINK	
7		ZD071086	OPENER PARALLEL LINK BUSHING	
8		GBB100075075	1" x 3/4" x 3/4" LG. HARD BUSHING	
11	4	BN08SF	1/2"-13NC FLANGE STOVER LOCK NUT GR. 8	
12	1	T00461	OPENER BOTTOM PARALLEL LINK	
13	1	GSE0720	7/16" WIRE x 20 COILS 2 HOOK SPRING	
14	2	T00463	SUNFLOWER	
15	1	T00462	13" x 3" SINGLE RIB PRESS WHEEL	
17	1	B1050	5/8 x 5" HEX BOLT	
18	1	BN10L	5/8" NYLOCK NUT NC	
19	1	T00464	SALFORD OPENER SEED TUBE	
23	2	BN06L	3/8"-16NC LOCK NUT	
24	4	B0860	1/2" UNC x 6" LG HEX BOLT GR.5 PLATED	
26	3	BF06	3/8" FLATWASHER	
28	1	T00450	TOP SPRING TENSION ROD	
29	1	T00501	1/2" x 9" BLANK LENGTH L-PIN	
32	1	B1680	1 X 8" BOLT GRADE 5	
33	1	T00460	OPENER SPRING SLEEVE	
34	1	GSE0182	Opener Inside Spring	
36	1	FL00148	DISC OPENER INSIDE SCRAPER	
40	1	GHP11	#11 HAIR PIN	
41	1	BU1246	U-BOLT 3/4" x 4" x 8" LG.	
42	2	BN12L	3/4" NC NYLOCK NUT	
43		T00402CH	SEED FIRMER	
44	1		HARD BUSHING KIT FOR OPENER REBUILD	



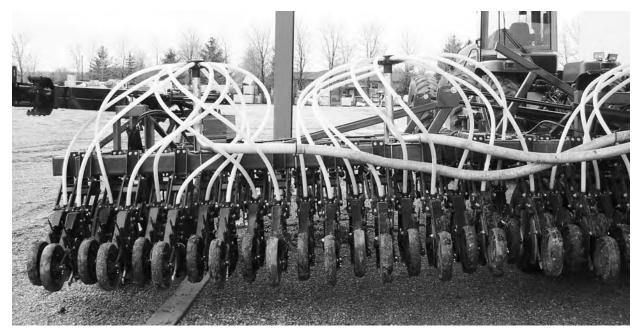
# **OPENER REAR SECTION PARTS LIST**

ITEM NO.	QTY.	PART NO.	DESCRIPTION	
2	1	T00452	REAR PACKER WHEEL ADJUSTER	
3	1	T00448	OPENER MAIN BODY WLDMNT	
5	1	T00446	REAR PACKER WHEEL ARM	
6	1	T00445	REAR PACKER WHEEL MOUNT	
9	4	A60018	NYLATRON SHOULDER BUSHING	
10	2	BC0835H	1/2" X 13NC X 3-1/2" LG. CARRIAGE BOLT GR. 5	
14	2	T00463	SUNFLOWER	
15	1	T00462	13" x 3" SINGLE RIB PRESS WHEEL	
16	1	C1071	2 HOOK CLEVIS SPRING 6" FL 1 1/4" OD	
23	2	BN06L	3/8"-16NC LOCK NUT	
25	2	BN08L	1/2" NYLOCK NUT NC	
26	3	BF06	3/8" FLATWASHER	
27	1	BN06	3/8 " HEX NUT	
29	1	T00501	1/2" x 9" BLANK LENGTH L-PIN	
36	1	T00403	KEETON SEED FIRMER FOR 15" BLADE	
38	1	BN16J	1"NC JAM NUT	
39	2	B0612	3/8" X 1 1/2" LG. GRADE 5	
30	1	B1040	5/8"NC x 4" LG. HEX BOLT	
31	1	BN10J	5/8" JAM NUT	
32	1	B1680	1 X 8" BOLT GRADE 5	
34	1	GSE0182	Opener Inside Spring	
41	1	BU1246	U-BOLT 3/4" x 4" x 8" LG.	
42	2	BN12L	3/4" NC NYLOCK NUT	
43	1	T00402CH	SEED FIRMER	
44	2	2448	ROUND TUBE, HARROW ARMS	
45	1		REAR PRESS WHEEL ARM REBUILD KIT	

# **AIR HOSE INSTALLATION**



# **AIR HOSE INSTALLATION**



Route hoses to openers as shown



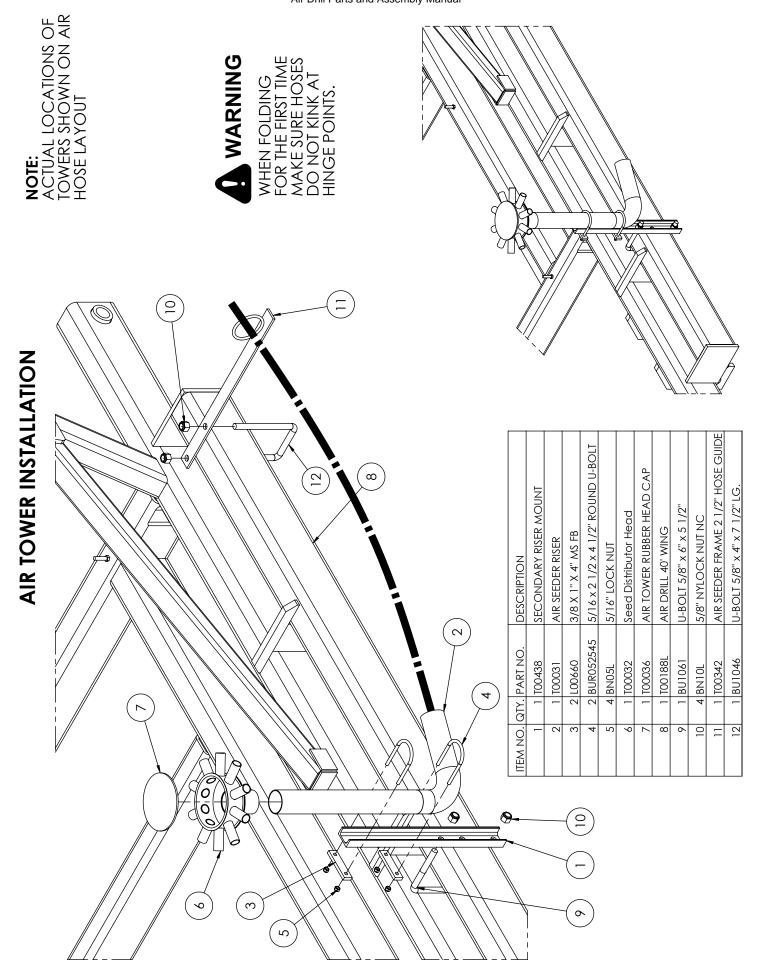
Mount air distribution tower as shown



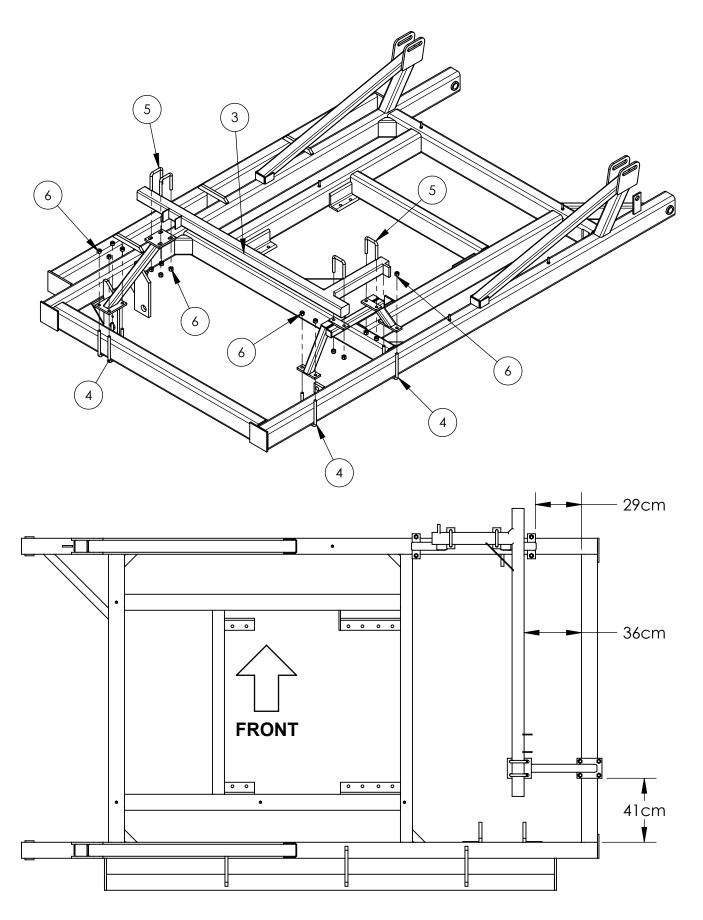
Secure large hoses with rings provided.



Leave some loop at wing joints so hose won't kink when folding wings.



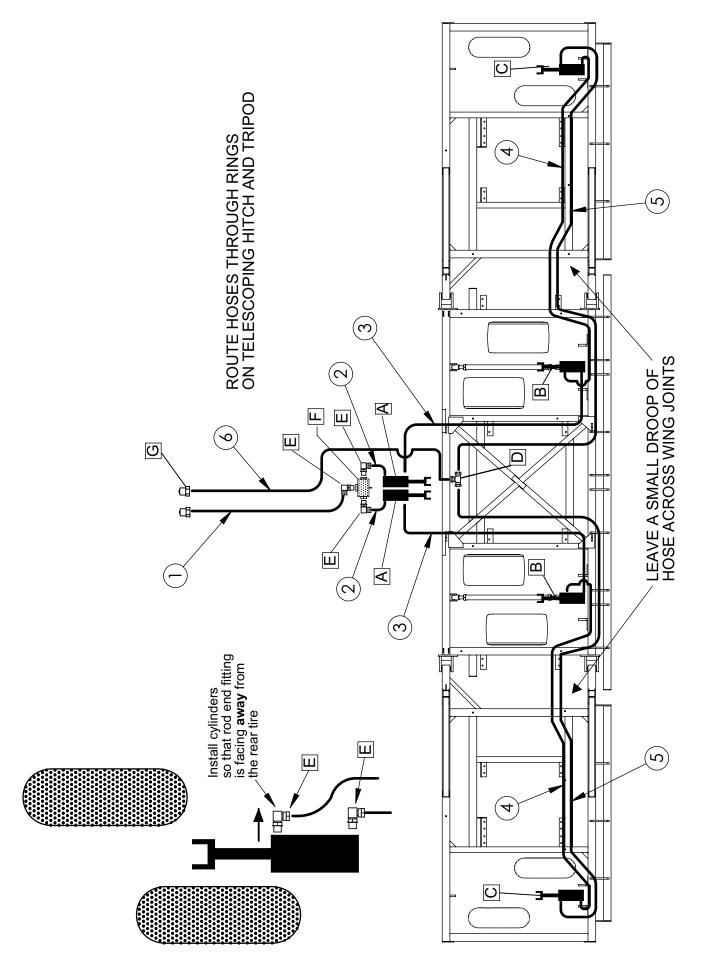
# **MARKER INSTALLATION**



### MARKER INSTALLATION

ITEM NO.	QTY.	PART NO.	DESCRIPTION	
1	1	T00416	FRONT AIR DRILL MARKER SUPPORT	
2	1	T00422	REAR AIR DRILL MARKER MOUNT	
3	1	T00150	MODEL 246 HAUKAAS MARKER	
4	4	BU1046	U-BOLT 5/8" x 4" x 7 1/2" LG.	
5	4	BU1030	U-BOLT 5/8" x 3" x 4 1/2"	
6	16	BN10L	5/8" NYLOCK NUT NC	
7	1	T00188r	AIR DRILL 40' WING	

- 1. Place front marker mount as shown in picture and retain with  $5/8 \times 4 \times 7 \times 1/2$ " ubolts(5) and 5/8" locknuts(7), do not tighten at this time,
- 2. Place the side marker bracket on side tube of wing and retain with  $5/8 \times 4 \times 7 \times 1/2$ " ubolts (5) and 5/8" locknuts (7).
- 3. Install marker ontop of marker brackets and retain with 5/8 x 3 x 4 1/2" ubolts on both front and rear marker brackets, once positioned as shown tighten all nuts and specified in torque spec. page.



### **AXLE LIFT HYDRAULICS**

LABEL	QTY	LENGTH (m)	FROM	TO
1	1	53	TRACTOR	BOTTOM OF STROKE CONTROL VALVE
1B	1	0.5	STROKE CONTROL VALVE	BARREL END OF HSR
2	1	0.5	STROKE CONTROL VALVE	BARREL END OF HSR
3	2	5.0	ROD END OF HSR	BARREL END OF HSR
4	2	5.4	ROD END OF HSR	BARREL END OF HSR
5	2	8.9	ROD END OF HSR	TEE
6	1	6.3	TEE	TRACTOR

ITEM	QTY	PART NO.	DESCRIPTION	
Α	2	HSR4512	4-1/2" BORE x 12" STROKE. REPHASING CYLINDER	
В	2	HSR4012	4" BORE x 12" STROKE. REPHASING CYLINDER	
С	2	HSR3712	3-3/4" BORE x 12" STROKE. REPHASING CYLINDER	
D	1	H956666 -O6F NPT ALL SWIVEL TEE		
Е	15	H951586	-08 ORB TO -06 NPT SWIVEL TEE	
F	1	HPMSC10	STROKE CONTROL VALVE	
G	2	H80104P	1/2" NPT MALE PIONEER COUPLER	

### CHARGING THE CIRCUIT

Connect only the Barrel end of the cylinders until the circuit has been charged.

Connect only the hoses to the tractor until the cicuit is charged. Be sure parking stand is properly engaged before beginning.

- 1. Be sure that all cylinders can extend completely without striking anything
- 2. Connect hoses to tractor.
- 3. Extend cylinders slowly and hold lever for 2-3 minutes. This will purge air from the circuit (each lift cylinder has an internal valve, which allows oil to by-pass only when completely extended)
- 4. The circuit is now free from air. Install Rod end Pins. And connect tongue telescope.

# DO NOT RETRACT CYLINDERS ALL THE WAY WITH THE MACHINE HITCHED TO THE TRACTOR (ON HARD GROUND). DRAWBAR MAY BE BENT UPWARDS.

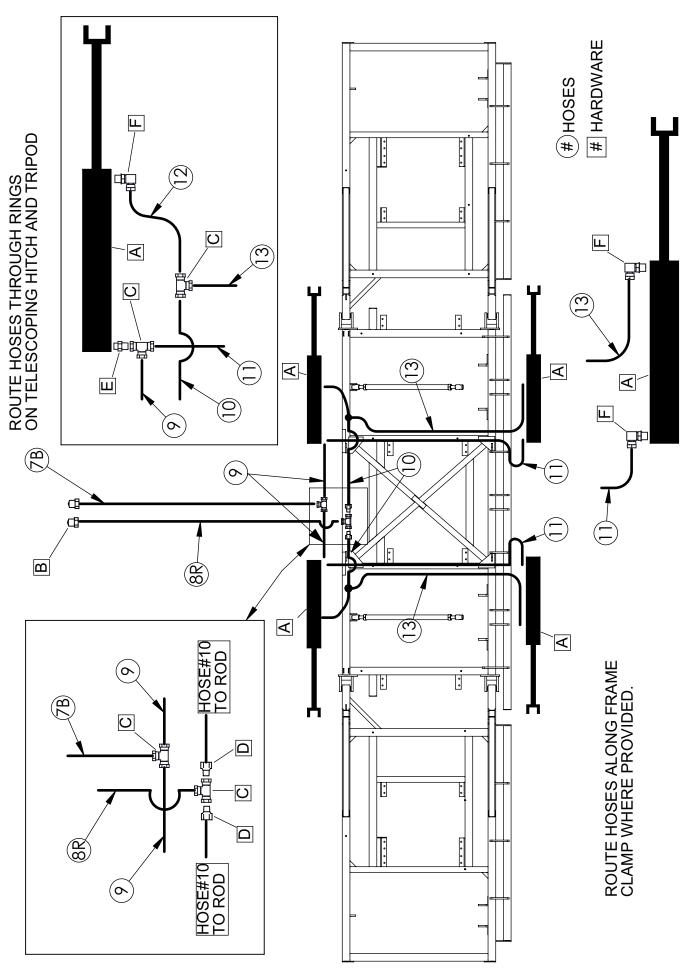
Use tie-straps to identify the hose ends for quick hookup to tractor



Route hoses behind axle towers



Leave a small droop of hose (3-4") across wing joint



### WING-FOLD HYDRAULICS

LABEL	QTY	LENGTH (m)	FROM	TO
7B	1	6.3	TRACTOR	TEE
8R	1	6.3	TEE	TRACTOR
9	2	1.1	TEE	BARREL END TEE
10	2	1.1	RESTRICTOR/RETURN TEE	ROD END TEE
11	2	2.4	BARREL END TEE	REAR CYL. BARREL END
12	2	1.1	ROD END TEE	FRONT CYL. ROD END
13	2	3.0	ROD END TEE	REAR CYL. ROD END

ITEM	QTY.	PART NO.	DESCRIPTION	
Α	4	HS3536	3-1/2" BORE x 36" STROKE HYD. CYLINDER	
В	2	H80104P	1/2" NPT MALE PIONEER COUPLER	
С	6	H956666	-06F NPT ALL SWIVEL TEE	
D	2	H1404668	-06M NPT TO -06F NPT RESTRICTOR .080"	
Е	2	H915066	-06 ORB TO -06 NPT NIPPLE	
F	6	H951586	-08 ORB TO -06 NPT SWIVEL ELBOW	
		HZ35SHD	SEAL KIT FOR HS3536 CYLINDER	

### **CHARGING WING FOLD CYLINDERS**

**IMPORTANT:** Do not connect the cylinder rods until system has been charged with oil. 1. Prop up the cylinder with a block of wood so the rod can extend without striking anything. (see Fig. 1)

- 2. Hitch to tractor and connect hoses.(note: check to see that all the cylinders move in the same direction. If not, then switch the rod and barrel hoses of the cylinder(s) moving backward.
- 3. Extend cylinders completely. Hold lever for 30 seconds as air exits the cylinder.
- 4. Retract cylinders completely. Hold lever for 30 seconds.
- 5. Repeat three times
- 6. Install cylinder pins. Be sure washers are installed correctly (see cylinder page).



7. When folding for the first time, or when new hardware is installed, check that cylinders and fittings do not collide with the wing frame when fully folded. If so, use an alternate plug in the cylinder, or simply rotate cylinder 180 degrees.



Air in the wing cylinders will cause wings to fall to the ground!!!

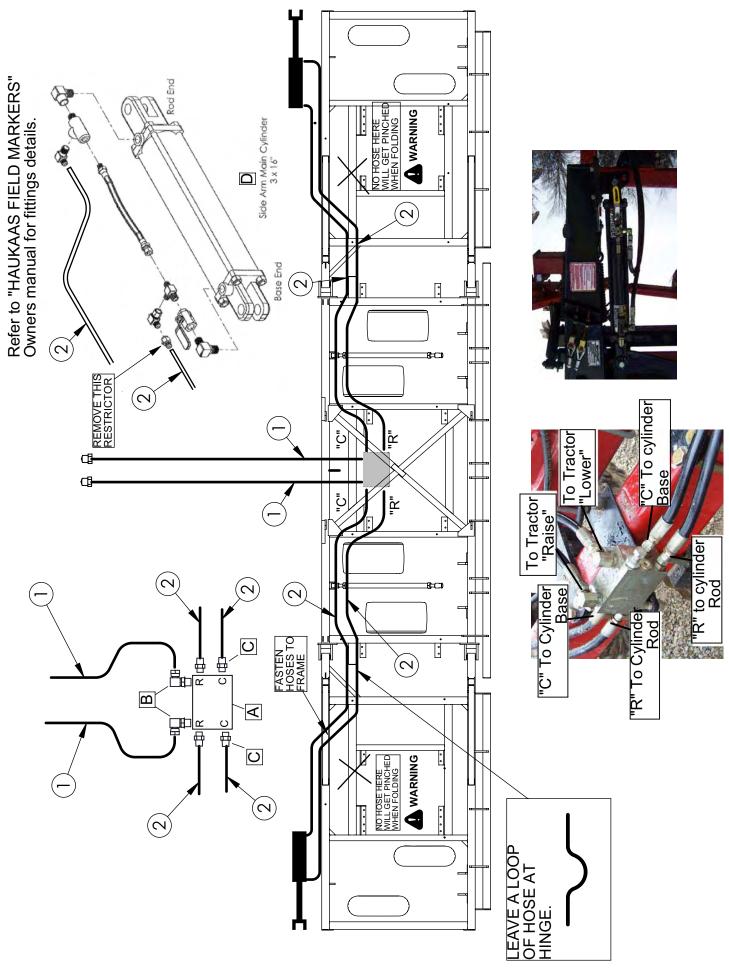
Whenever air could have entered the cylinders, repeat the process above to purge circuit.

Never work on a lift system with the wings folded!!! ALWAYS UNFOLD WINGS before working on hydraulics!!

Use colored tie straps to identify hoses for quick hookup

Fig 1. When charging the circuit, prop up cylinder with block of wood. Be sure the rod can extend freely without striking anything.





# **MARKER HYDRAULICS**

LABEL	QTY	LENGTH (m)	ENDS
M1	2	6.3	1/2"NPT06jic
M2	4	7.0	-06jic06jic

ITEM	QTY	PART NO.	DESCRIPTION
Α	1	T00353	HAUKAAS SEQUENCING VALVE
В	2	T00025A	ELBOW - 1/2"ORB x 9/16" JIC
С	4	T00025B	SPECIAL C Fitting x 9/16" JIC (HYD 2481)
D	2	T00025C	SIDE ARM CYLINDER (3 x 16")

Refer to "HAUKAAS FIELD MARKERS" Owners Manual for operation instruction and part numbers.

### LIGHTS AND SLOW MOVING VEHICLE SIGN

