

LEON

Operator Manual



Land Scraper Model 1000

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INTRODUCTION

This manual provides recommended operation and service instructions for your Leon M900 & M1000 Land Scrapers.

The M900 & M1000 Land Scrapers are rated for use with tractors having a minimum drawbar of 130 HP and a maximum drawbar of 225 HP. The heaped capacity is 9.09 & 10.1 cu. yards respectively.

Your implement has been designed to give you years of satisfactory service. Safe, successful operation and long life depend on the proper precautions and the proper care given to your implement. Please read this manual carefully and follow the instructions provided to ensure long life of your implement. Correct operation and maintenance will save you time and expence. For additional information see your dealer.

With proper operation, your implement will give maximum performance, low maintenance and long life. Please read the warranty page carefully, fill in the required information and return the warranty card so your dealer can give you prompt, efficient service when ordering parts.

OPERATION AND MAINTENANCE INSTRUCTIONS

The Leon Scraper, upon delivery, has Duratran hydraulic oil in all cylinders. It is our understanding that such oil is compatible with all factory recommended gear and hydraulic oil. Before operating, the Scraper should be greased at all grease fitting points. After connecting the hydraulic hoses to the tractor, retract the lift cylinders and remove the transport lock pins. Take care to keep dirt out of the oil when connecting or disconnecting any oil line, as dirt contributes to the failure of hydraulic components.

Again, before your Leon Scraper is put onto action ALL bolts, specifically wheel bolts, should be checked and tightened.

1. After eight (8) hours work, all bolts should be checked and tightened if necessary.
2. Every eight (8) hours all grease fittings should be lubricated.
3. After thirty (30) hours operation, all bolts should be rechecked and tightened if necessary. check wheel bearings and adjust if necessary.
4. After three hundred (300) work hours, clean and repack wheel bearings.

SEQUENCE OF OPERATION

To fill the bucket:

1. Open the front gate (apron),
2. Lower the bucket to desired digging depth while moving forward;
3. When full, raise the bucket and close the front gate to prevent spillage,
4. Transport to required dumping area.

To empty the bucket:

1. Lower the bucket to give required spread depth,
2. Open the front gate,
3. When the front gate is fully open, then the rear push gate will operate and eject the load,
4. Spread depth is controlled by the height of the bucket and tractor speed.

OPERATING TIPS

For efficient scraper operation:

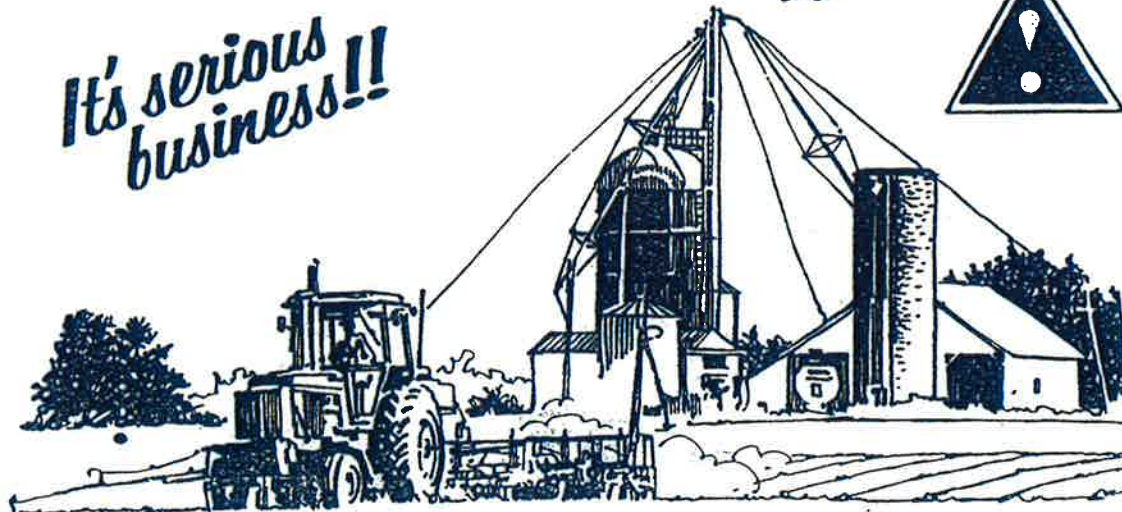
1. Plan work to load scraper downhill,
2. Eliminate excess turns,
3. Load scraper in direction of where load is to be dumped,
4. Do not spend unnecessary time in trying for heaped loads - you may sacrifice this gain in cubic yards by a longer time cycle.
5. Do not cut too deep - deep cuts increase the voids and reduce pay load. Large chunks in the scraper make poor spreading material.
6. Maintain a downslope in the cut - don't cut horizontal layers off the top,
7. On side hill cuts keep the inside of the lower than the outside,
8. Maintain a smooth hauling road,
9. Don't raise bucket any higher than necessary when hauling - increasing bucket height reduces scraper stability.
10. In constructing a fill, keep shoulders high and center low - this provides drainage toward center and prevents scraper from sliding over the side of the fill.



SAFETY PAGE

1. Keep all persons clear of this machine while in operation.
2. Do not ride or permit others to ride on this implement or carry children or other persons on the tractor while operating.
3. Set brakes before dismounting from tractor.
4. Operate with absolute caution when on slopes where there is a possibility that the tractor could drop in a hole or ditch, and overturn.
5. In transport, always raise your implement high enough to clear roadway or obstructions.
6. In snow or ice removal (or similar operations) do not hit mounds or ridges at high ground speeds.
7. Keep tractor in level position when making implement adjustments to prevent hazardous movement due to implement weight.
8. In storage, lower the power lift and set the implement on the ground.
9. Keep fingers away from pivot points.
10. Study your operator's manual and know your equipment. Ask your dealer to explain anything that you do not understand.

SCRAPER



OPERATION AND MAINTENANCE

BEFORE OPERATING THE SCRAPER

- Lubricate all wheel bearings, pins and rollers.
- Check and adjust tire pressure as listed below.
- Check wheel bolt torque as listed below.
- Hitch scraper to tractor and cycle operate the entire unit while empty. Stop tractor and make adjustments as required.
- Cycle all hydraulic functions several times to ensure proper operation of hydraulics. Ensure to raise the front gate fully before cycling the push gate. Adjust the settings on the sequence valve accordingly, so that the front gate opens completely prior to the push gate moving ahead. This is highly recommended during freezing conditions to ensure that the push off gate moves freely prior to loading. When all the cylinders are retracted, check the tractor oil level, adding to maintain normal levels.
- Approximate oil volumes required to charge the hydraulic system:
 - Model 600 / 650 21 liters
 - Model 900 / 1000 24 liters
 - Model 1200 / 1350 26 liters
 - Model 1450 / 1700 28 liters
 - Model 1800 / 2050 30 liters

WHEEL BOLT TORQUE **IMPORTANT!**

New Scrapers: Tighten all wheel bolts before using the units and check again after the first few loads. Tighten wheel bolts to:

Model 600 / 650	5/8 bolts	180 ft-lbs
	3/4 bolts	320 ft-lbs
Model 900 / 1000	5/8 bolts	180 ft-lbs
	3/4 bolts	320 ft-lbs
Model 1200 / 1350	5/8 bolts	180 ft-lbs
	3/4 bolts	320 ft-lbs
Model 1450 / 1700	5/8 bolts	180 ft-lbs
	3/4 bolts	320 ft-lbs
Model 1800 / 2050	5/8 bolts	180 ft-lbs
	3/4 bolts	320 ft-lbs

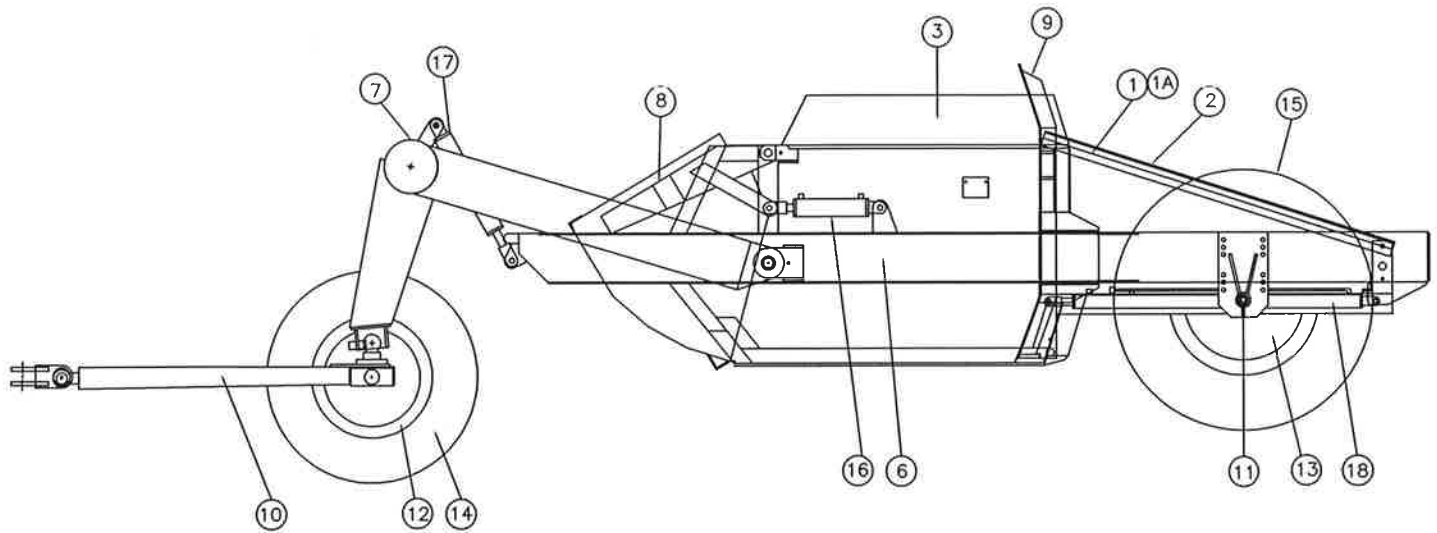
TRANSPORT SAFETY CHAIN / SAFETY LIGHTS

Always use a transport safety chain and Safety Lights in use on roads as per Highway Traffic Regulations.

TIRE PRESSURE

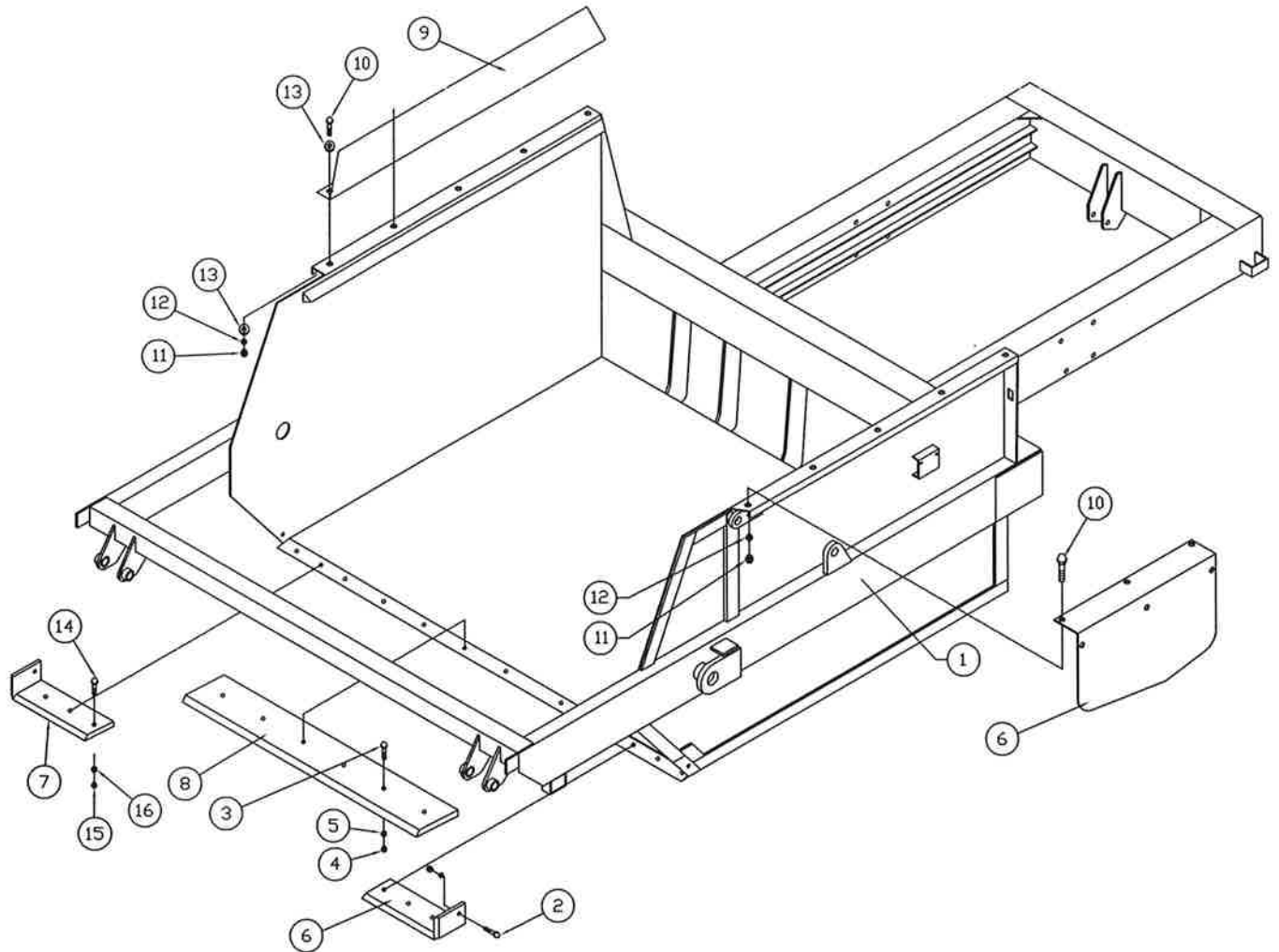
Tire Size	PSI
16.5L x 16.1 – 10 Ply Rib Implement	22
21.5L x 16.1 – 10 Ply Rib Implement	28
21.5L x 16.1 – 10 Ply AWT	22
18.4 x 26 – 10 Ply Rib Implement	26
23.1 x 26 – 10 Ply Rib Implement	26

1000 SCRAPER ASSEMBLY



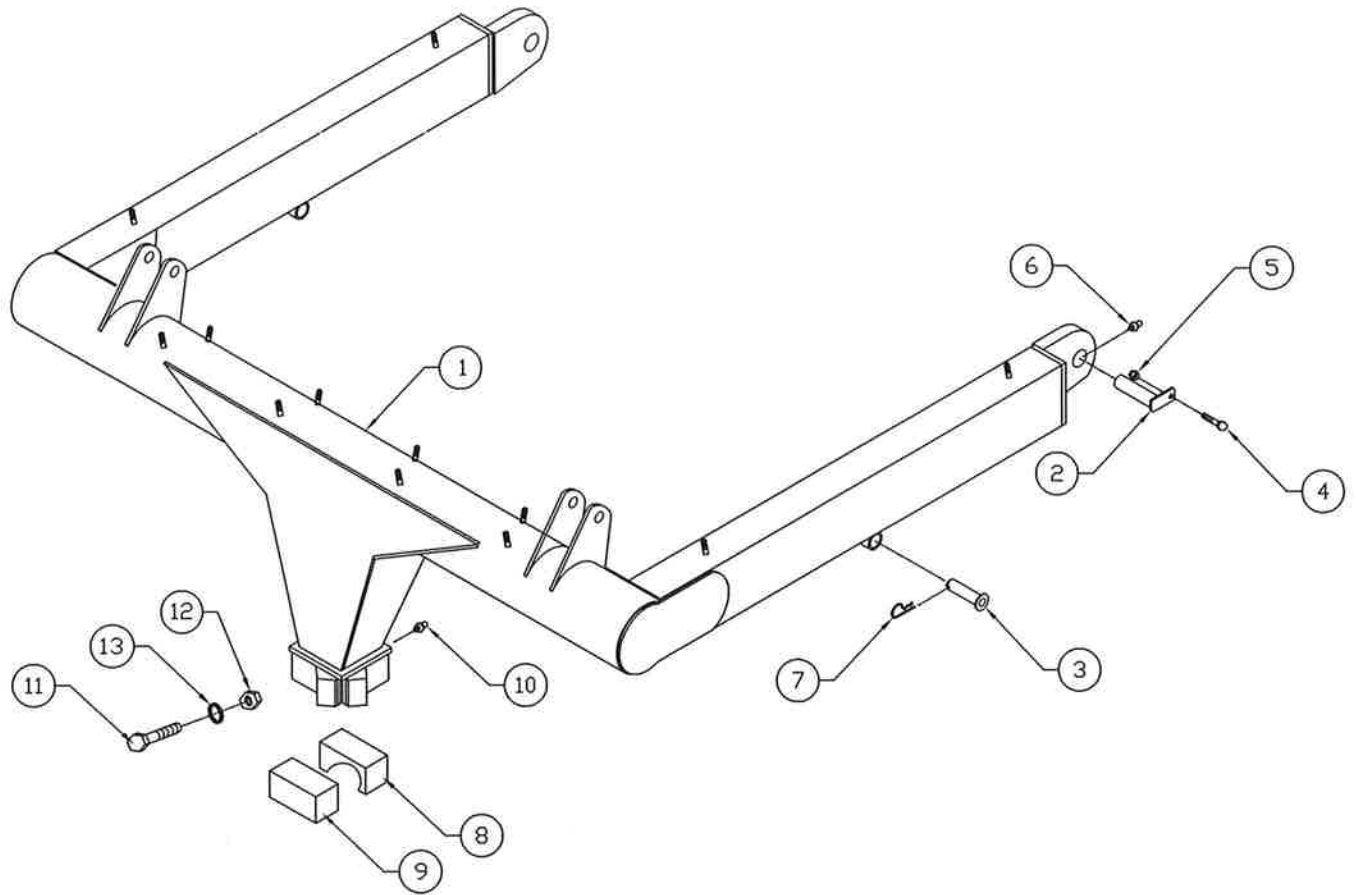
REF. NO.	PART #	QTY.	DESCRIPTION
1	1850238	1	REAR GATE BRACE-LEFT
1A	1850239	1	REAR GATE BRACE-RIGHT
2	1850167	1	REAR GATE CYLINDER GUARD
3	1850168	2	SIDE EXTENSION (OPTIONAL-1000)
6	1850220	1	MAIN FRAME
7	1850096	1	FRONT FRAME
8	1850079	1	FRONT GATE
9	1850080	1	REAR GATE
10	1850181	1	HITCH POLE
11	1850192	2	REAR AXLE
12	1135011	2	RIM - W14C X 16.1 - 8 BOLT
13	1135024	2	RIM - W16C X 16.1 - 8 BOLT
14	1135061	2	TIRE - 16.5L X 16.1 - 10 PLY RIB IMPLEMENT
15	1135040	2	TIRE - 21.5L X 16.1 - 10 PLY RIB IMPLEMENT
16	1126315	2	HYDRAULIC CYLINDER R2-30L-10
16A	1850470	2	HYDRAULIC CYLINDER CW-3.00-10.00-1.50(ORB)
17	1126314	2	HYDRAULIC CYLINDER R2-35L-18
17A	1850480	2	HYDRAULIC CYLINDER CW-3.50-18.00-1.75(ORB)
18	1128195	1	HYDRAULIC CYLINDER R2-40L-52
18A	1850490	1	HYDRAULIC CYLINDER CW-4.00-52.00-2.5(ORB)

1000 MAIN FRAME



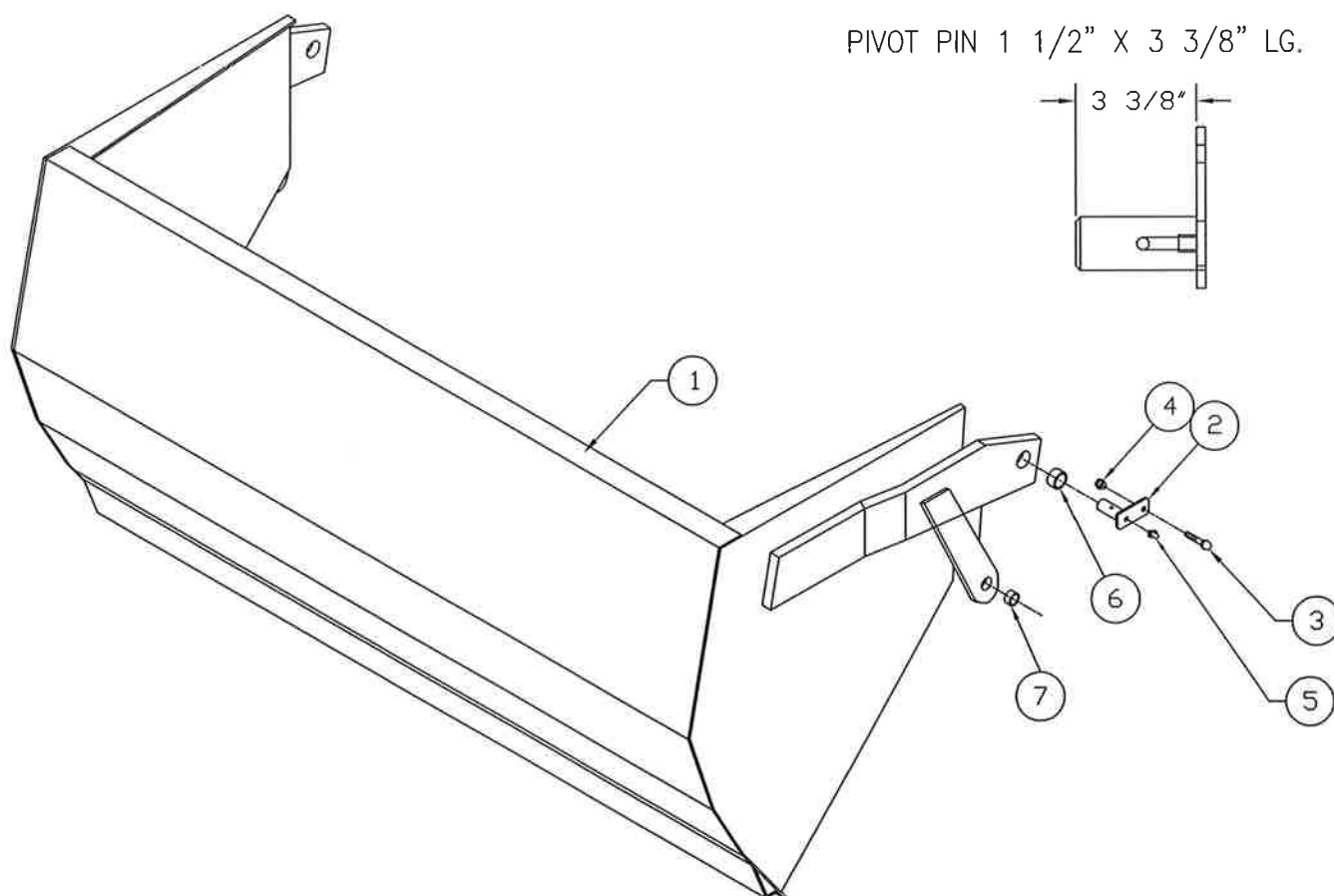
REF. NO.	PART #	QTY.	DESCRIPTION
1	1850220	1	MAIN FRAME
2	1102325	2	SCRAPER BOLT, 5/8" UNC x 1 3/4" LG.
3	1102366	6	SCRAPER BOLT, 3/4" UNC x 2 1/2" LG.
4	1102546	6	HEX NUT, 3/4" UNC GRADE 8
5	1102596	6	LOCKWASHER, 3/4" DIA.
6	1162814	1	CORNER CUTTING EDGE, 5/8" x 6" x 19 1/2", LEFT HAND
7	1162815	1	CORNER CUTTING EDGE, 5/8" x 6" x 19 1/2", RIGHT HAND
8	1162845	1	CENTER CUTTING EDGE, 3/4" X 10" x 54"
9	1850168	2	SIDE EXTENSION (OPTIONAL-1000)
10	1102050	8	HEX HEAD BOLT, 1/2" UNC x 1 3/4" LG.
11	1102535	8	HEX NUT 1/2" UNC
12	1102592	8	LOCKWASHER 1/2" DIA.
13	1102611	16	FLAT WASHER 1/2" DIA.
14	1102350	6	SCRAPER BOLT, 5/8" UNC x 2 1/2" LG.
15	1102541	8	HEX NUT 5/8" UNC GRADE 8
16	1102594	8	LOCKWASHER 5/8" DIA.
17	1850199	2	SIDE COVER (OPTIONAL)

1000 FRONT FRAME



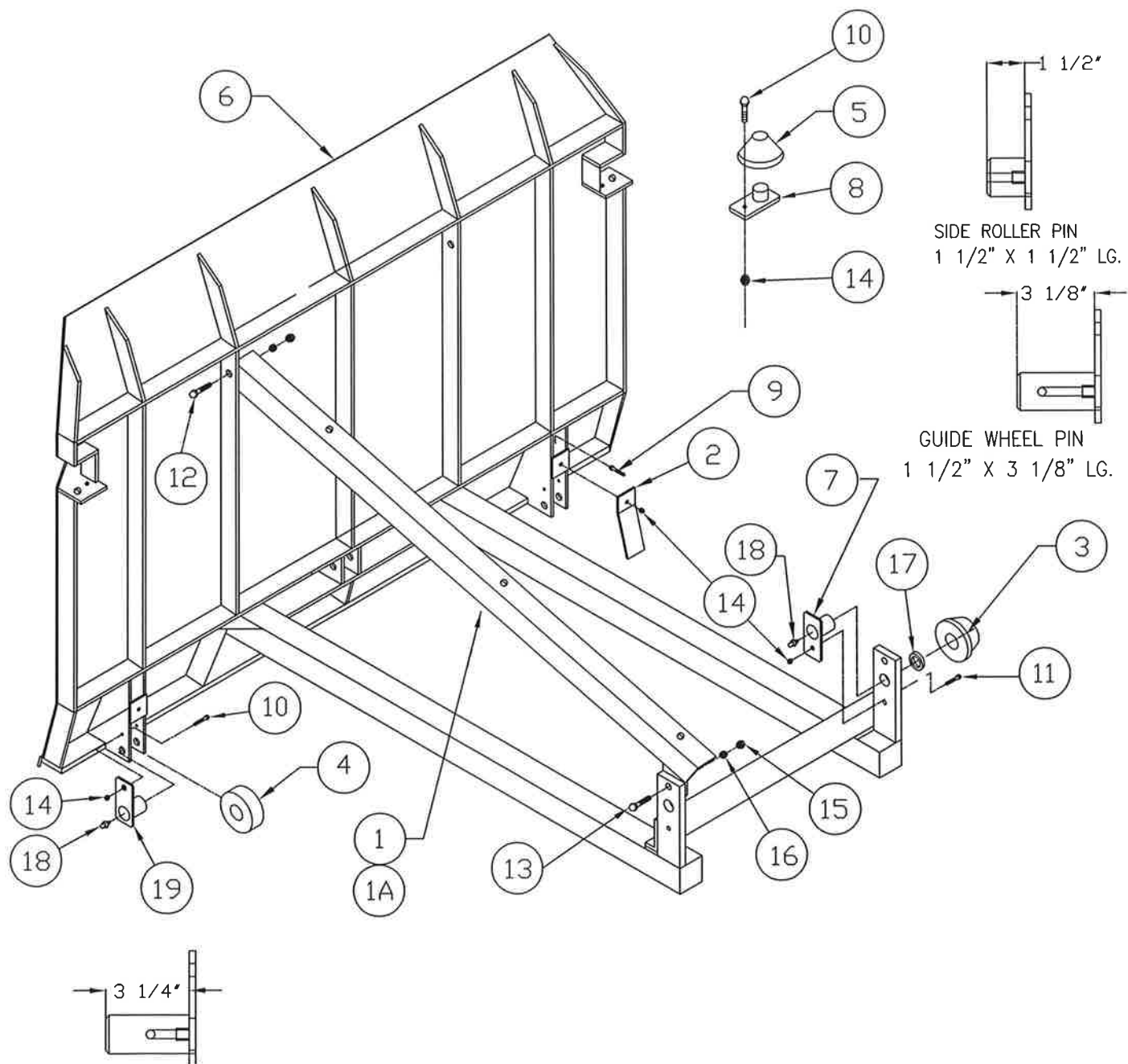
REF. NO.	PART #	QTY.	DESCRIPTION
1	1850096	1	FRONT FRAME
2	1850175	2	MAIN PIVOT PIN
3	1850174	2	TRANSPORT SAFETY PIN, $\phi 1 \frac{1}{2}$ " x $5 \frac{1}{4}$ " LG.
4	1102003	2	HEX HEAD BOLT, $\frac{3}{8}$ " UNC X 2" LG.
5	1102525	2	LOCKNUT, $\frac{3}{8}$ " UNC
6	1122797	2	GREASE NIPPLE, $\frac{1}{8}$ " NPT
7	1102775	2	HAIR PIN, $\phi \frac{1}{4}$ "
8	1144225	1	COUPLING SOCKET HALF (TAPPED)
9	1144226	1	COUPLING SOCKET HALF
10	1122798	1	GREASE NIPPLE— LONG BASE, $\frac{1}{8}$ " NPT
11	1102120	2	HEX HEAD BOLT, $\frac{5}{8}$ " UNC X 5" LONG GRADE 8
12	1102541	2	HEX HEAD NUT, $\frac{5}{8}$ " UNC GRADE 8
13	1102594	2	LOCKWASHER $\frac{5}{8}$ " DIA

1000 FRONT GATE



REF. NO.	PART #	QTY.	DESCRIPTION
1	1850079	1	FRONT GATE
2	1850173	2	FRONT GATE PIVOT PIN 1 1/2" X 3 3/8" LG.
3	1102002	2	HEX HEAD BOLT, 3/8" UNC X 1 1/2" LG.
4	1102525	2	HEX LOCKNUT, 3/8" UNC
5	1122797	2	GREASE NIPPLE, 1/8" NPT
6	1115548	2	BUSHING, 1 7/8" OD. X 1 1/2" ID. X 1" LG.
7	1115516	2	SPRING BUSHING, 1.25 OD. X 1" ID. X 1" LG.

1000 REAR PUSH GATE

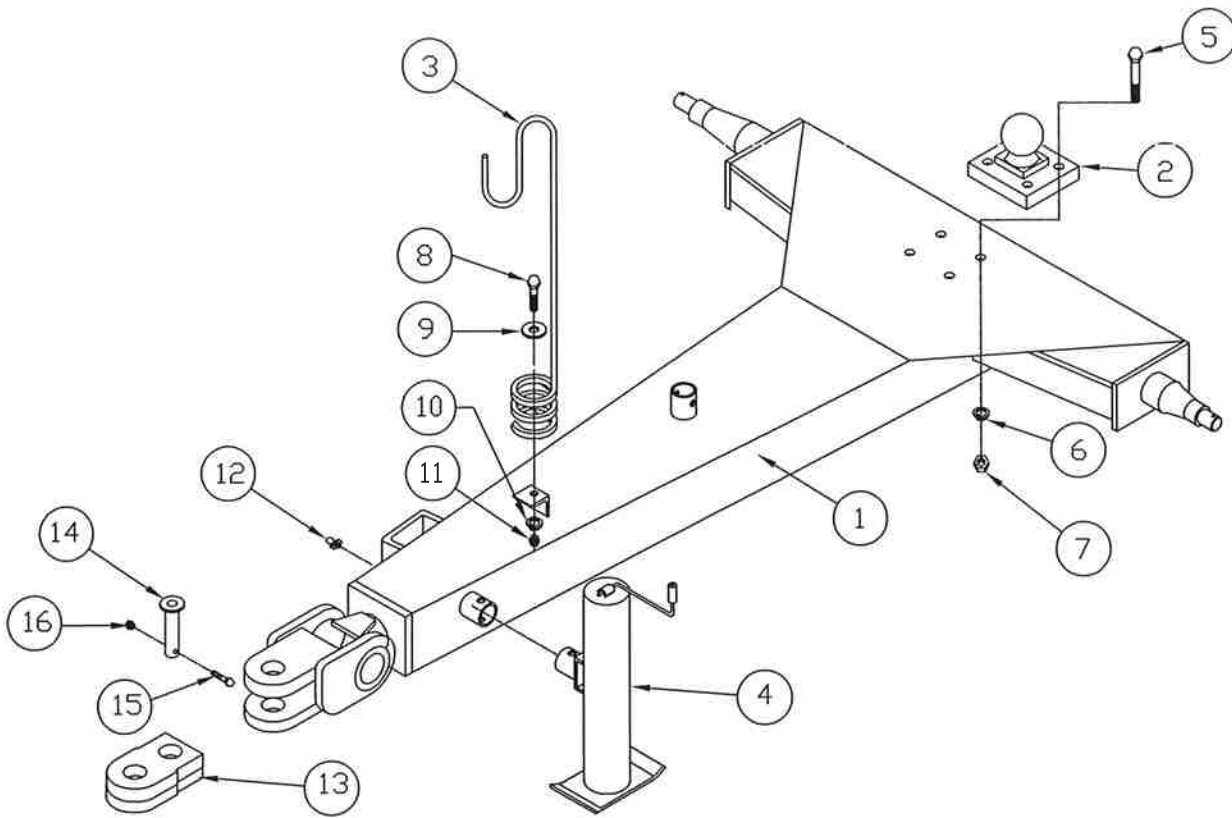


ROLLER PIN 1 1/2" X 3 1/4" LG.

1000 REAR PUSH GATE

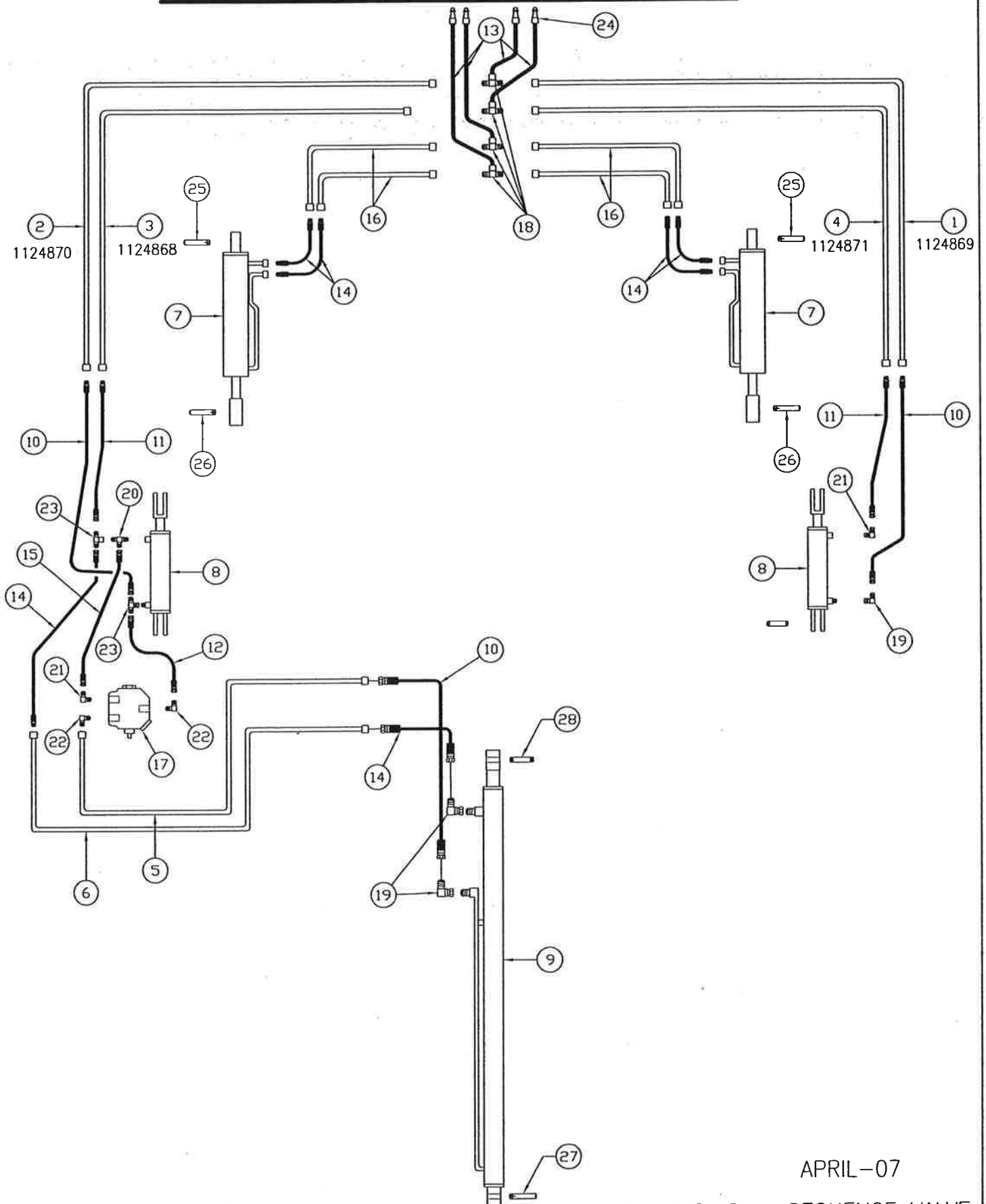
REF. NO.	PART #	QTY.	DESCRIPTION
	1850080		REAR GATE WELDMENT
1	1850238	1	REAR GATE BRACE-LEFT
1A	1850239	1	REAR GATE BRACE-RIGHT
2	1850169	2	REAR GATE ROLLER SCRAPER
3	1175573	2	REAR GATE GUIDE WHEEL
4	1175572	2	REAR GATE ROLLER, 4" DIA.
5	1850180	2	REAR GATE SIDE ROLLER
6	1850080	1	REAR PUSH GATE
7	1850171	2	REAR GATE GUIDE WHEEL PIN 1 1/2" X 3 1/8" LG.
8	1850172	2	SIDE ROLLER PIN 1 1/2" X 1 1/2" LG.
9	1102001	2	HEX HD. BOLT 3/8" UNC x 1" LG.
10	1102002	4	HEX HD. BOLT 3/8" UNC x 1 1/2" LG.
11	1102003	2	HEX HD. BOLT 3/8" UNC x 2" LG.
12	1102151	2	HEX HD. BOLT 3/4" UNC x 2" LG.
13	1102152	2	HEX HD. BOLT 3/4" UNC x 2 1/2" LG.
14	1102526	8	HEX LOCKNUT, 3/8" UNC.
15	1102545	4	HEX NUT, 3/4" UNC
16	1102596	4	LOCKWASHER, 3/4" DIA.
17	1102625	2	FLATWASHER, 1 1/2" DIA.
18	1122797	6	GREASE NIPPLE, 1/8" NPT
19	1105667	2	REAR GATE ROLLER PIN 1 1/2" X 3 1/4" LG.

1000 HITCH POLE

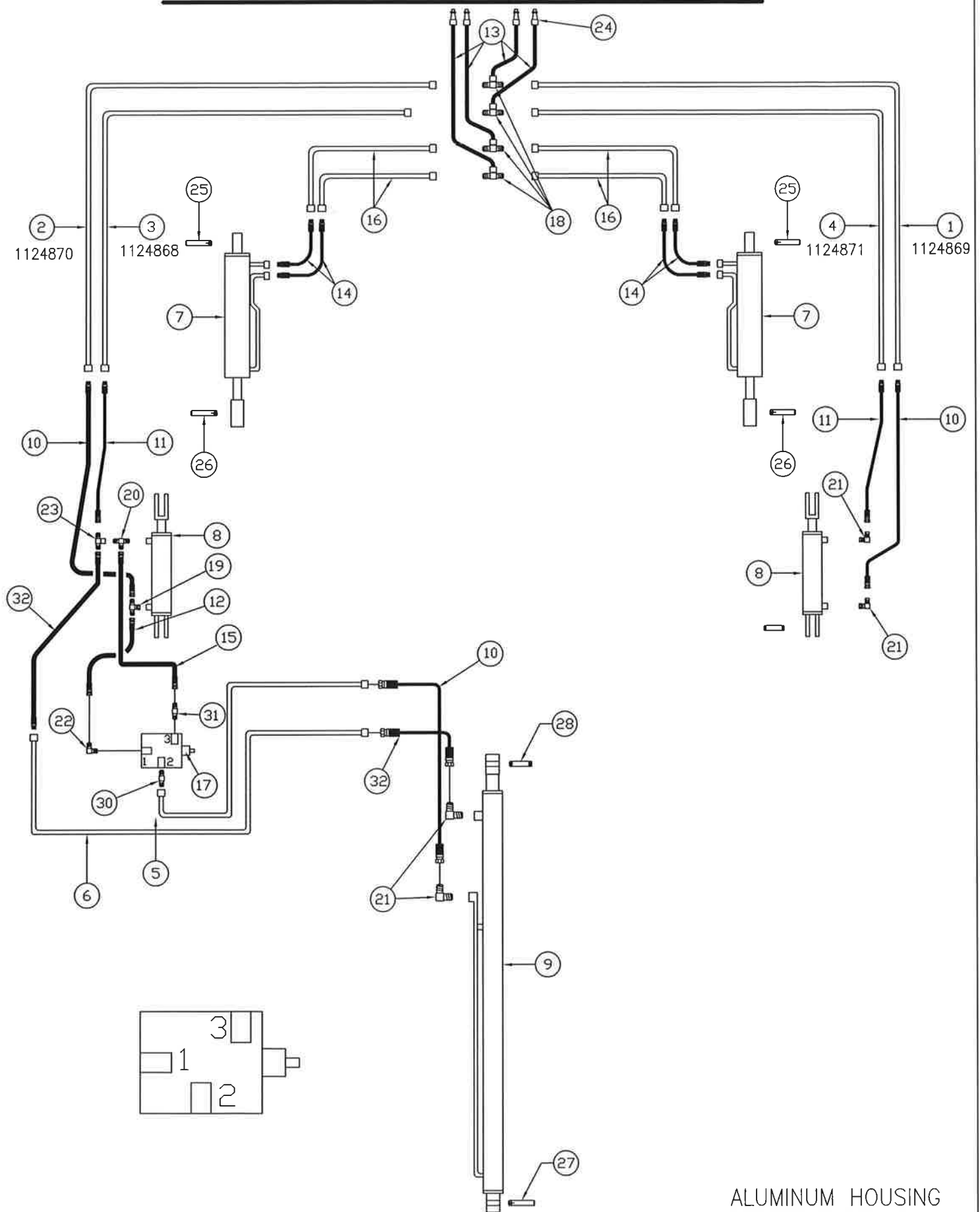


REF. NO.	PART #	QTY.	DESCRIPTION
1	1850181	1	HITCH POLE
2	1144224	1	COUPLING BALL
3	1105556	1	HOSE HOLDER – SPRING TYPE
4	1173410	1	HITCHJACK
5	1102167	4	HEX HEAD BOLT – 3/4" UNC x 3" LG. GRADE 8
6	1102596	4	LOCKWASHER – 3/4" DIA
7	1102546	4	HEX NUT – 3/4" UNC GRADE 8
8	1102051	1	HEX HEAD BOLT – 1/2" UNC x 1 1/2" LG.
9	1102611	1	FLATWASHER – 1/2" DIA
10	1102592	1	LOCKWASHER – 1/2" DIA
11	1102535	1	HEX NUT – 1/2" UNC
12	1122798	1	GREASE NIPPLE, STRAIGHT LONG BASE, 1/8" NPT
13	1850260	1	HITCH TONGUE (OPTIONAL)
14	1850262	1	HITCH TONGUE PIN (OPTIONAL)
15	1102004	1	HEX HEAD BOLT – 3/8" UNC x 2 1/2" LG.
16	1102526	1	HEX LOCKNUT – 3/8" UNC
	1850265	1	HITCH TONGUE ADAPTOR KIT – (OPTIONAL)

900 HYDRAULIC ASSEMBLY



1000 HYDRAULIC ASSEMBLY



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ALUMINUM HOUSING
SEQUENCE VALVE

900 HYDRAULIC ASSEMBLY

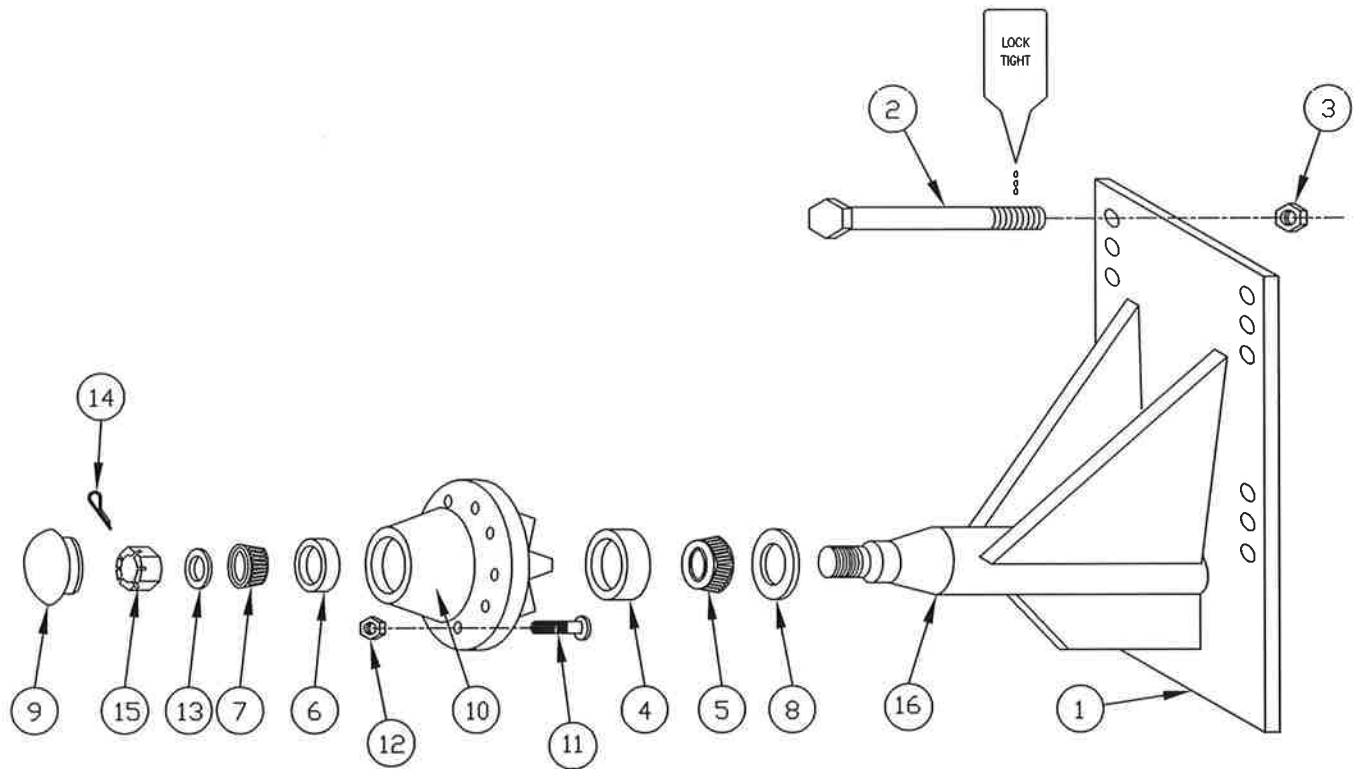
REF. NO.	PART #	QTY.	DESCRIPTION
1	1124869	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
2	1124870	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
3	1124868	1	HYDRAULIC TUBE, 1/2" DIA. X 119 1/2" LG. - 3/4"-16 JICF(2)
4	1124871	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
5	1124867	1	HYDRAULIC TUBE, 1/2" DIA. X 79" LG. - 3/4"-16 JICF(2)
6	1124866	1	HYDRAULIC TUBE, 1/2" DIA. X 73 1/4" LG. - 3/4"-16 JICF(2)
7	1126314	2	LIFT CYLINDER, R2-35L-18
8	1126315	2	FRONT GATE CYLINDER, R2-30L-10
9	1128195	1	REAR PUSH CYLINDER, R2-40L-52
10	1124609	3	HYDRAULIC HOSE, 1/2" x 30" LG., 3/4" JICM X 3/4" JICF
11	1124607	2	HYDRAULIC HOSE, 1/2" x 18" LG., 3/4" JICM X 3/4" JICF
12	1124530	1	HYDRAULIC HOSE, 1/2" x 16 1/2" LG., 3/4" JICFSW(2)
13	1123082	4	HYDRAULIC HOSE, 1/2" x 144" LG., 1/2" NPTM(2)
14	1124608	6	HYDRAULIC HOSE, 1/2" x 24" LG., 3/4" JICM X 3/4" JICFSW
15	1124520	1	HYDRAULIC HOSE, 3/8" x 27" LG., 3/4" JICFSW(2)
16	1124861	4	HYDRAULIC TUBE, 1/2" DIA. X 35" LG. - 3/4"-16 JICF(2)
17	1127070	1	SEQUENCE VALVE (RD1050SH) - CAST HOUSING
18	1123368	4	FEMALE BRANCH TEE, 3/4" JICM(2) X 1/2" NPTF
19	1124405	3	SWIVEL ELBOW 90° - 3/4" JICM X 3/4" JICFSW
20	1124402	1	MALE RUN TEE, 3/8" NPTM X 3/4" JICM(2)
21	1124403	2	SWIVEL ELBOW 90° - 3/8" NPTM X 3/4" JICM
22	1124404	2	SWIVEL ELBOW 90° - 1/2" NPTM X 3/4" JICM
23	1124401	2	FEMALE BRANCH TEE, 3/4" JICM(2) X 3/4" JICFSW
24	1127011	4	MALE COUPLERS TIP 1/2" NPTF
25	1850204	2	LIFT CYLINDER PIN TOP 1" X 4 5/8" DRILLED
26	1707139	2	LIFT CYLINDER PIN BOTTOM 1" X 5 1/8" DRILLED
27	1707096	1	PUSH CYLINDER PIN REAR 1" X 5 3/8" DRILLED
28	1225627	1	PUSH CYLINDER PIN FRONT 1" X 3 3/8" U.L. GROOVED
29	1225620	2	FRONT GATE CYLINDER PIN REAR 1" X 2 1/4" U.L. GROOVED
	1707130	25	2 LINE PIPE CLAMPS
	1102526	25	3/8" UNC LOCK NUT

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1000 HYDRAULIC ASSEMBLY

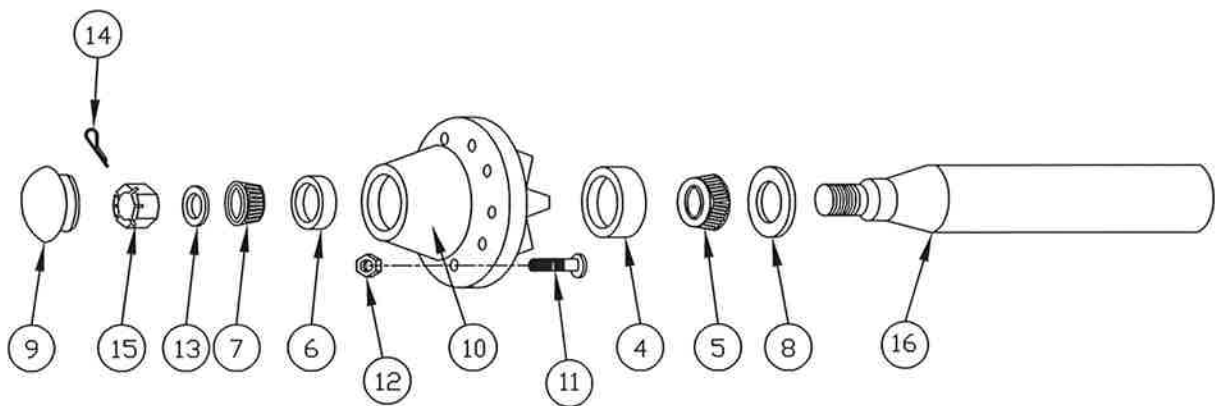
REF. NO.	PART #	QTY.	DESCRIPTION
1	1124869	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
2	1124870	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
3	1124868	1	HYDRAULIC TUBE, 1/2" DIA. X 119 1/2" LG. - 3/4"-16 JICF(2)
4	1124871	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
5	1124867	1	HYDRAULIC TUBE, 1/2" DIA. X 79" LG. - 3/4"-16 JICF(2)
6	1124866	1	HYDRAULIC TUBE, 1/2" DIA. X 73 1/4" LG. - 3/4"-16 JICF(2)
7	1850480	2	LIFT CYLINDER
8	1850470	2	FRONT GATE CYLINDER
9	1850490	1	REAR PUSH CYLINDER
10	1124609	3	HYDRAULIC HOSE, 1/2" x 30" LG., 3/4" JICM X 3/4" JICF
11	1124607	2	HYDRAULIC HOSE, 1/2" x 18" LG., 3/4" JICM X 3/4" JICF
12	1124530	1	HYDRAULIC HOSE, 1/2" x 16 1/2" LG., 3/4" JICFSW(2)
13	1123082	4	HYDRAULIC HOSE, 1/2" x 144" LG., 1/2" NPTM(2)
14	1127537	4	HYDRAULIC HOSE, 1/2" x 24" LG., 3/4" JICM X #8 ORBM
15	1124520	1	HYDRAULIC HOSE, 3/8" x 27" LG., 3/4" JICFSW(2)
16	1124861	4	HYDRAULIC TUBE, 1/2" DIA. X 35" LG. - 3/4"-16 JICF(2)
17	1127071	1	SEQUENCE VALVE (PARKER-ECJ) - ALUMINUM HOUSING
18	1123368	4	FEMALE BRANCH TEE, 3/4" JICM(2) X 1/2" NPTF
19	1124739	1	BRANCH TEE, 3/4" JICM(2) X #8 ORBM
20	1123372	1	MALE RUN TEE, 3/4" JICM(2) X #8 ORBM
21	1123442	4	ELBOW 90° - 3/4" JICM X #8 ORBM
22	1123210	1	SWIVEL ELBOW 90° - 3/4" ORBM X 3/4" JICM
23	1124401	1	FEMALE BRANCH TEE, 3/4" JICM(2) X 3/4" JICFSW
24	1127011	4	MALE COUPLERS TIP 1/2" NPTF
25	1850204	2	LIFT CYLINDER PIN TOP 1" X 5 1/2" DRILLED
26	1707139	2	LIFT CYLINDER PIN BOTTOM 1" X 5 1/8" DRILLED
27	1707096	1	PUSH CYLINDER PIN REAR 1" X 6 1/8" DRILLED
28	1225627	1	PUSH CYLINDER PIN FRONT 1" X 3 3/8" U.L. GROOVED
29	1225620	2	FRONT GATE CYLINDER PIN REAR 1" X 2 1/4" U.L. GROOVED
30	1123212	1	CONNECTOR, 3/4" ORBM X 3/4" JICM
31	1124363	1	CONNECTOR, 9/16" ORBM X 3/4" JICM
32	1124608	2	HYDRAULIC HOSE, 1/2" x 24" LG., 3/4" JICM X 3/4" JICFSW
	1707130	25	2 LINE PIPE CLAMPS
	1102526	25	3/8" UNC LOCK NUT

1000 REAR AXLE



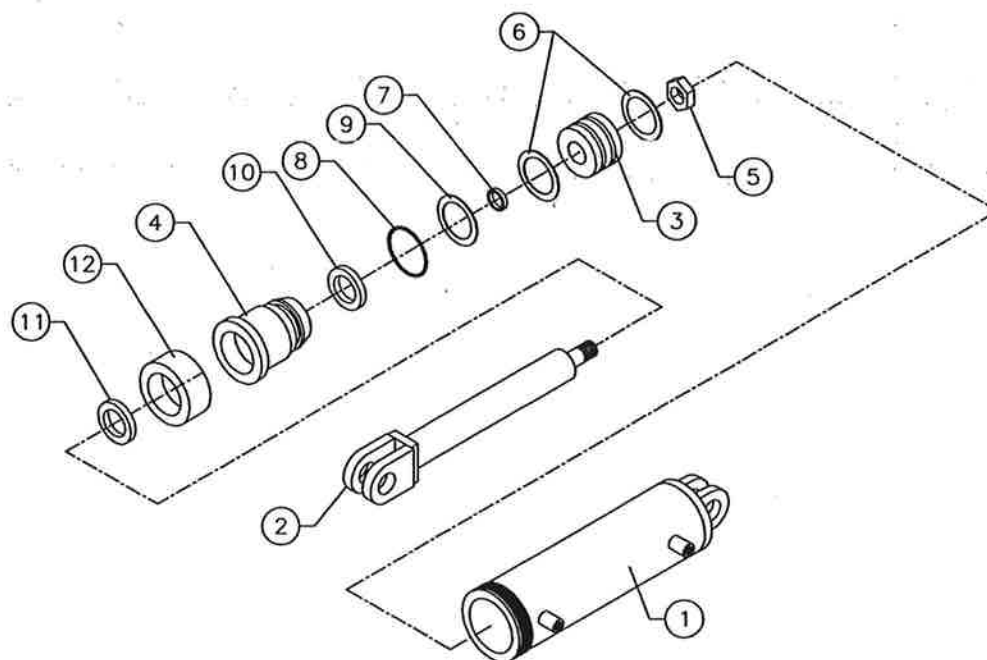
REF. NO.	PART #	QTY.	DESCRIPTION
1	1850192	1	REAR AXLE
2	1102185	4	HEX HEAD BOLT, 3/4" UNC x 8 " LONG, GRADE 8
3	1102546	4	HEX HEAD NUT, 3/4" UNC GRADE 8
4	1135502	1	INNER CUP
5	1135506	1	INNER CONE
6	1135205	1	OUTER CUP
7	1135206	1	OUTER CONE
8	1135508	1	GREASE SEAL
9	1135512	1	DUST CAP
10	1135501	1	HUB CASTING
11	1135504	8	WHEEL BOLT STUDS
12	1135505	8	WHEEL NUTS, 3/4" UNF HEX FLANGED, GRADE 8
13	1135397	1	WASHER, 1 1/4" DIA.
14	1105371	1	COTTER PIN
15	1135398	1	CASTELLATED HEX NUT, 1 1/4" - 12UNF
16	1135413	1	SPINDLES 3" DIA X 16" LG. (REAR ONLY)
	1135420	1	HUB ASSEMBLY COMPLETE
NOT SHOWN	1135150	1	VALVE STEM
NOT SHOWN	1135024	1	RIM, W16C X 16.1 8 BOLT
NOT SHOWN	1135040	1	TIRE, 21.5 X 16.1 - 10 PLY RIB IMPLEMENT

1000 FRONT AXLE



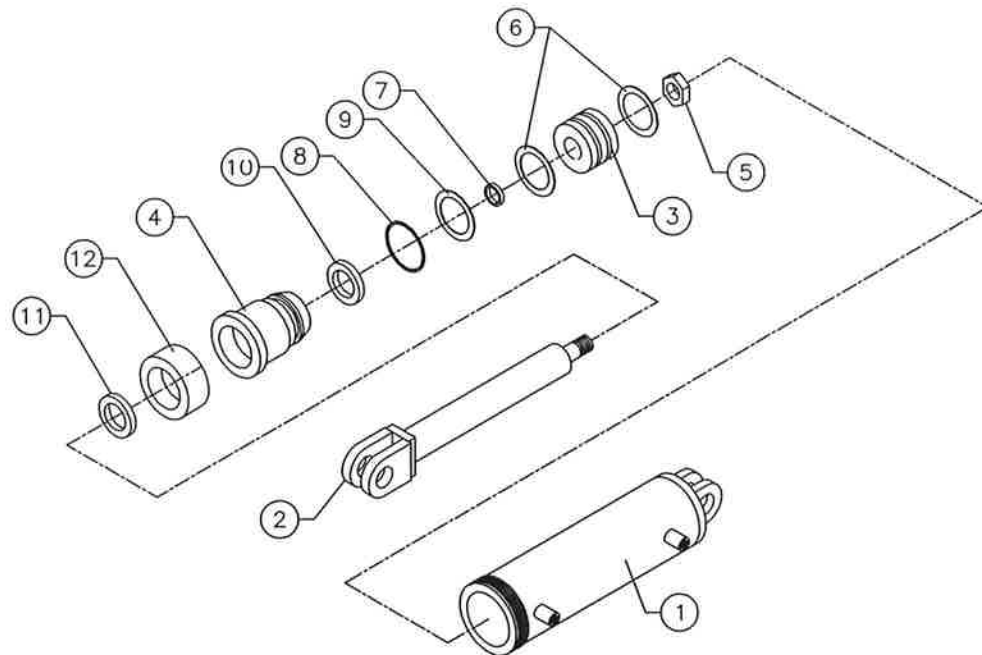
REF. NO.	PART #	QTY.	DESCRIPTION
1			
2			
3			
4	1135502	1	INNER CUP
5	1135506	1	INNER CONE
6	1135205	1	OUTER CUP
7	1135206	1	OUTER CONE
8	1135508	1	GREASE SEAL
9	1135512	1	DUST CAP
10	1135501	1	HUB CASTING
11	1135504	8	WHEEL BOLT STUDS
12	1135505	8	WHEEL NUTS, 3/4" UNF HEX FLANGED, GRADE 8
13	1135397	1	WASHER, 1 1/4" DIA.
14	1105371	1	COTTER PIN
15	1135398	1	CASTELLATED HEX NUT, 1 1/4" - 12UNF
16	1135417	1	SPINDLES 3" DIA X 15 1/2" LG. (FRONT ONLY)
	1135420	1	HUB ASSEMBLY COMPLETE
NOT SHOWN	1135150	1	VALVE STEM
NOT SHOWN	1135011	1	RIM, W14C X 16.1 8 BOLT
NOT SHOWN	1135061	1	TIRE, 16.5 X 16.1 - 10 PLY RIB IMPLEMENT

900 FRONT GATE CYLINDER



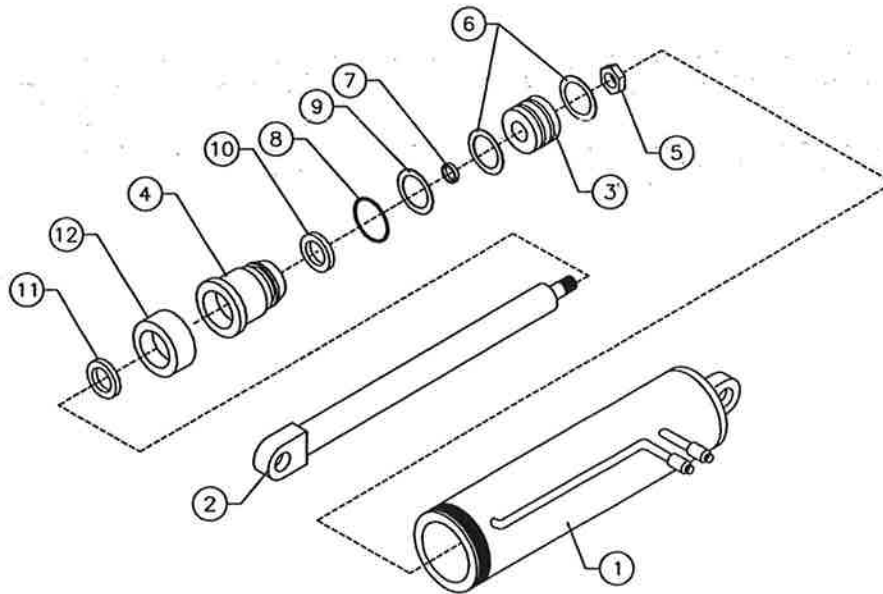
REF. NO.	PART #	QTY.	DESCRIPTION
	1126315	1	CYLINDER ASSEMBLY R2-30L-10
1	1126581	1	CYLINDER BARREL
2	1126582	1	CYLINDER SHAFT
3	1126533	1	PISTON
4	1126570	1	GLAND
5	1126426	1	NUT, 1" - 14 UNF, GRADE 8 LOCKNUT
6	1126540	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126538	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126536	1	GLAND COLLAR
	1126803	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1550059	1	PIN - FRONT GATE
	1225620	1	PIN - GROOVE 1" DIA X 2 1/8" LG.
	1500115	2	PIN RETAINER

1000 FRONT GATE CYLINDER



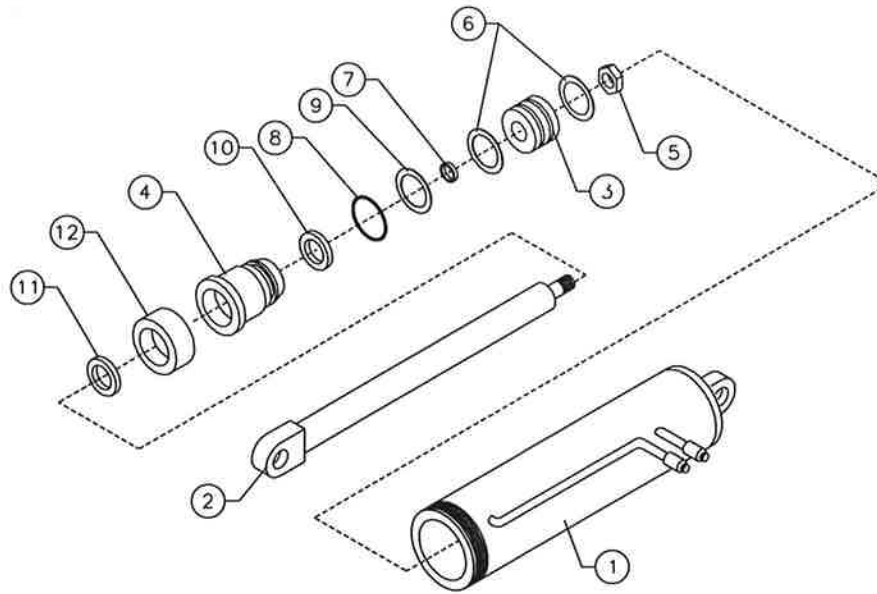
REF. NO.	PART #	QTY.	DESCRIPTION
	1850470	1	CYLINDER ASSEMBLY CW-3.00-10.00-1.50
1	1850471	1	CYLINDER BARREL
2	1850472	1	CYLINDER SHAFT
3	1126533	1	PISTON
4	1126570	1	GLAND
5	1126426	1	NUT, 1" - 14 UNF, GRADE 8 LOCKNUT
6	1126540	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126538	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126536	1	GLAND COLLAR
	1126803	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1550059	1	PIN - FRONT GATE
	1225620	1	PIN - GROOVE 1" DIA X 2 1/8" LG.
	1500115	2	PIN RETAINER

900 LIFT CYLINDER



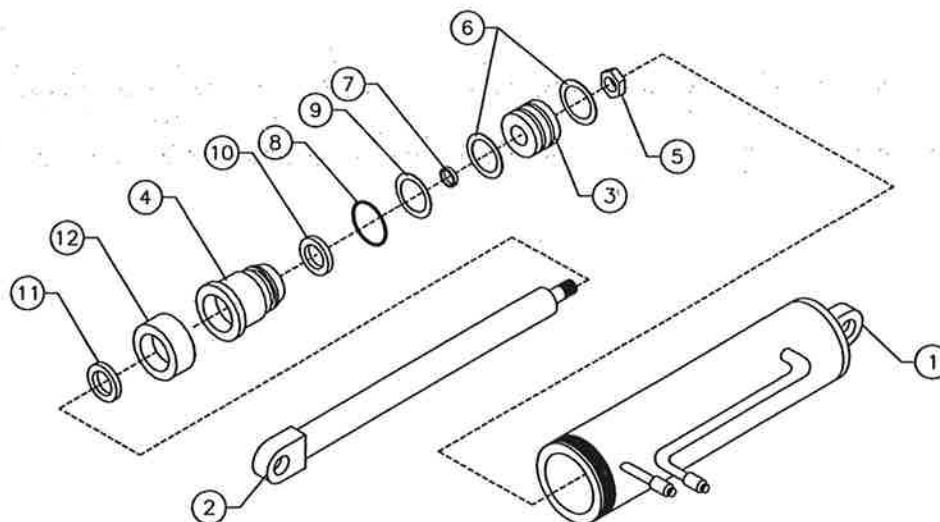
REF. NO.	PART #	QTY.	DESCRIPTION
	1126314	1	CYLINDER ASSEMBLY R2-35L-18
1	1126682	1	CYLINDER BARREL
2	1126683	1	CYLINDER SHAFT
3	1126653	1	PISTON
4	1126700	1	GLAND
5	1126756	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126693	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126695	1	GLAND STATIC SEAL
9	1126698	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126665	1	GLAND COLLAR
	1126685	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225627	1	PIN - GROOVE 1" DIA X 3 3/8"
	1225654	1	PIN - GROOVE 1" DIA X 2 7/8"
	1500115	4	PIN RETAINER

1000 LIFT CYLINDER



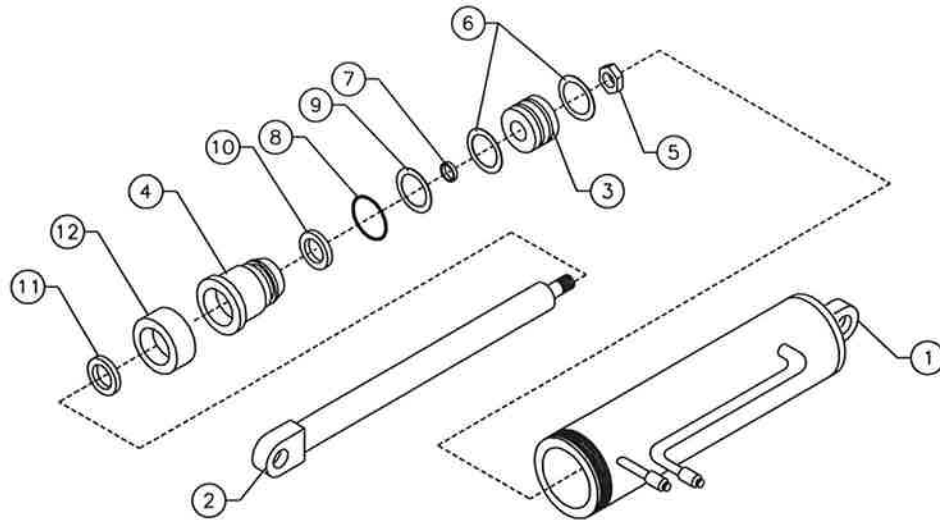
REF. NO.	PART #	QTY.	DESCRIPTION
	1850480	1	CYLINDER ASSEMBLY CW-3.50-18.00-1.75
1	1850481	1	CYLINDER BARREL
2	1850482	1	CYLINDER SHAFT
3	1126653	1	PISTON
4	1126700	1	GLAND
5	1126756	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126693	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126695	1	GLAND STATIC SEAL
9	1126698	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126665	1	GLAND COLLAR
	1126685	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1850204	1	PIN - 1" DIA X 5 1/2"
	1707139	1	PIN - 1" DIA X 5 1/8"
	1102004	4	HCS, GR 5, 0.375-16 UNC X 2.5 LG
	1102004	4	NUT, LOCK, HEX, 0.375 UNC

900 PUSH CYLINDER



REF. NO.	PART #	QTY.	DESCRIPTION
	1128195	1	CYLINDER ASSEMBLY R2-40L-52-2.5
1	1126797	1	CYLINDER BARREL
2	1128196	1	CYLINDER SHAFT
3	1106056	1	PISTON
4	1128197	1	GLAND
5	1102549	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126806	2	PISTON SEAL (D)
7	1126882	1	PISTON SEAL (S)
8	1126830	1	GLAND STATIC SEAL
9	1126831	1	GLAND STATIC SEAL BACKUP
10	3500047	1	ROD SEAL
11	3500076	1	ROD WIPER
12	1126770	1	GLAND COLLAR
	1128198	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225627	2	PIN - GROOVE 1" DIA X 3 3/8"
	1500115	4	PIN RETAINER

1000 PUSH CYLINDER



REF. NO.	PART #	QTY.	DESCRIPTION
	1850490	1	CYLINDER ASSEMBLY CW-4.00-52.00-2.50
1	1850491	1	CYLINDER BARREL
2	1850492	1	CYLINDER SHAFT
3	1106056	1	PISTON
4	1128197	1	GLAND
5	1102549	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126806	2	PISTON SEAL (D)
7	1126882	1	PISTON SEAL (S)
8	1126830	1	GLAND STATIC SEAL
9	1126831	1	GLAND STATIC SEAL BACKUP
10	3500047	1	ROD SEAL
11	3500076	1	ROD WIPER
12	1126770	1	GLAND COLLAR
	1128198	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1707096	1	PIN - 1" DIA X 6 1/8"
	1225627	1	PIN - GROOVE 1" DIA X 3 3/8"
	1500115	2	PIN RETAINER
	1102004	1	3/8" X 2 1/2" UNC GR. 5 PLATED HEX BOLT
	1102526	1	3/8" UNC HEX NYLOCK. NUT GR.5 PLATED

PILOT OPERATED SEQUENCE VALVE MODEL RD 1000S

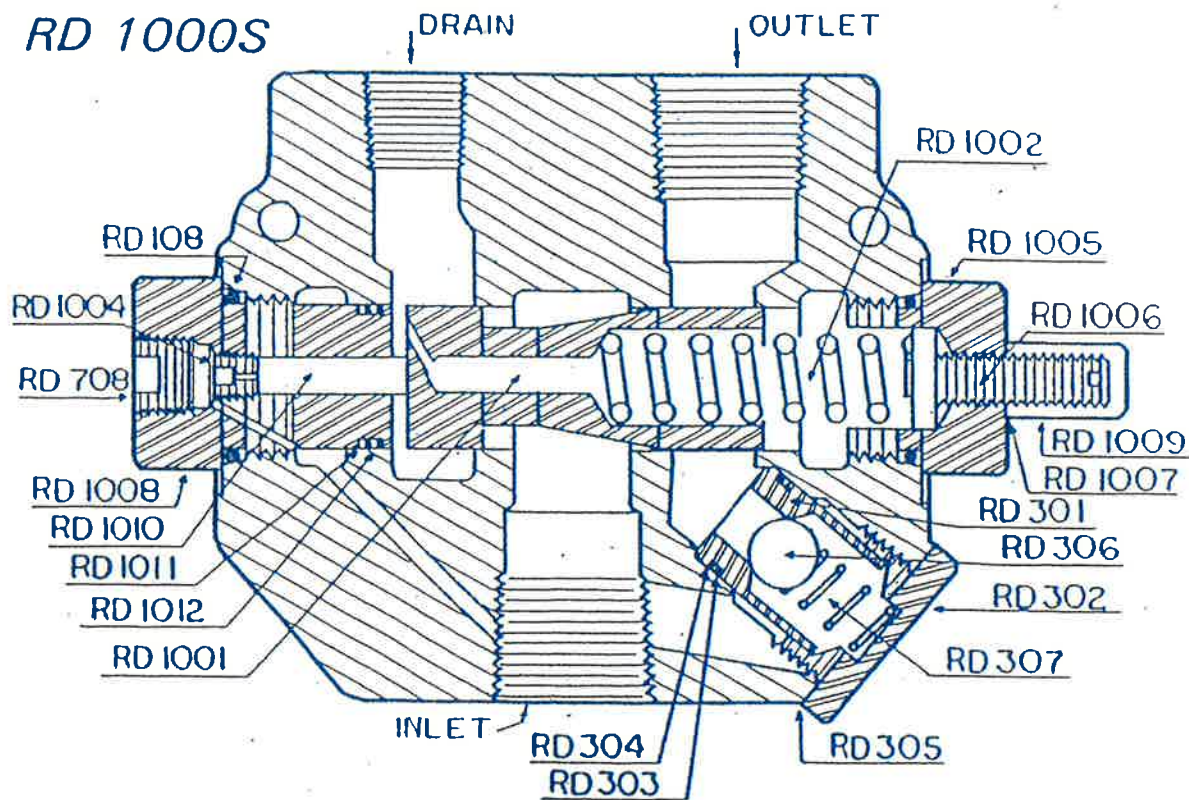
The model RD 1000S pilot-operated sequence valve is designed to prevent oil in a primary circuit from reaching a secondary circuit until the pressure in the primary circuit reaches a pre-set level. The sequence valve opens and oil is metered to the secondary circuit until the cylinder bottoms out and the system rises to full pressure. The operation is smooth and chatter free. The RD 1000S has an integral heat treated check valve for free return flow thru the valve.

Weight 7 lbs.

Flow Capacity (0-30 GPM)

Maximum Pressure 3000 PSI

RD 1000S



Internal pilot and external drain

Manufactured by

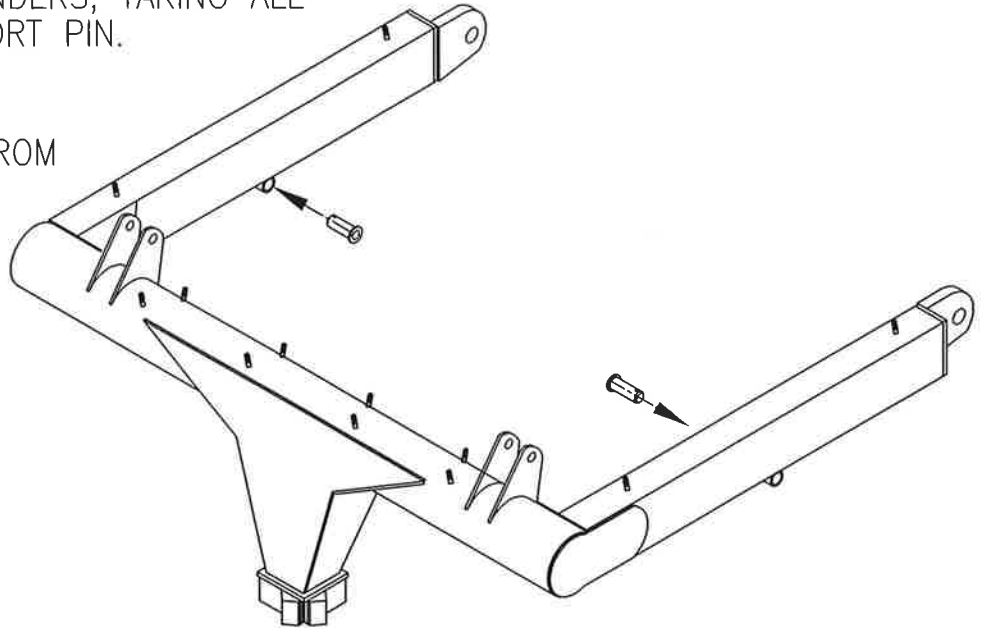
Douglass Hydraulics, Inc.

311 E. Locust St., C.L., Omaha, Nebraska 68110, (712) 347-5262

1000 TRANSPORT PIN

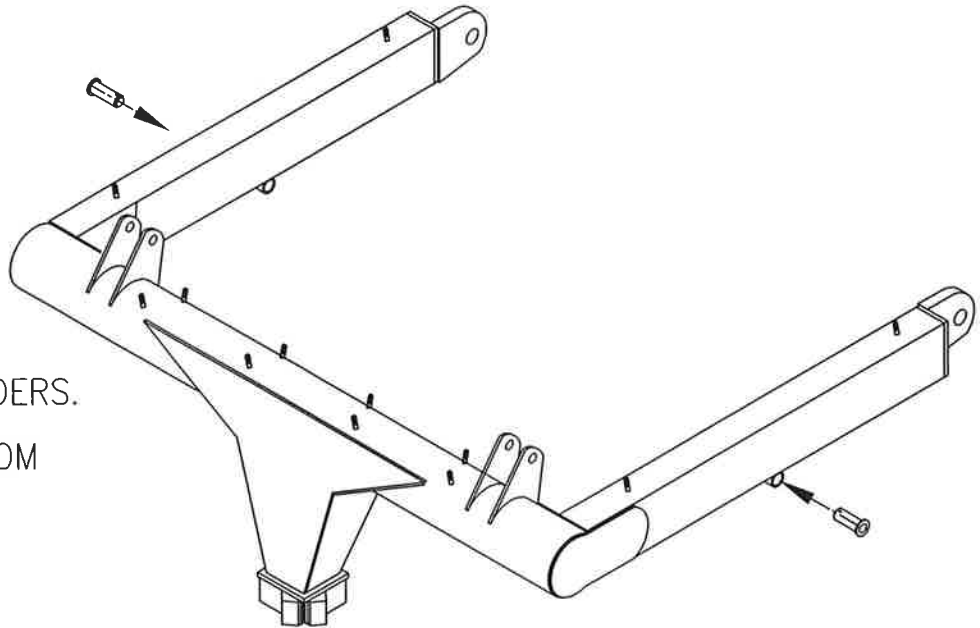
PIN POSITION FOR WORK MODE

1. FULLY RETRACT LIFT CYLINDERS, TAKING ALL PRESSURE OFF THE TRANSPORT PIN.
2. REMOVE TRANSPORT PIN.
3. INSERT TRANSPORT PIN FROM INSIDE OF FRONT FRAME AS SHOWN TO THE RIGHT.
4. BEGIN WORK MODE.



PIN POSITION FOR TRANSPORT MODE

1. REMOVE TRANSPORT PIN.
2. FULLY RETRACT LIFT CYLINDERS.
3. INSERT TRANSPORT PIN FROM OUTSIDE OF FRONT FRAME AS SHOWN TO THE RIGHT.
4. BEGIN TRANSPORT MODE.



WARRANTY

REGISTRATION (OWNER'S COPY)

Leon's Mfg. Company Inc. warrants all products manufactured by Leon's Mfg. Company Inc. for a period of one year from the date of purchase for private use, or a period of 90 days for commercial use.

Leon's Mfg. Company Inc. warrants tires for a period of 60 days for private use or a period of 30 days for commercial use.

This warranty provides that the equipment shall be free of defective materials and workmanship, or we will replace or repair at our factory any part that our inspection shows to be defective.

If any product or portion thereof is modified, changed or tampered with in any way, this warranty shall be deemed null and void.

All hydraulic cylinders, valves, hoses, tires, spindles and other purchased products, except as specifically included in the warranty above, are not manufactured by Leon's and are, therefore, covered by the warranties of the manufacturer of these products.

All parts shipped to the factory shall be shipped prepaid and will be returned F.O.B. Factory. Leon's Mfg. Company Inc. does not assume responsibility for shipping, labour or travel expenses.

Although Leon's products are designed to minimize tractor strain, Leon's Mfg. Company Inc. will assume no responsibility for damage to tractors or other equipment.

Leon's Mfg. Company Inc. reserves the right to make improvements and reserve the right to change the design, materials and specifications without notice or obligation.

MODEL NO. _____ **DATE OF PURCHASE** _____

SERIAL NO. _____ **DEALER** _____

TOWN _____ **PROV. / STATE** _____

OWNER _____ **ADDRESS** _____

TOWN _____ **PROV. / STATE** _____

What make and model of tractor will this product be used with? _____

Will this product be used: commercially? _____

Privately? _____

Why did you buy **Leon**? Advertising _____
 Previous Owner _____
 Recommendation _____
 Special Features _____

Comments:

NOTE: This warranty is effective only if the warranty registration is filled in and mailed by the original purchaser within ten days after the date of delivery.

WARRANTY

REGISTRATION (MANUFACTURER'S COPY)

Leon's Mfg. Company Inc. warrants all products manufactured by Leon's Mfg. Company Inc. for a period of one year from the date of purchase for private use, or a period of 90 days for commercial use.

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MODEL NO. _____ DATE OF PURCHASE _____

SERIAL NO. _____ DEALER _____

TOWN _____ PROV. / STATE _____

OWNER _____ ADDRESS _____

TOWN _____ PROV. / STATE _____

What make and model of tractor will this product be used with? _____

Will this product be used: commercially? _____
privately? _____

Why did you buy **Leon**? Advertising _____
Previous Owner _____
Recommendation _____
Special Features _____

Comments:

NOTE: This warranty is effective only if the warranty registration is filled in and mailed by the original purchaser within ten days after the date of delivery.

FEB-2012

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