

LEON

Operator Manual



Land Scraper

MODELS 600 & 650

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INTRODUCTION

This manual provides recommended operation and service instructions for your Leon M600 & M650 Land Scrapers.

The M600 & M6500 Land Scrapers are rated for use with tractors having a minimum drawbar of 100 HP and a maximum drawbar of 150 HP. The heaped capacity is 6.03 & 6.51 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 expense. 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:

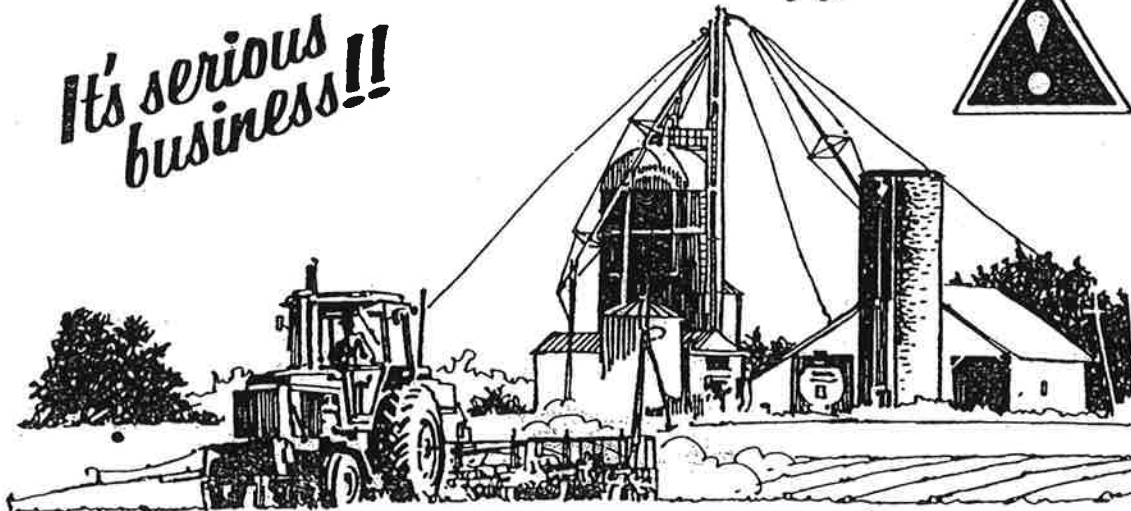
1. Plan work to load scraper downhill,
2. Eliminate excess turns,
3. Load scraper in direction of where load is to be dumped,
4. Do not spend unnecessary time in trying for heaped loads - you may sacrifice this gain in cubic yards by a longer time cycle.
5. Do not cut too deep - deep cuts increase the 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.

LEON

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

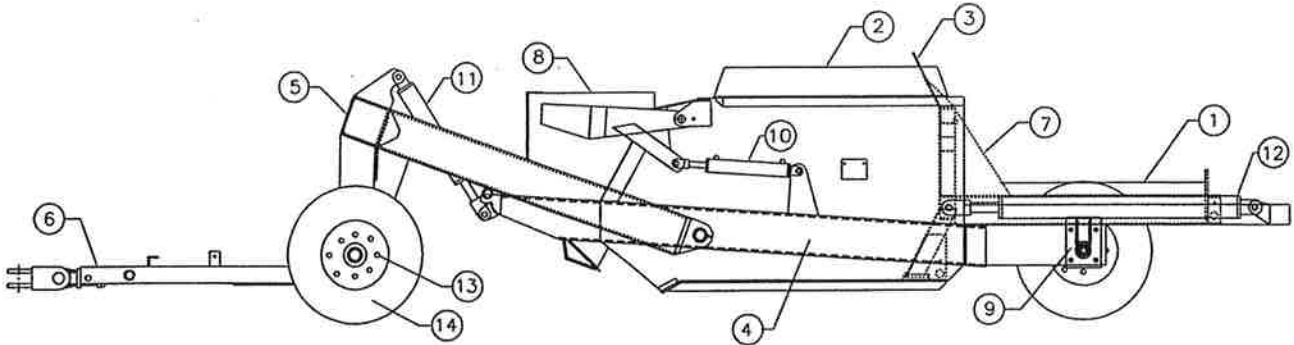
TRANSPORT SAFETY CHAIN / SAFETY LIGHTS

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

TIRE PRESSURE

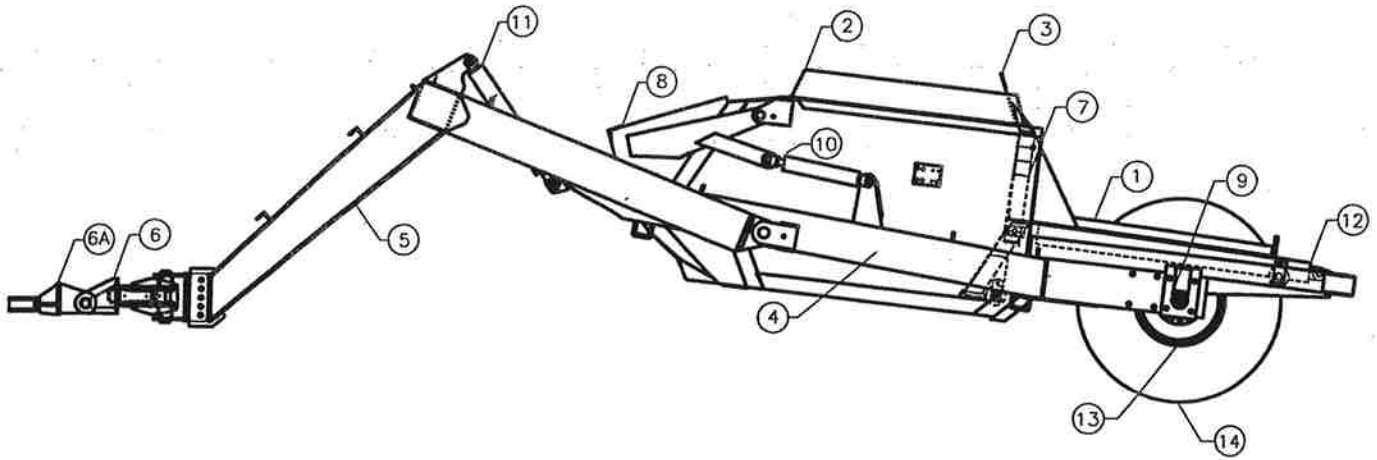
Tire Size	PSI
16.5L x 16.1 – 10 Ply Rib Implement	22
21.5L x 16.1 – 10 Ply Rib Implement	28
21.5L x 16.1 – 10 Ply AWT	22
18.4 x 26 – 10 Ply Rib Implement	26
23.1 x 26 – 10 Ply Rib Implement	26

600 SCRAPER ASSEMBLY



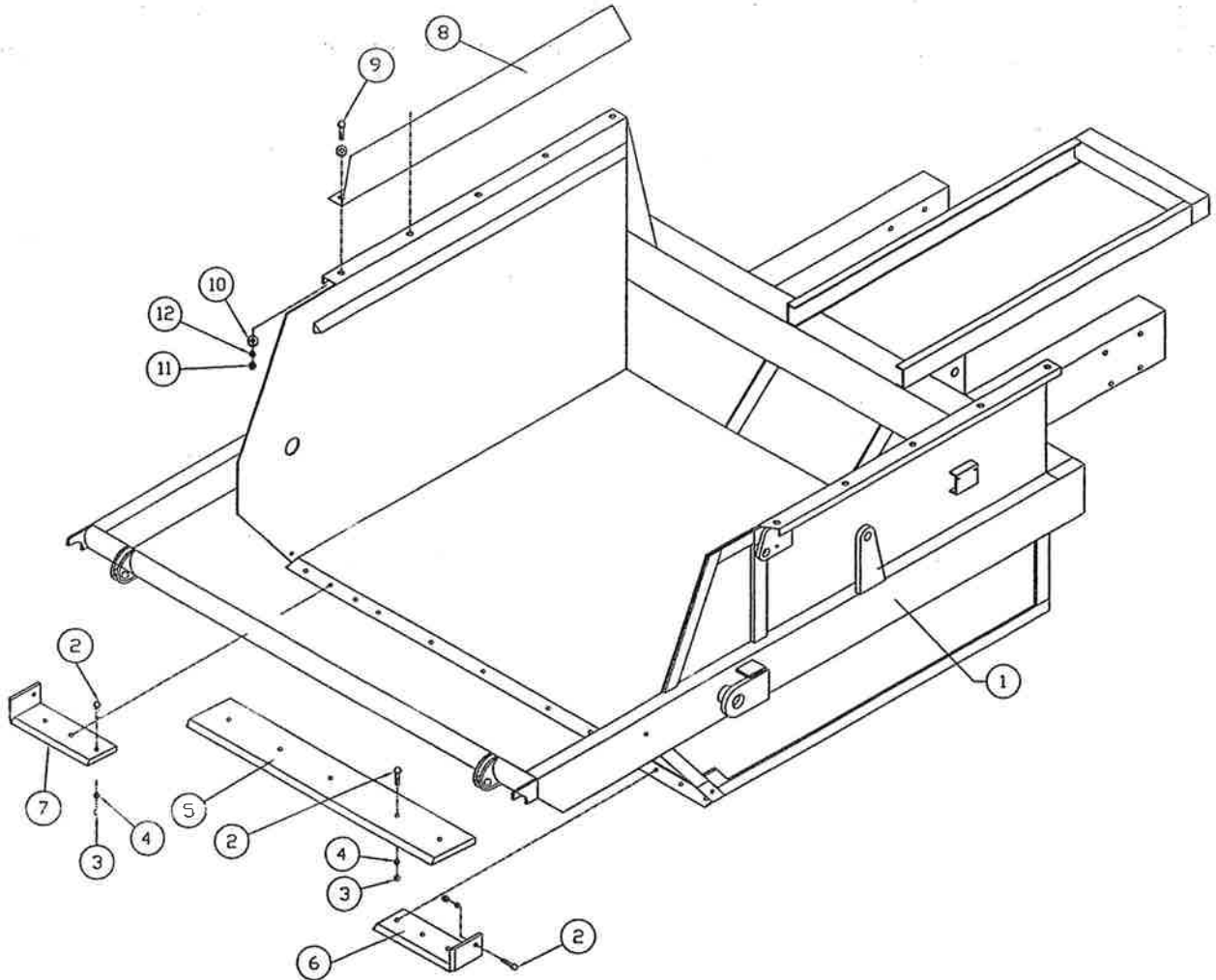
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550098	1	REAR GATE CYLINDER GUARD
2	1550145	2	SIDE EXTENSION (OPTIONAL)
3	1550146	1	REAR SIDE EXTENSION
4	1550180	1	MAIN FRAME
5	1550161	1	FRONT FRAME
6	1550163	1	HITCH POLE
7	1550167	1	REAR GATE
8	1550169	1	FRONT GATE
9	1550171	2	REAR AXLE
10	1126295	2	HYD. CYL. FRONT GATE R2-25L-10
10A	1850430	2	HYD. CYL. FRONT GATE CW-2.50-10.00-1.50(ORB)
11	1126316	2	HYD. CYL. LIFT R2-35L-18
11A	1850420	2	HYD. CYL. LIFT CW-3.00-18.00-1.50(ORB)
12	1126365	1	HYD. CYL. PUSH R2-40L-52-2.5
12A	1850410	1	HYD. CYL. PUSH CW-3.50-48.00-2.00(ORB)
13	1135006	4	RIM - W10C X 16 - 8 BOLT
14	1135055	4	TIRE - 12.5L X 16 - 10 PLY RIB IMPLEMENT
OPTIONAL	1135011	4	RIM - W14C X 16.1 - 8 BOLT
OPTIONAL	1135061	4	TIRE - 16.5L X 16.1 - 10 PLY RIB IMPLEMENT

600 SH SCRAPER ASSEMBLY



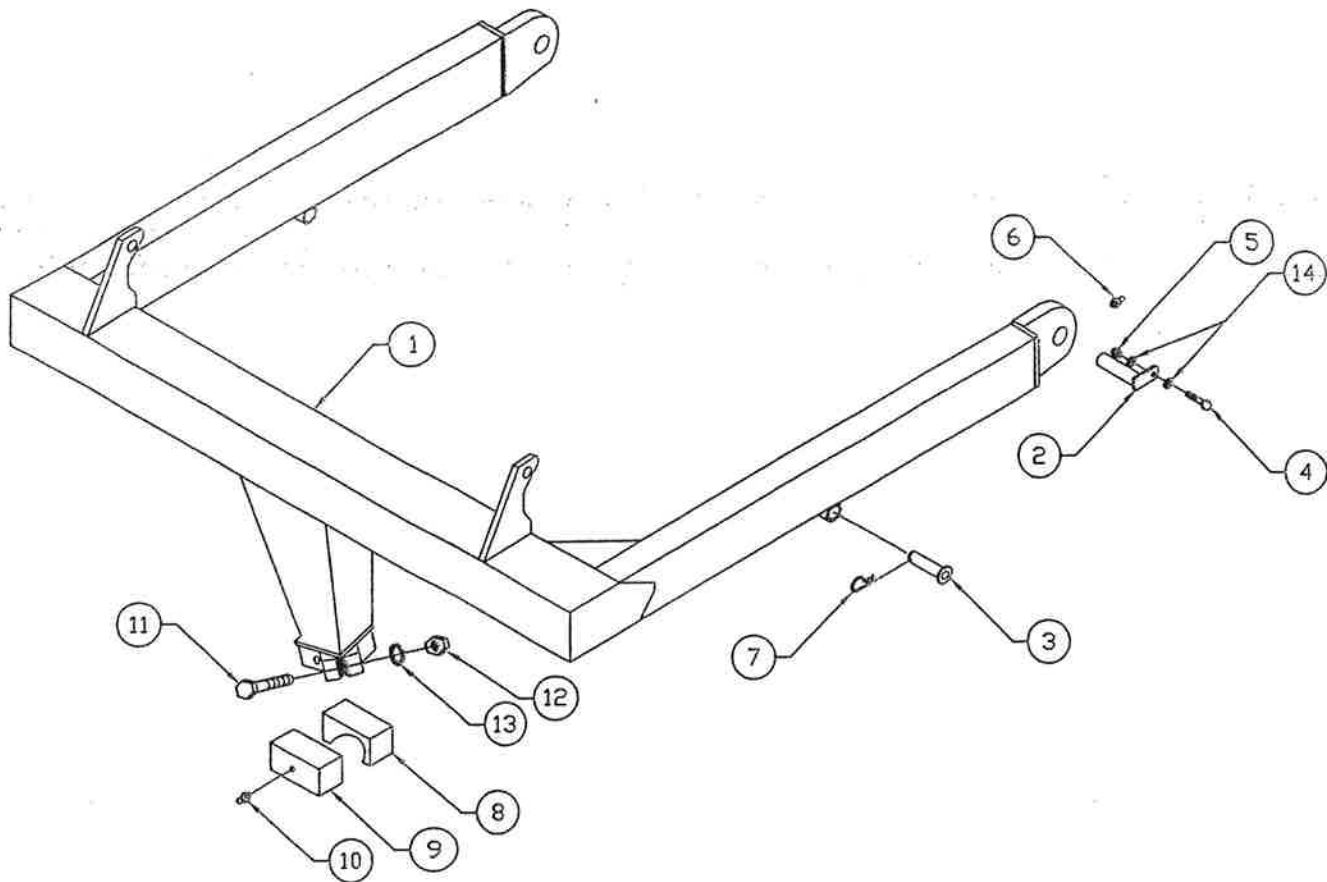
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550098	1	REAR GATE CYLINDER GUARD
2	1550145	2	SIDE EXTENSION (OPTIONAL)
3	1550146	1	REAR SIDE EXTENSION
4	1550180	1	MAIN FRAME
5	1550292	1	FRONT FRAME
6	1550205	1	SH CLEVIS
6A	1550320	1	DRAWBAR ADAPTOR
7	1550167	1	REAR GATE
8	1550169	1	FRONT GATE
9	1550171	2	REAR AXLE
10	1126295	2	HYD. CYL. FRONT GATE R2-25L-10
10A	1850430	2	HYD. CYL. FRONT GATE CW-2.50-10.00-1.50(ORB)
11	1126316	2	HYD. CYL. LIFT R2-35L-18
11A	1850420	2	HYD. CYL. LIFT CW-3.00-18.00-1.50(ORB)
12	1126365	1	HYD. CYL. PUSH R2-40L-52-2.5
12A	1850410	1	HYD. CYL. PUSH CW-3.50-48.00-2.00(ORB)
13	1135011	2	RIM - W14C X 16.1 - 8 BOLT
14	1135061	2	TIRE - 16.5L X 16.1 - 10 PLY RIB IMPLEMENT
OPTIONAL	1135024	2	RIM - W16C X 16.1 - 8 BOLT
OPTIONAL	1135040	2	TIRE - 21.5L X 16.1 - 10 PLY RIB IMPLEMENT

600 MAIN FRAME ASSEMBLY



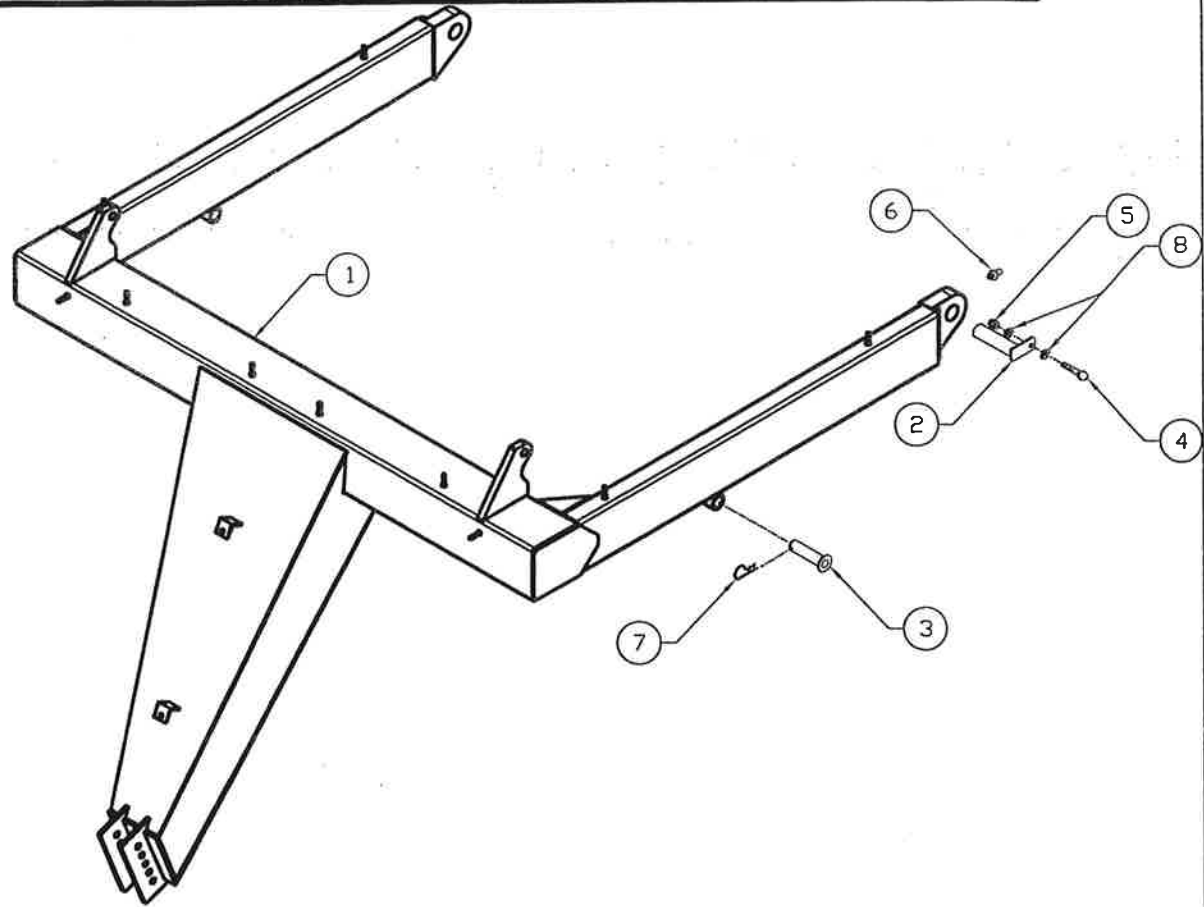
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550180	1	MAIN FRAME WELDMENT
2	1102325	13	SCRAPER BOLT, 5/8" UNC x 1 3/4" LG.
3	1102541	13	HEX NUT 5/8" UNC GRADE 8
4	1102594	13	LOCKWASHER 5/8" DIA.
5	1162813	1	CENTER CUTTING EDGE, 5/8" X 8" X 48"
6	1162814	1	CORNER CUTTING EDGE, 5/8" X 6" X 19 1/2", LEFT HAND
7	1162815	1	CORNER CUTTING EDGE, 5/8" X 6" X 19 1/2", RIGHT HAND
8	1550145	2	SIDE EXTENSION (OPTIONAL)
9	1102052	8	HEX HEAD BOLT, 1/2" UNC x 1 3/4" LG.
10	1102611	16	FLAT WASHER 1/2" DIA.
11	1102535	8	HEX NUT 1/2" UNC
12	1102592	8	LOCKWASHER 1/2" DIA.

600 FRONT FRAME ASSEMBLY



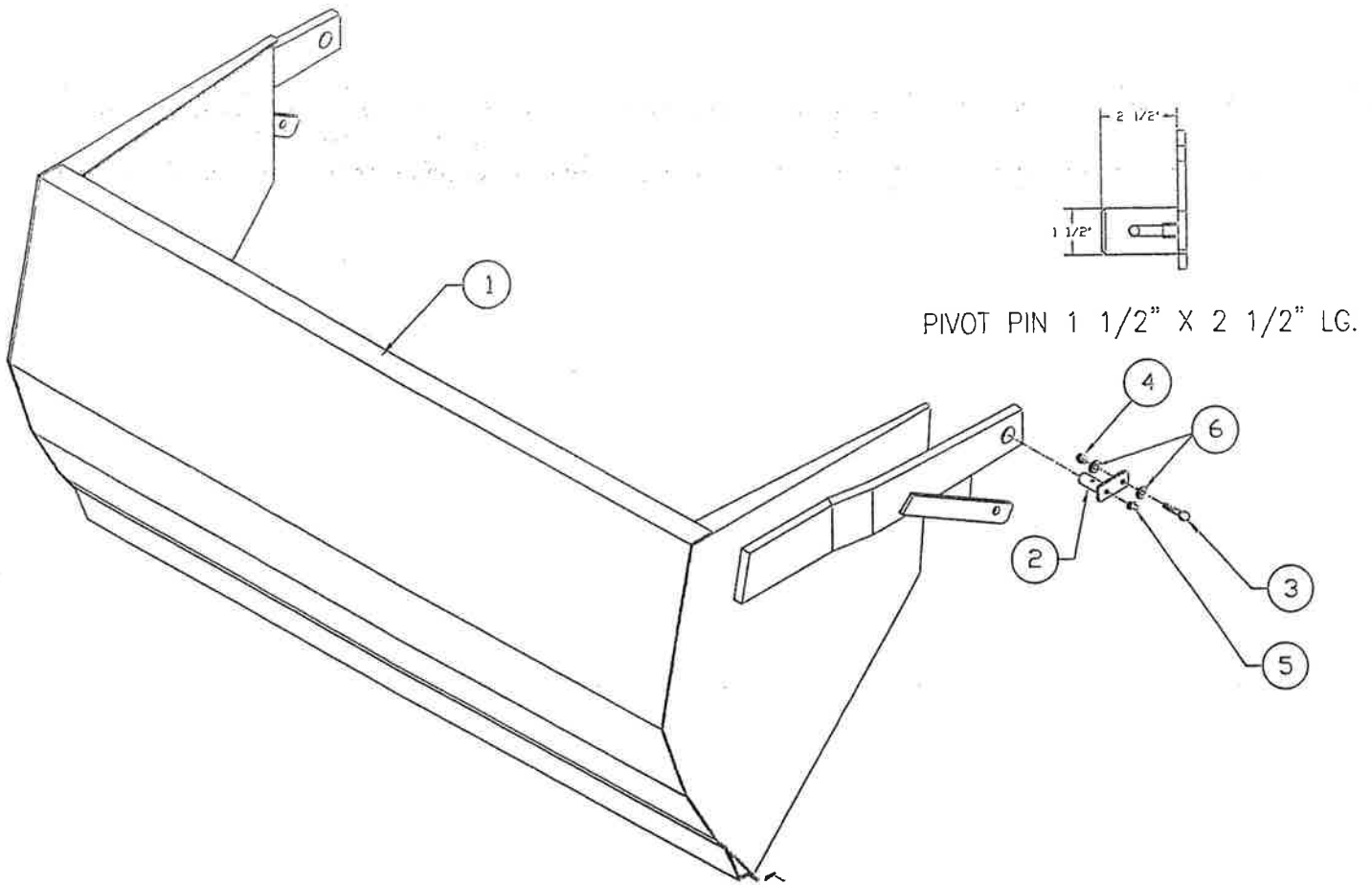
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550161	1	FRONT FRAME
2	1105666	2	MAIN PIVOT PIN
3	1105669	2	TRANSPORT SAFETY PIN, $\phi 1 \frac{1}{2}$ " x $5 \frac{1}{4}$ " LG.
4	1102002	2	HEX HEAD BOLT, $\frac{3}{8}$ " UNC X 2" LG.
5	1102526	2	LOCKNUT, $\frac{3}{8}$ " UNC
6	1122797	2	GREASE NIPPLE, $\frac{1}{8}$ " NPT
7	1102775	2	HAIR PIN, $\phi 1/4$ "
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
14	1102609	4	FLATWASHER $\frac{3}{8}$ " DIA

600 SH FRONT FRAME ASSEMBLY



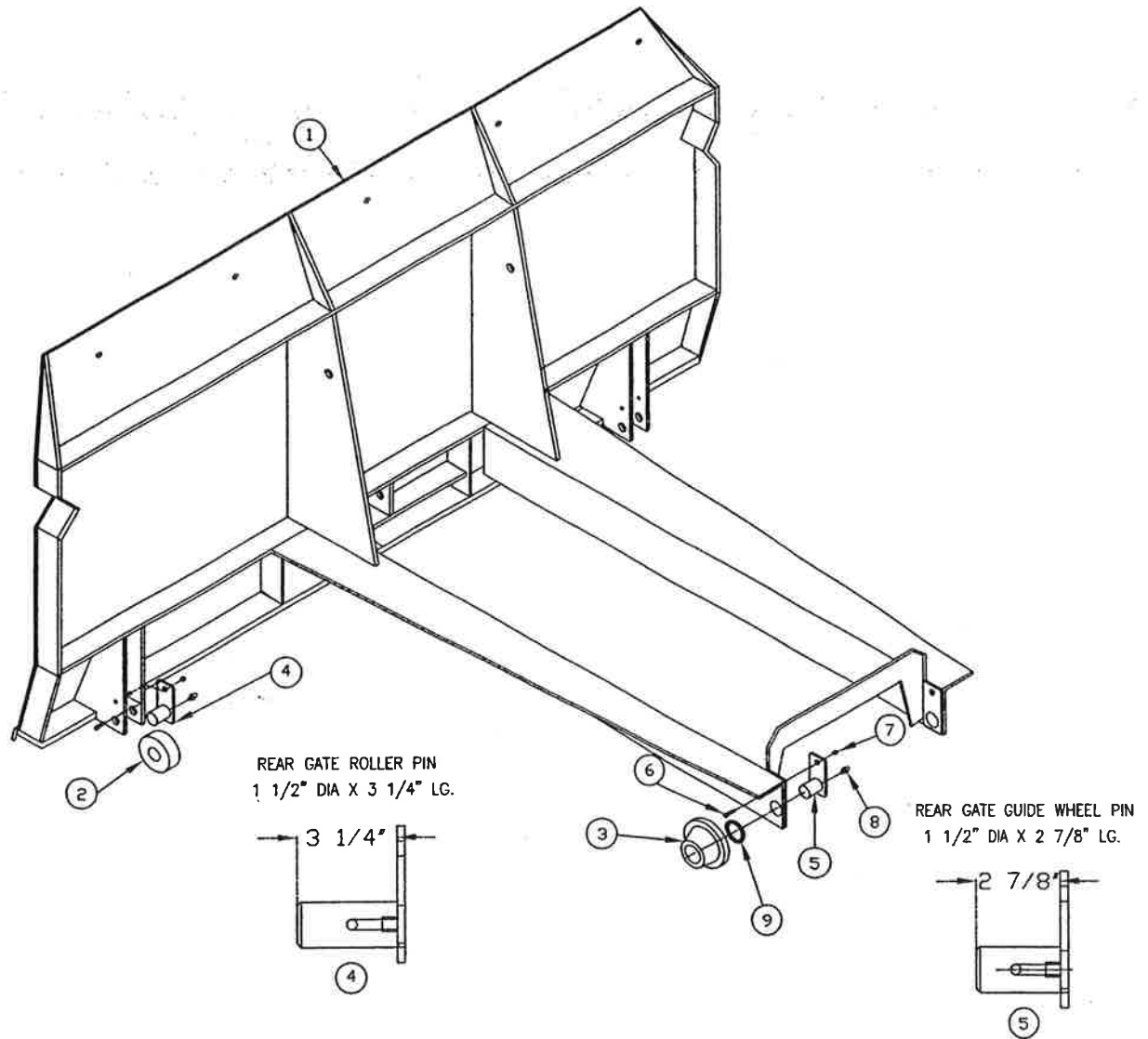
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550161	1	FRONT FRAME
2	1105666	2	MAIN PIVOT PIN
3	1105669	2	TRANSPORT SAFETY PIN, $\phi 1 \frac{1}{2}$ " x $5 \frac{1}{4}$ " LG.
4	1102002	2	HEX HEAD BOLT, $\frac{3}{8}$ " UNC X 2" LG.
5	1102526	2	LOCKNUT, $\frac{3}{8}$ " UNC
6	1122797	2	GREASE NIPPLE, $\frac{1}{8}$ " NPT
7	1102775	2	HAIR PIN, $\phi \frac{1}{4}$ "
8	1102609	4	FLATWASHER $\frac{3}{8}$ " DIA

600 FRONT GATE ASSEMBLY



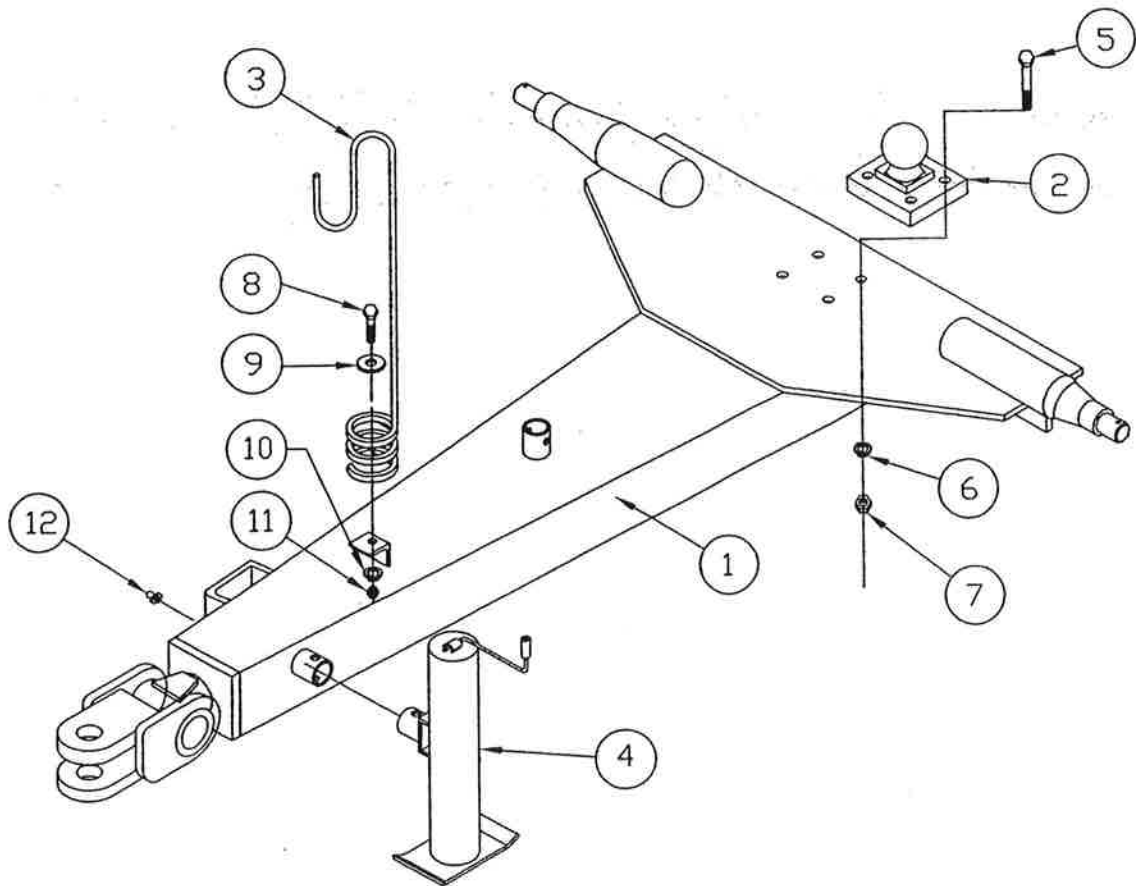
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550169	1	FRONT GATE
2	1105697	2	FRONT GATE PIVOT PIN 1 1/2" X 2 1/2" LG.
3	1102009	2	HEX HEAD BOLT, 3/8" UNC X 1 3/4" LG.
4	1102526	2	HEX LOCKNUT, 3/8" UNC
5	1122797	2	GREASE NIPPLE, 1/8" NPT
6	1102609	4	FLATWASHER 3/8" DIA.

600 REAR GATE ASSEMBLY



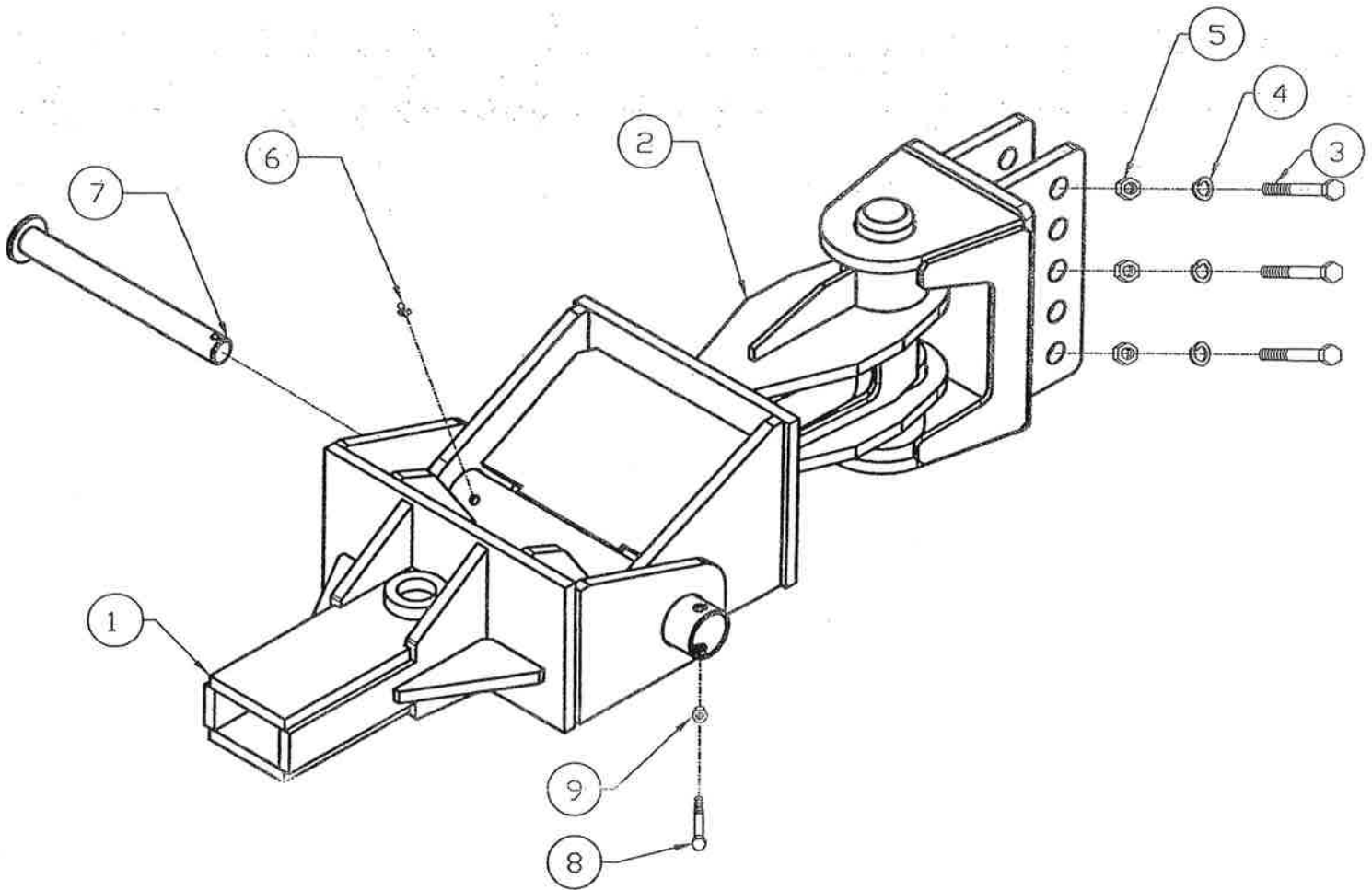
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550167	1	REAR GATE
2	1175572	2	REAR GATE ROLLER, 4" DIA.
3	1175573	2	REAR GATE GUIDE WHEEL
4	1105667	2	REAR GATE ROLLER PIN 1 1/2" DIA. X 3 1/4" LG.
5	1105668	2	REAR GATE GUIDE WHEEL PIN 1 1/2" DIA. X 2 7/8" LG.
6	1102002	2	HEX HD. BOLT 3/8" UNC x 1 1/2" LG.
7	1102526	2	HEX LOCKNUT, 3/8" UNC.
8	1122797	2	GREASE NIPPLE, 1/8" NPT
9	1102625	2	FLATWASHER 1 1/2" DIA.

600 HITCH POLE ASSEMBLY



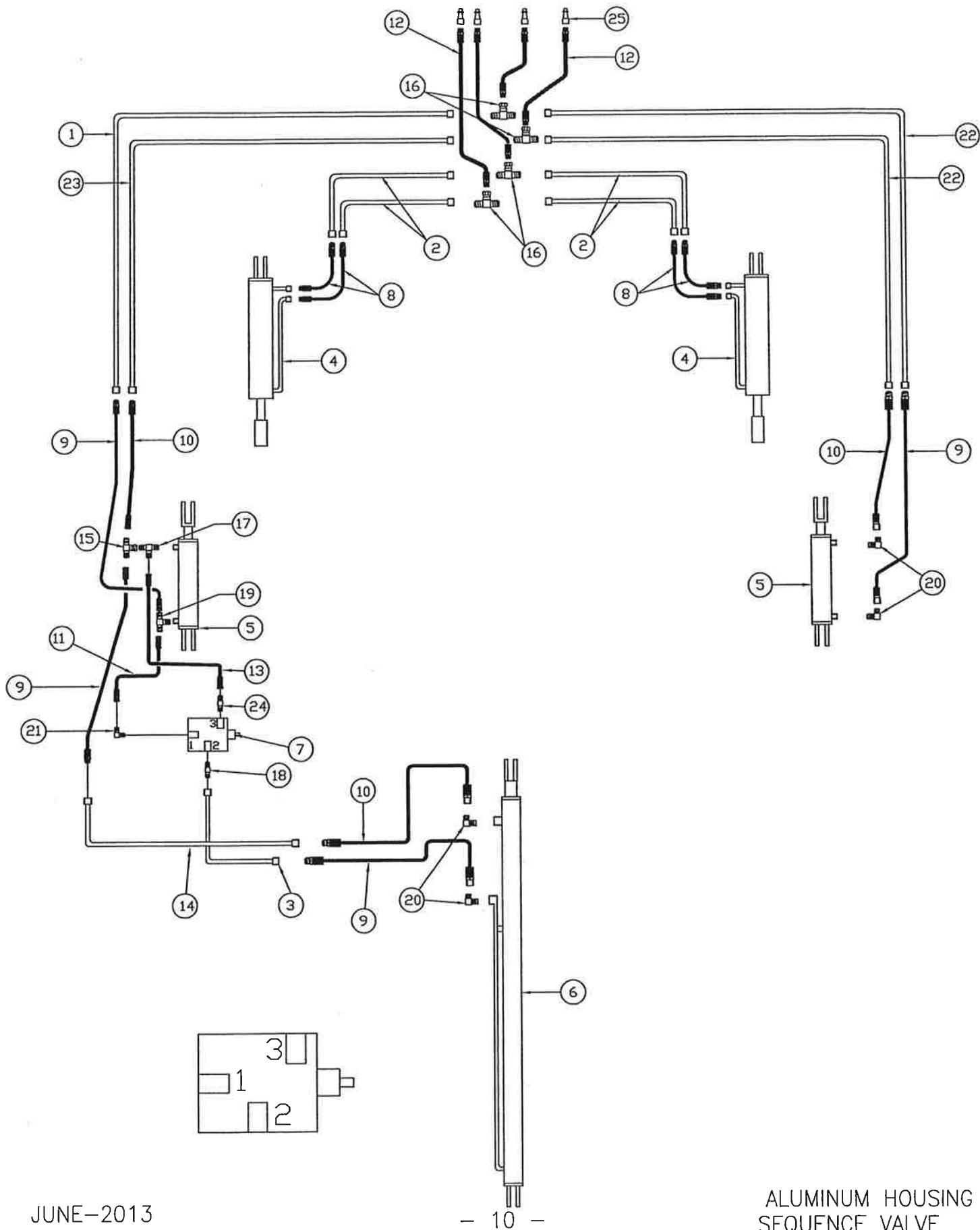
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550163	1	HITCH POLE WELDMENT
2	1144224	1	COUPLING BALL
3	1105556	1	HOSE HOLDER, SPRING TYPE
4	1173410	1	HITCHJACK
5	1102167	4	HEX HEAD BOLT - 3/4" UNC x 3" LG. GRADE 8
6	1102596	4	LOCKWASHER - 3/4" DIA
7	1102546	4	HEX NUT - 3/4" UNC GRADE 8
8	1102051	1	HEX HEAD BOLT - 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

600 SOLID HITCH CLEVIS ASSEMBLY



REF. NO.	PART #	QTY.	DESCRIPTION
1	1550320	1	DRAWBAR ADAPTOR
2	1550205	1	SH HITCH CLEVIS
3	1102157	3	3/4"-10 UNC X 5" GR.5 BOLTS
4	1102596	3	3/4" LOCKWASHER
5	1102545	3	3/4" HEX NUT
6	1122798	6	GREASE NIPPLE, STRAIGHT LONG BASE, 1/8" NPT
7	1550310	1	DRAWBAR PIN
8	1102002	1	3/8" X 2 1/2" BOLT
9	1102526	1	3/8" LOCKNUT

600 HYDRAULIC ASSEMBLY



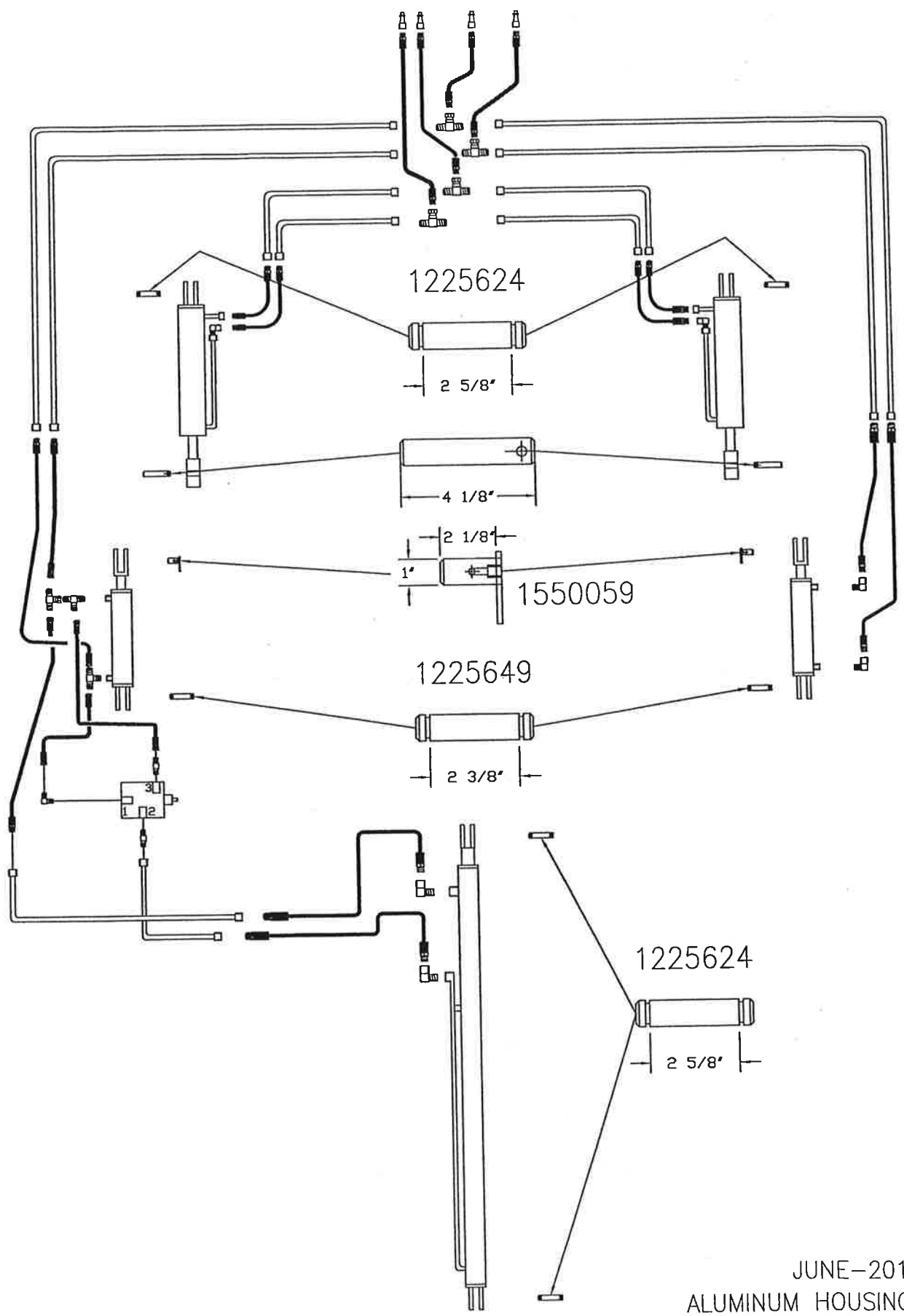
JUNE-2013

ALUMINUM HOUSING
SEQUENCE VALVE

600 HYDRAULIC ASSEMBLY

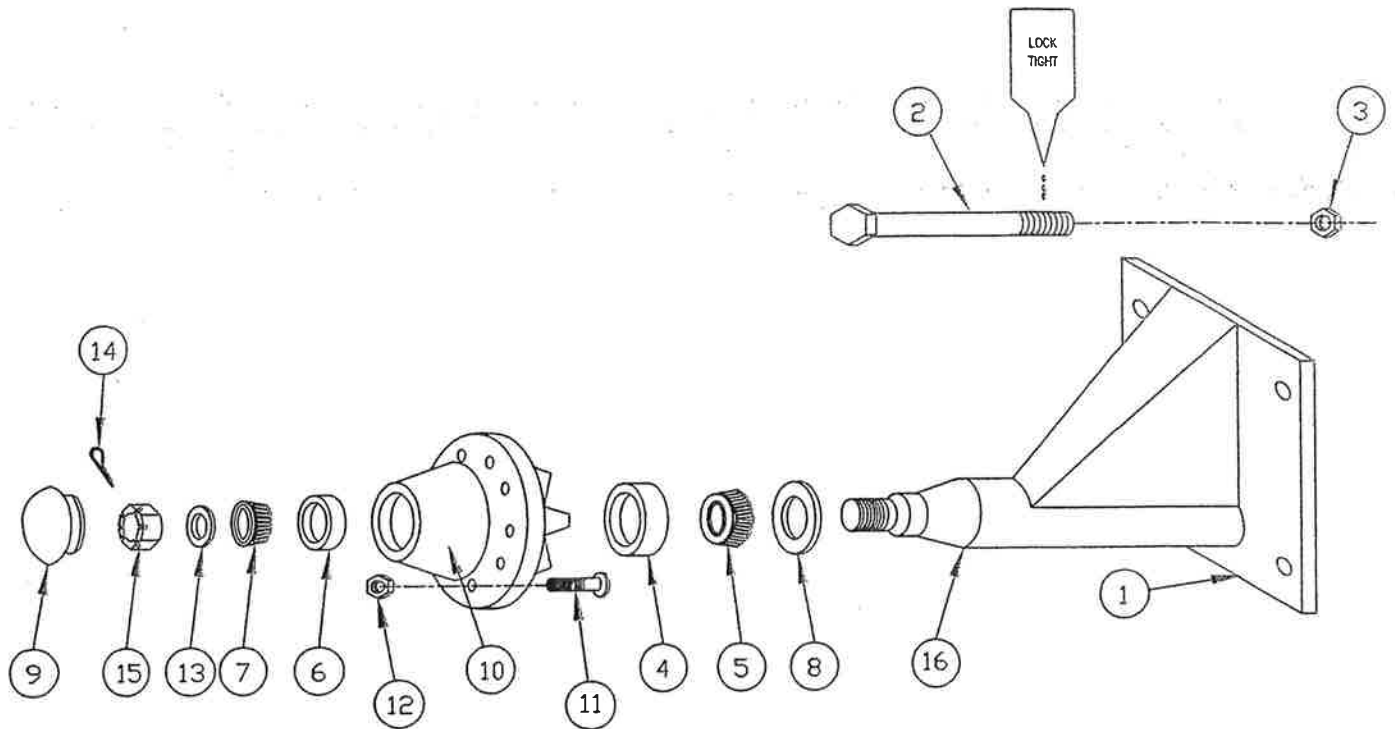
REF. NO.	PART #	QTY.	DESCRIPTION
1	1124863	1	HYDRAULIC TUBE, 1/2" DIA. X 110" LG. - 3/4"-16 JICF(2)
2	1124861	4	HYDRAULIC TUBE, 1/2" DIA. X 35" LG. - 3/4"-16 JICF(2)
3	1124862	1	HYDRAULIC TUBE, 1/2" DIA. X 59" LG. - 3/4"-16 JICF(2)
4	1850420	2	LIFT CYLINDER
5	1850430	2	FRONT GATE CYLINDER
6	1850410	1	REAR PUSH CYLINDER
7	1127071	1	SEQUENCE VALVE (PARKER-ECJ) - ALUMINUM HOUSING
8	1123317	4	HYDRAULIC HOSE, 1/2" x 20" LG., 3/4" JICM X #8 ORB
9	1123337	4	HYDRAULIC HOSE, 1/2" x 34" LG., 3/4" JICF X 3/4" JICM
10	1127563	3	HYDRAULIC HOSE, 1/2" x 24" LG., 3/4" JICF X 3/4" JICM
11	1123605	1	HYDRAULIC HOSE, 1/2" x 24" LG., 3/4" JICFSW(2)
12	1123080	4	HYDRAULIC HOSE, 1/2" x 120" LG., 1/2" NPTM(2)
13	1124520	1	HYDRAULIC HOSE, 3/8" x 27" LG., 3/4" JICFSW(2)
14	1125160	1	HYDRAULIC TUBE, 1/2" DIA. X 60" LG. - 3/4"-16 JICF(2)
15	1124401	1	RUN TEE, 3/4"-16 JICM(2) X 3/4" JICF
16	1123368	4	FEMALE BRANCH TEE, 3/4" JICM(2) X 1/2" NPTFSW
17	1123372	1	RUN TEE, 3/4"-16 JICM(2) X #8 ORBM
18	1123212	1	CONNECTOR, 3/4" ORBM X 3/4" JICM
19	1124739	1	BRANCH TEE, 3/4"-16 JICM(2) X #8 ORBM
20	1123442	4	ELBOW, 90°, 3/4" JICM X #8 ORBM
21	1123210	1	SWIVEL ELBOW 90° - 3/4" ORBM X 3/4" JICM
22	1124864	2	HYDRAULIC TUBE, 1/2" DIA. X 108" LG. - 3/4"-16 JICF(2)
23	1124865	1	HYDRAULIC TUBE, 1/2" DIA. X 108" LG. - 3/4"-16 JICF(2)
24	1124363	1	CONNECTOR, 9/16" ORBM X 3/4" JICM
25	1127011	4	MALE COUPLERS TIP 1/2" NPTF
26	1127185	4	MALE COUPLER DUST CAP (BLACK)(NOT SHOWN)
	1707130	26	2 LINE PIPE CLAMPS
	1102526	13	3/8" UNC LOCK NUT

600 HYDRAULIC ASSEMBLY



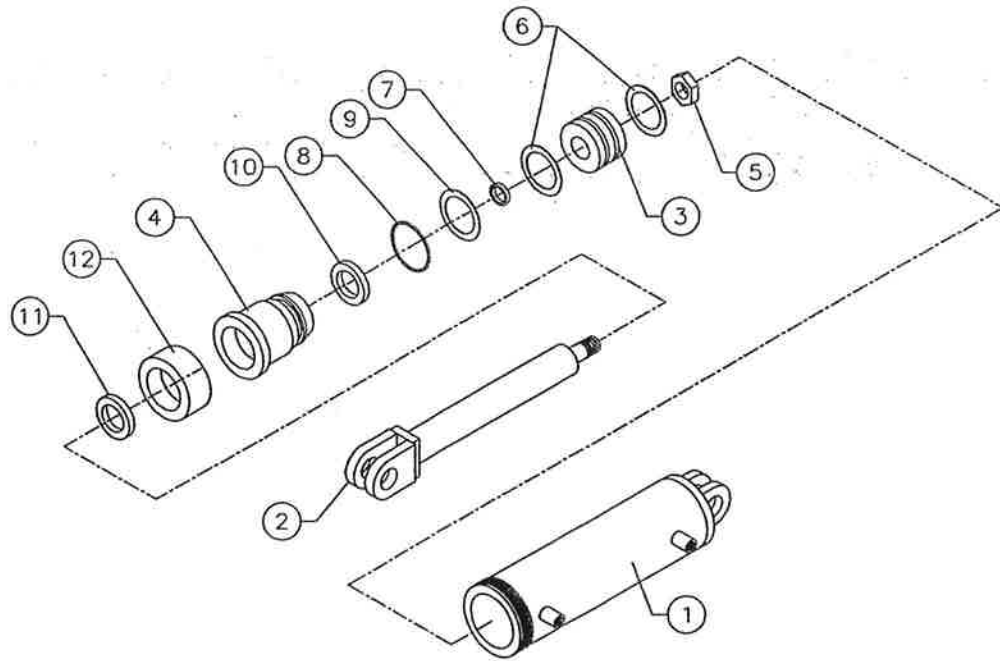
JUNE-2013
ALUMINUM HOUSING
SEQUENCE VALVE

600 REAR AXLE ASSEMBLY



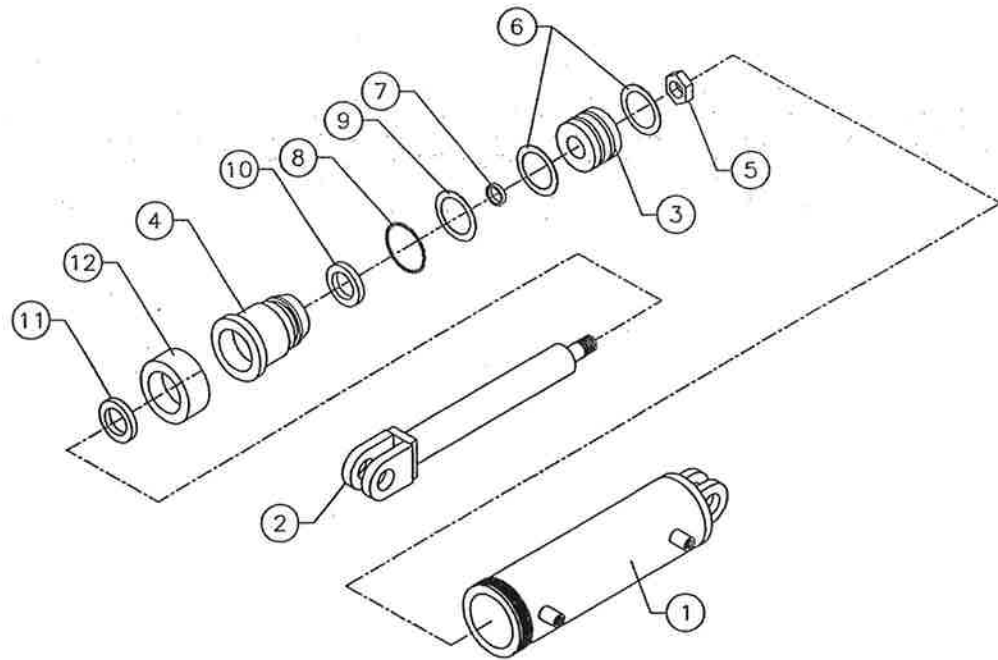
REF. NO.	PART #	QTY.	DESCRIPTION
1	1550171	2	REAR AXLE WELDMENT
2	1102159	8	HEX HEAD BOLT, 3/4" UNC x 6" LONG
3	1102545	8	HEX HEAD NUT, 3/4" UNC
4	1135502	4	INNER CUP
5	1135506	4	INNER CONE
6	1135205	4	OUTER CUP
7	1135206	4	OUTER CONE
8	1135508	4	GREASE SEAL
9	1135512	4	DUST CAP
10	1135501	4	HUB CASTING
11	1135504	32	WHEEL BOLT STUDS
12	1135505	32	WHEEL NUTS, 3/4" UNF HEX FLANGED, GRADE 8
13	1135397	4	WASHER, 1 1/4" DIA.
14	1105371	4	COTTER PIN
15	1135398	4	CASTELLATED HEX NUT, 1 1/4" - 12UNF
16	1135421	4	SPINDLES 3" DIA X 13" LG. (FRONT AND REAR)
	1135420	4	HUB ASSEMBLY COMPLETE
NOT SHOWN	1135011	4	RIM, W14C X 16.1 8 BOLT
NOT SHOWN	1135061	4	TIRE, 16.5 X 16.1 - 10 PLY RIB IMPLEMENT
NOT SHOWN	1135150	4	VALVE STEMS

600 FRONT GATE CYLINDER



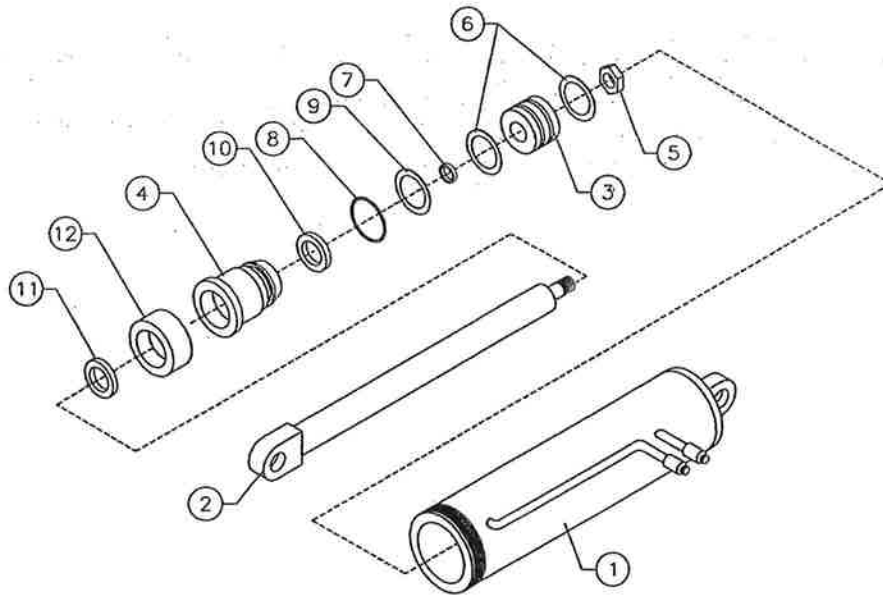
REF. NO.	PART #	QTY.	DESCRIPTION
	1850430	1	CYLINDER ASSEMBLY C-2.50-10.00-1.50
1	1850431	1	CYLINDER BARREL
2	1850432	1	CYLINDER SHAFT
3	1126320	1	PISTON
4	1126619	1	GLAND
5	1126426	1	NUT, 1" - 14 UNF, GRADE 8 LOCKNUT
6	1126434	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126815	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126818	1	ROD SEAL
11	1126787	1	ROD WIPER
12	1126425	1	GLAND COLLAR
	1126803	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1550059	1	PIN - FRONT GATE
	1225649	1	PIN - GROOVE 1" DIA X 2 3/8" LG.
	1500115	2	PIN RETAINER

600 FRONT GATE CYLINDER



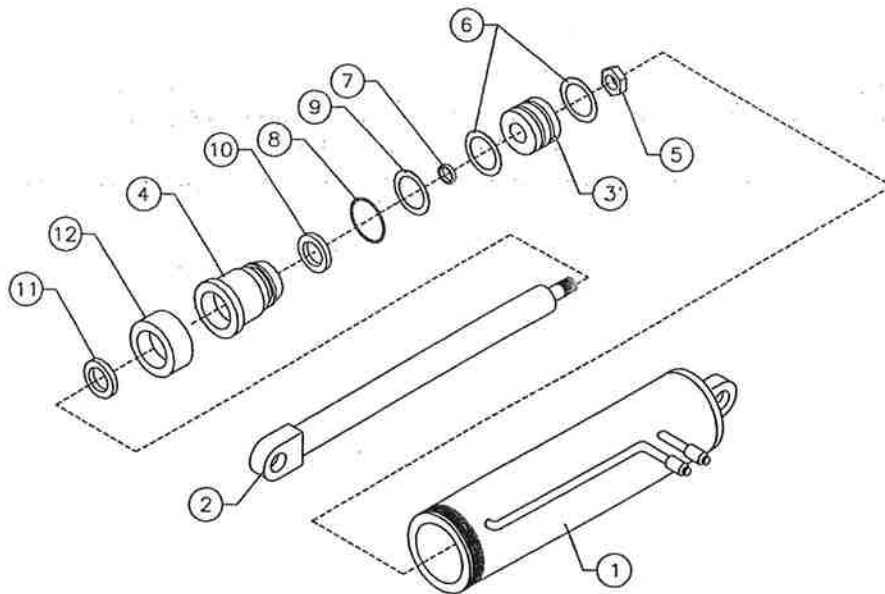
REF. NO.	PART #	QTY.	DESCRIPTION
	1126295	1	CYLINDER ASSEMBLY R2-25L-10
1	1126611	1	CYLINDER BARREL
2	1126779	1	CYLINDER SHAFT
3	1126320	1	PISTON
4	1126619	1	GLAND
5	1126426	1	NUT, 1" - 14 UNF, GRADE 8 LOCKNUT
6	1126434	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126815	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126818	1	ROD SEAL
11	1126787	1	ROD WIPER
12	1126425	1	GLAND COLLAR
	1126803	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1550059	1	PIN - FRONT GATE
	1225649	1	PIN - GROOVE 1" DIA X 2 3/8" LG.
	1500115	2	PIN RETAINER

600 LIFT CYLINDER



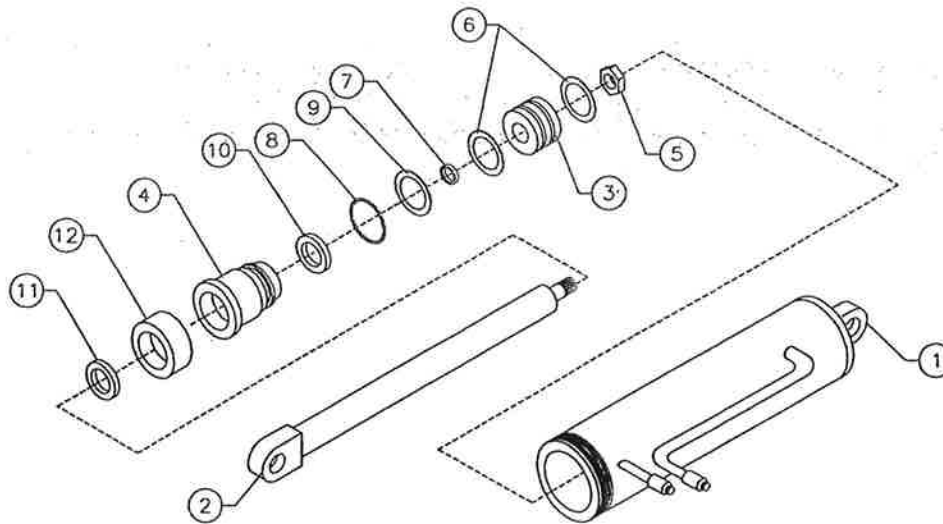
REF. NO.	PART #	QTY.	DESCRIPTION
	1850420	1	CYLINDER ASSEMBLY CW-3.00-18.00-1.50
1	1850421	1	CYLINDER BARREL
2	1850422	1	CYLINDER SHAFT
3	1126533	1	PISTON
4	1126570	1	GLAND
5	1126426	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126540	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126695	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126536	1	GLAND COLLAR
	1126546	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225627	2	PIN - GROOVE 1" DIA X 2 3/8"
	1500115	4	PIN RETAINER

600 LIFT CYLINDER



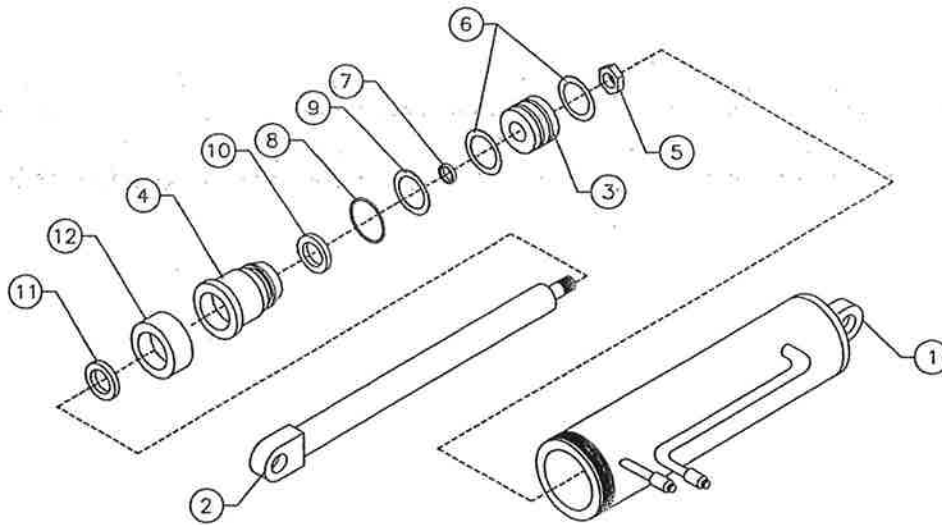
REF. NO.	PART #	QTY.	DESCRIPTION
	1126316	1	CYLINDER ASSEMBLY R2-30L-18
1	1126563	1	CYLINDER BARREL
2	1126780	1	CYLINDER SHAFT
3	1126533	1	PISTON
4	1126570	1	GLAND
5	1126426	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126540	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126695	1	GLAND STATIC SEAL
9	1126848	1	GLAND STATIC SEAL BACKUP
10	1126433	1	ROD SEAL
11	1126436	1	ROD WIPER
12	1126536	1	GLAND COLLAR
	1126546	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225627	2	PIN - GROOVE 1" DIA X 2 3/8"
	1500115	4	PIN RETAINER

600 PUSH CYLINDER



REF. NO.	PART #	QTY.	DESCRIPTION
	1850410	1	CYLINDER ASSEMBLY CW-3.50-48.00-2.00
1	1850411	1	CYLINDER BARREL
2	1850412	1	CYLINDER SHAFT
3	1126986	1	PISTON
4	1126985	1	GLAND
5	1126577	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126981	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126982	1	GLAND STATIC SEAL
9	1126983	1	GLAND STATIC SEAL BACKUP
10	1126435	1	ROD SEAL
11	1126437	1	ROD WIPER
12	1126665	1	GLAND COLLAR
	1126984	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225624	2	PIN - GROOVE 1" DIA X 2 5/8"
	1500115	4	PIN RETAINER

600 PUSH CYLINDER



REF. NO.	PART #	QTY.	DESCRIPTION
	1126365	1	CYLINDER ASSEMBLY R2-35L-48
1	1126934	1	CYLINDER BARREL
2	1126935	1	CYLINDER SHAFT
3	1126986	1	PISTON
4	1126985	1	GLAND
5	1126577	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6	1126981	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126982	1	GLAND STATIC SEAL
9	1126983	1	GLAND STATIC SEAL BACKUP
10	1126435	1	ROD SEAL
11	1126437	1	ROD WIPER
12	1126665	1	GLAND COLLAR
	1126984	1 SET	SEAL KIT (CONSISTS OF ITEMS: 6, 7, 8, 9, 10, 11)
	1225624	2	PIN - GROOVE 1" DIA X 2 5/8"
	1500115	4	PIN RETAINER

PILOT OPERATED SEQUENCE VALVE MODEL RD 1000S

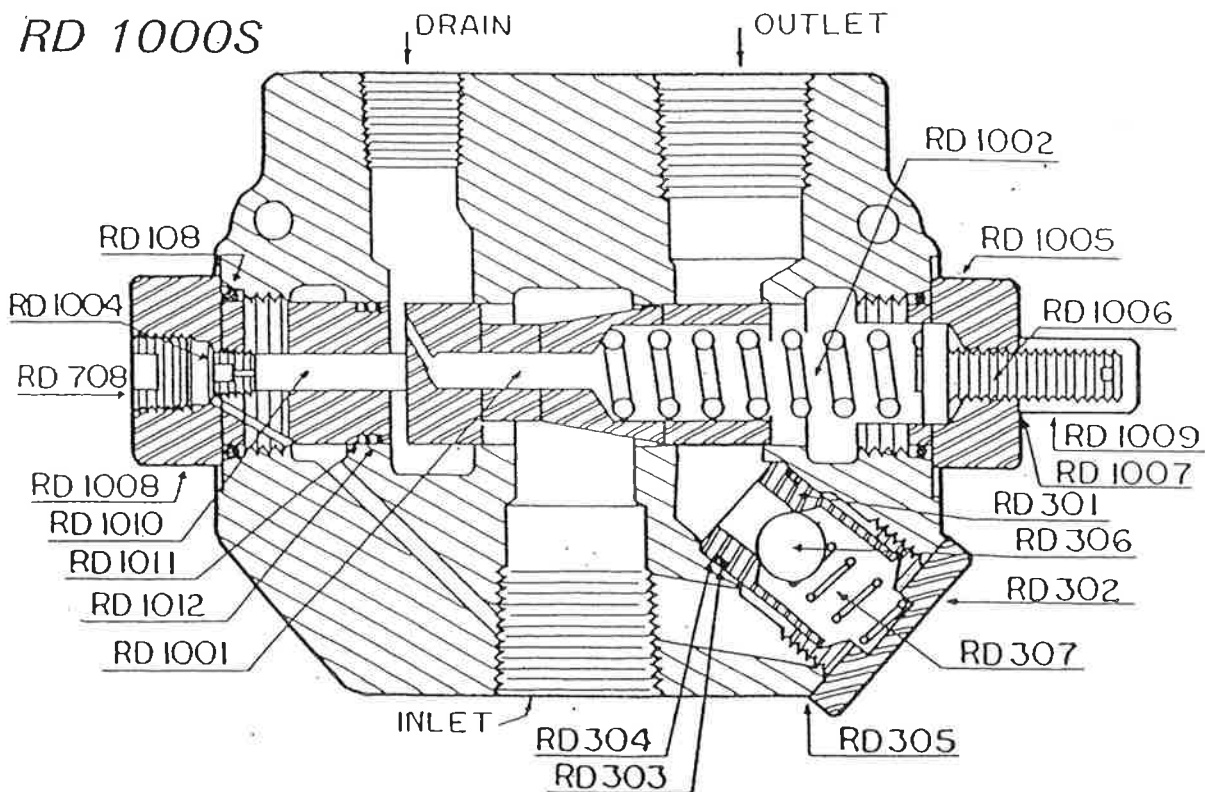
The model RD 1000S pilot-operated sequence valve is designed to prevent oil in a primary circuit from reaching a secondary circuit until the pressure in the primary circuit reaches a pre-set level. The sequence valve opens and oil is metered to the secondary circuit until the cylinder bottoms out and 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

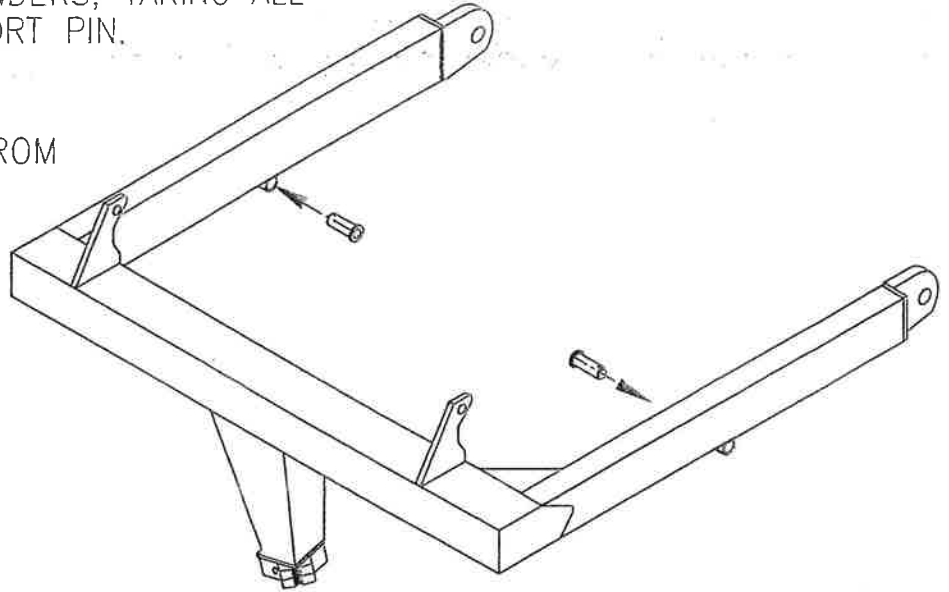
Douglass Hydraulics, Inc.

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

600 TRANSPORT PIN

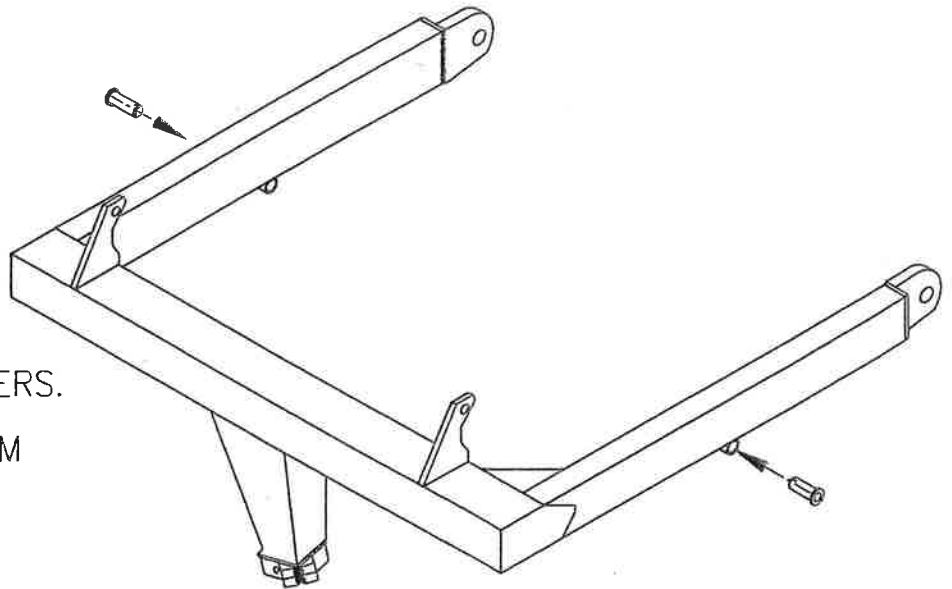
PIN POSITION FOR WORK MODE

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

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privately? _____

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Recommendation _____
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