

# LEON

## Operator Manual



# Land Scraper

## Model 1350

**LEON'S MFG. COMPANY INC.**

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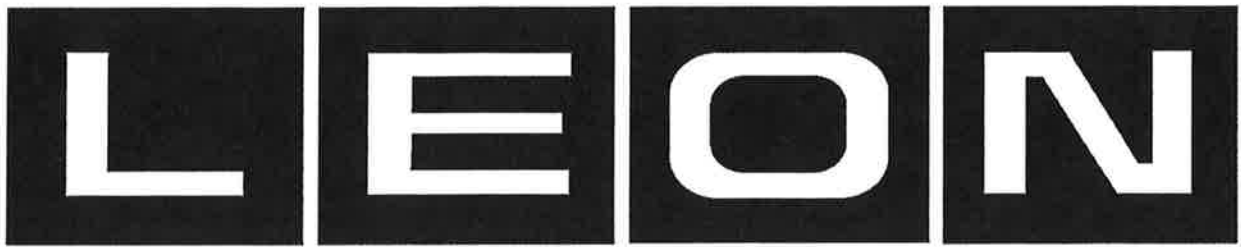
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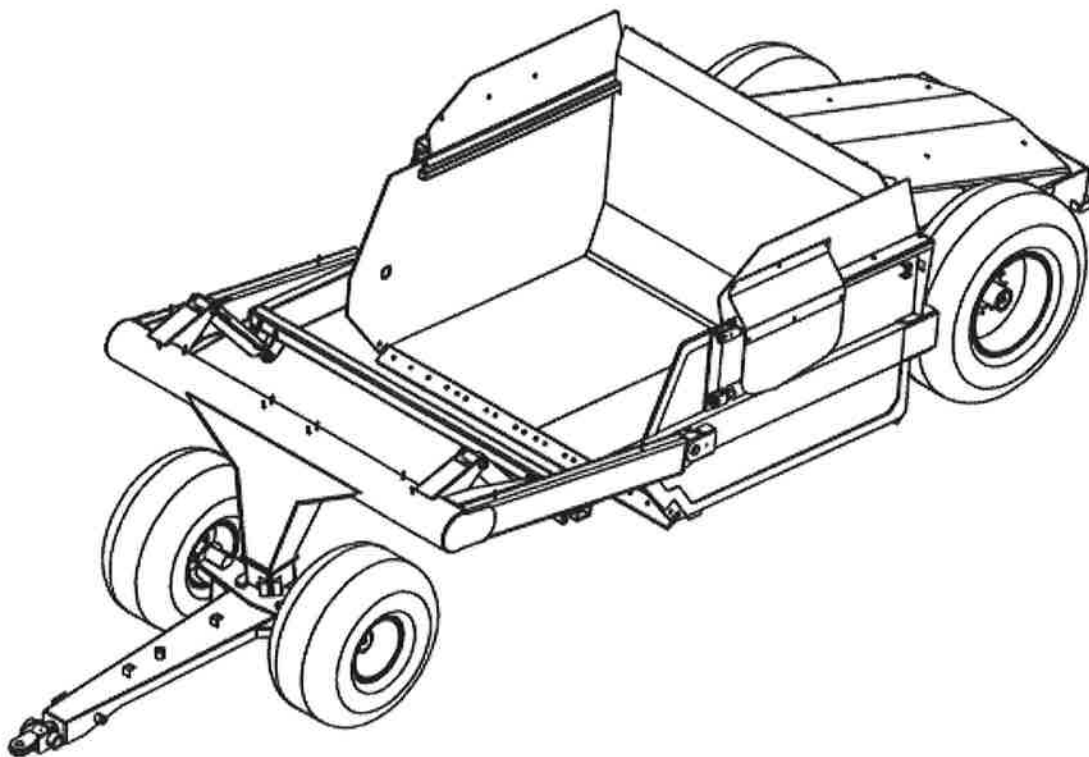
# Introductions

This manual provides recommended operation and service instructions for your LEON M1350 Land Scraper.

The M1350 Land Scraper is rated for use with tractors having a minimum drawbar of 200 HP. The heaped capacity is 13.38 cu. Yards.

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 warranty card so your dealer can give you prompt, efficient service when you order parts.



# Operation Instructions

The LEON land Scraper, upon delivery, had Gulf 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 Land 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.

## BEFORE OPERATING THE SCRAPER

### *REMOVE THE TRANSPORT LOCK PIN*

- Lubricate all wheel bearings, pins and rollers.
- Check and adjust tire pressure as listed below.
- Check wheel bolt torque as listed below.
- Hitch Land 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 to fully open before cycling the push gate. When all the cylinders are retracted, check the tractor oil level, adding to maintain normal levels.
- After eight (8) hours of work, all bolts should be checked and tightened if necessary.
- Every eight (8) hours all grease fittings should be lubricated.
- After thirty (30) hours operation, all bolts should be re-checked and tightened if necessary.

## WHEEL BOLT TORQUE IMPORTANT

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

5/8 bolts	180 ft.-lbs.
3/4 bolts	320 ft.-lbs.

## TIRE PRESSURE

Tire Size	PSI
16.5L x 16.1 – 10 Ply Rib Implement	32
21.5L x 16.1 – 10 Ply Rib Implement	38
21.5L x 16.1 – 10 Ply AWT	32
18.4 x 26 – 10 Ply Rib Implement	36
23.1 x 26 – 10 Ply Rib Implement	36

## Sequence of Operation

### ***REMOVE THE TRANSPORT LOCK PIN***

#### **To fill the bucket:**

1. Open the front gate (apron) by energizing the hydraulics through the sequence valve. When it reach maximum opening, *STOP* the hydraulics.
2. Lower the Land Scraper to desired cutting depth by energizing the hydraulics through the lifting cylinders while moving forward,
3. When the bucket is full, raise the Land Scraper by energizing hydraulics reversely through the lifting cylinders, and close the front gate to prevent spillage,
4. Transport to required dumping area

#### **To empty the bucket:**

1. Lower the Land Scraper to give required spread depth
2. Open the front gate by energizing hydraulics in the front gate cylinders through the Sequence valve.
3. When the front gate is fully open, the Sequence valve will allow the hydraulics to energize the rear push gate cylinders and the rear gate will start moving forward to eject the load.
4. When the bucket is empty, reverse the hydraulic cycle in order to move back the push cylinder to its closed position. This will also close the front gate. The sequence valve is designed to protect the push gate from running into the front gate.
5. The sequence valve is preset at the factory.
6. Spread depth is controlled by the height of Land Scraper and tractor speed.

# Operating Tips

For efficient Land 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 heaping 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 the pay load. Large chunks in the scraper make poor spreading material,
6. Maintain a downslope in cut – do not cut horizontal layers off the top,
7. On side hill cuts, keep inside of cut, deeper than outside,
8. Maintain a smooth hauling road,
9. Do not raise Land Scraper any higher than necessary when hauling - increasing Land Scraper height reduces the scraper's stability,
10. In constructing a fill, keep shoulders high and center low – this provides drainage toward center and prevents the scraper from sliding over the side of the fill.

## Pre-Delivery Inspection

- Check the wheel torque requirements.
- Check and adjust the tire inflation pressure as per requirements on.
- Lubricate all rotating parts with premium quality multi-purpose grease where applicable.
- Ensure that the safety SMV emblem have been installed properly.
- Ensure that all bolts and fasteners are in place and properly tightened.
- Hook up the scraper and perform a test run. Ensure that the area around the scraper is clear of obstacles and other people.
- Cycle the hydraulics and raise and lower the Front Gate ensuring that no interference occurs.
- Cycle the hydraulics and raise and lower the Goose Neck ensuring that no interference occurs.
- Cycle the hydraulics and push the Rea Gate forward and backward ensuring that no interference occurs.



# Safety

This symbol calls your attention to instructions concerning your personal safety. It is found throughout the manual as well as on the machine to point out specific hazards and ways to avoid them. Always follow the instructions to



minimize the risk of personal injury or death.

## OPERATING

- In addition to equipment configuration and design, hazard control and accident prevention depend on awareness, concern, prudence and proper training of personnel in the operation, maintenance, transport and storage of equipment.
- Always shut off tractor engine, shift to "PARK" position or shift to neutral, set brakes and allow scraper to completely stop before dismounting tractor or working around the machine.
- Remove tractor start key when tractor and scraper will be unattended for adjustments or maintenance.
- Do not attempt to lubricate or adjust scraper while machine is in operation.
- Machinery operation should be performed only by persons who are trained and qualified to do so and are knowledgeable of the scraper.
- Only the operator should be permitted on the tractor (unless the tractor has a factory installed passenger seat) when the tractor and scraper are in motion. Never permit anyone to ride in or on the scraper at any time.
- Avoid wearing loose-fitting clothing or jewelry when working around the scraper and tie up long hair that can entangle in moving parts.
- Wear personal protective equipment (PPE) such as, but not limited to, protection for eyes, lungs, ears, head, hands and feet when operating, servicing or repairing equipment.
- Be sure bystanders are clear before engaging and operating the tractor or scraper.
- Do not leave tractor or scraper unattended with tractor engine running.
- Never attempt to operate the scraper unless sitting in the tractor driver's seat.
- Keep all guards and shields in place when scraper is in operation.
- Do not stand between tractor and scraper to install hitch pin when tractor is running.
- Regulate ground speed to field conditions, and maintain control at all times.
- Be sure tractor has sufficient weight to operate scraper on public roads, on hillsides and under any other adverse conditions.
- Do not allow children to ride on, play on, or operate equipment. Always keep children away from equipment operating, servicing and storage areas.
- Be sure tractor is in safe operating condition and has adequate braking capabilities.
- Tractor should be equipped with rollover protective structure (ROPS), enclosed cab and seat belts. Use seat belts during operation.
- Detach and store scraper where children do not normally play. Always block the wheels and ensure that the hitch jack is stable and secured to scraper properly.

**WARNING:**  
**DO NOT OPERATE THE SCRAPER WITH A TRACTOR EXCEEDING THE 425 HP DRAWBAR RATING. WARRANTY WILL BE VOID IF THE SCRAPER IS OPERATED WITH THESE TYPE OF TRACTORS.**

# Maintenance

- Always follow proper safety precautions.
- Never attempt any service, maintenance, adjustment or repair unless you have been properly trained and are qualified to do so.
- Always shut off the tractor, engage the park brake and take steps to ensure no person can start up the machine while you are working on it.
- Check wheel bolts hourly for the first day of operation and every 50 hours of operation thereafter.
- Check tires daily for sign of damage or noticeably low air pressure. Every 50 hours check the tire pressure. Grease walking beam bearings every 8 hours and wheel bearings every 50 hours with premium quality multi-purpose grease.

## Lubrication and Check Summary

### ***1. 8 hours of operation:***

- Grease all grease fittings as indicated by the Decals
- Grease the Hitch pivot
- Check tires

### ***2. 50 hours of operation:***

- Check wheel bolts
- Check air pressure
- Grease wheel bearings

# Specifications

## TIRES AND WHEELS

	<b>FRONT</b>	<b>REAR</b>
<b>TIRES</b>	21.5 x 16.1-10 Ply Rib Implement	18.4 x 26-10 Ply Rib Implement
<b>RIMS</b>	W16C x 16.1x 8-bolts	W16L x 26-10 bolts
<b>HUBS</b>	8-bolts	Complete Assembly, H-1010-11

## CYLINDERS

	<b>Lift Cylinders</b>	<b>Push Gate Cylinders</b>	<b>Front Gate Cylinder</b>
<b>Bore Diameter (inch)</b>	3.50	5.00	3.00
<b>Shaft Diameter (inch)</b>	1.75	3.00	1.50
<b>Stroke (inch)</b>	18.00	76.00	10.00
<b>Design Pressure (psi)</b>	3000		
<b>Test Pressure (psi)</b>	3500		

# 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 _____	PROV/STATE _____
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 then days after the date of delivery.



**WARRANTY**  
**REGISTRATION (MANUFACTURER'S COPY)**

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TOWN	_____	PROV/STATE	_____
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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 then days after the date of delivery.



# Delivery Checklist

## Pre-Delivery:

- \_\_\_\_\_ Verify Tires Pressure
- \_\_\_\_\_ Verify Wheel Torque
- \_\_\_\_\_ Inspect all Lubrication Points
- \_\_\_\_\_ Inspect all Hydraulic Hoses and Fittings
- \_\_\_\_\_ Inspect all Hydraulic Cylinder Pins
- \_\_\_\_\_ Verify Hydraulic Tighten Torque

DEALER REPRESENTATIVE: \_\_\_\_\_

DATE: \_\_\_\_\_

## Customer Delivery :

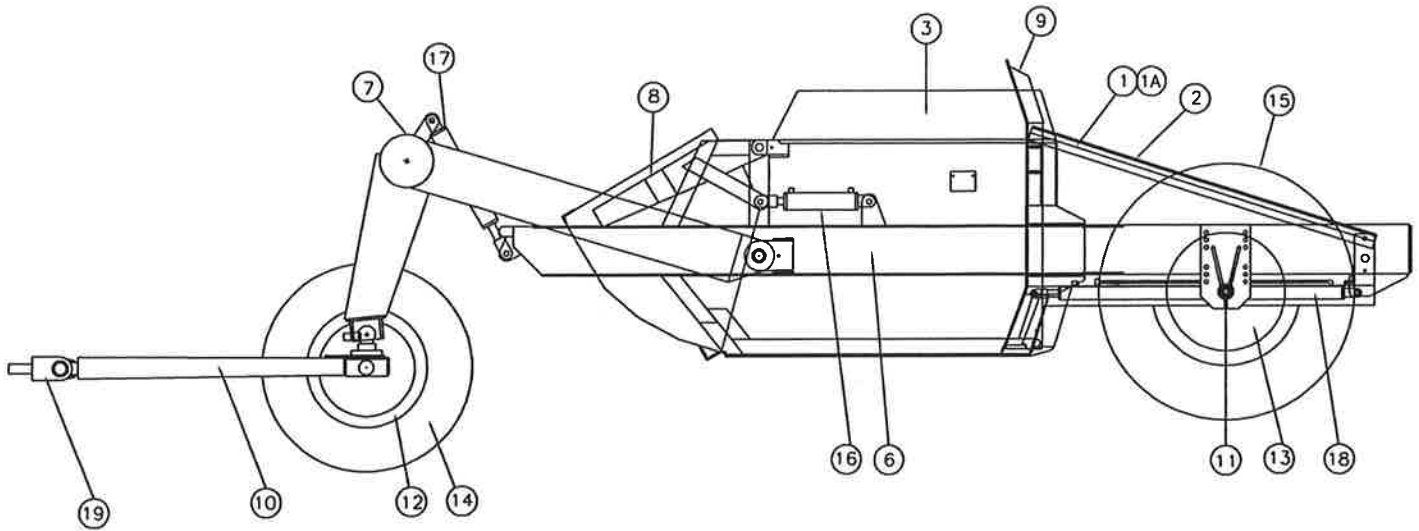
- \_\_\_\_\_ Review Safety Procedures regarding Bale Handler Operation
- \_\_\_\_\_ Review Operator's and Part's Manual
- \_\_\_\_\_ Review proper Operating Procedure
- \_\_\_\_\_ Review the Assembly Procedure
- \_\_\_\_\_ Review general Adjustment and Setup procedure
- \_\_\_\_\_ Discuss Road and Highway Transportation Requirements and Regulations

DEALER REPRESENTATIVE: \_\_\_\_\_

DATE: \_\_\_\_\_

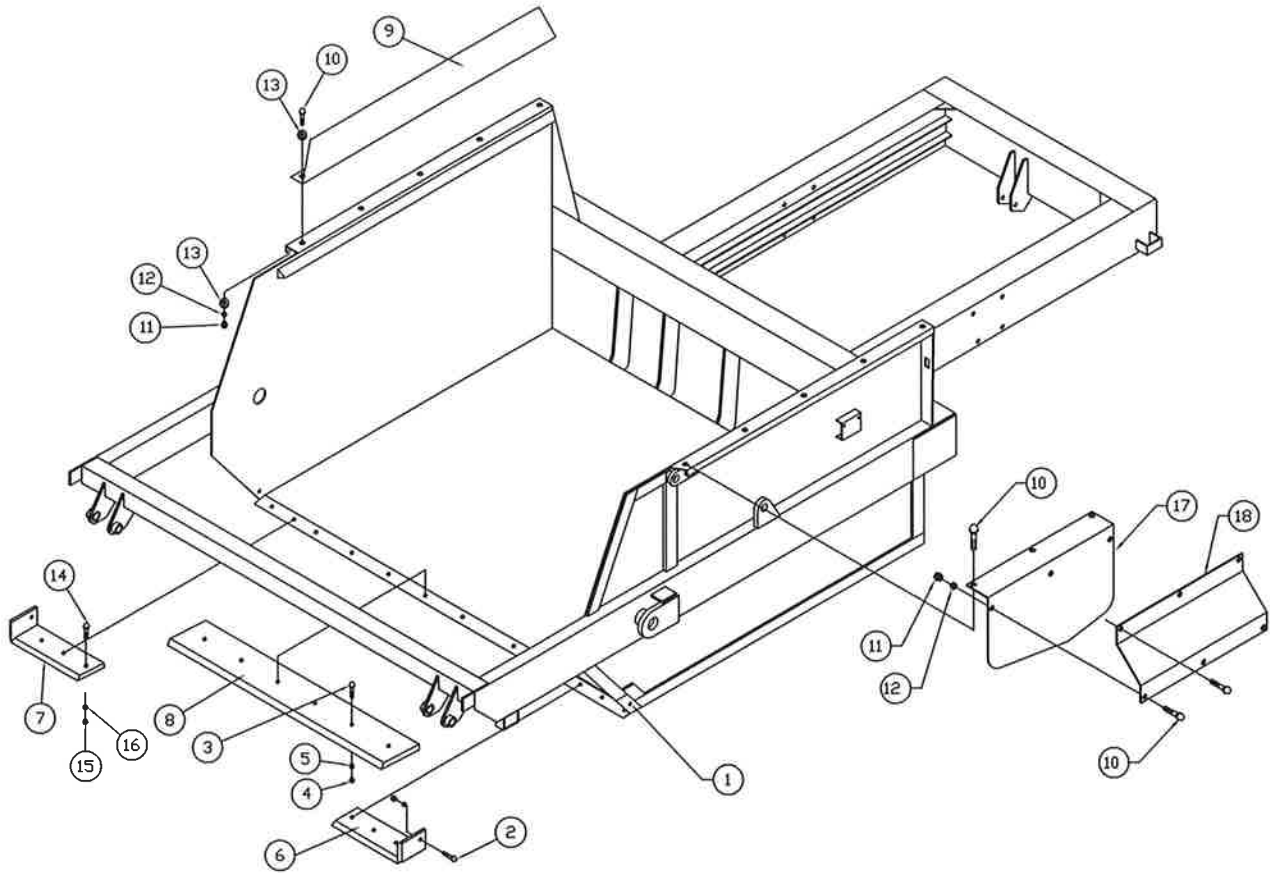


# 1350 SCRAPER ASSEMBLY



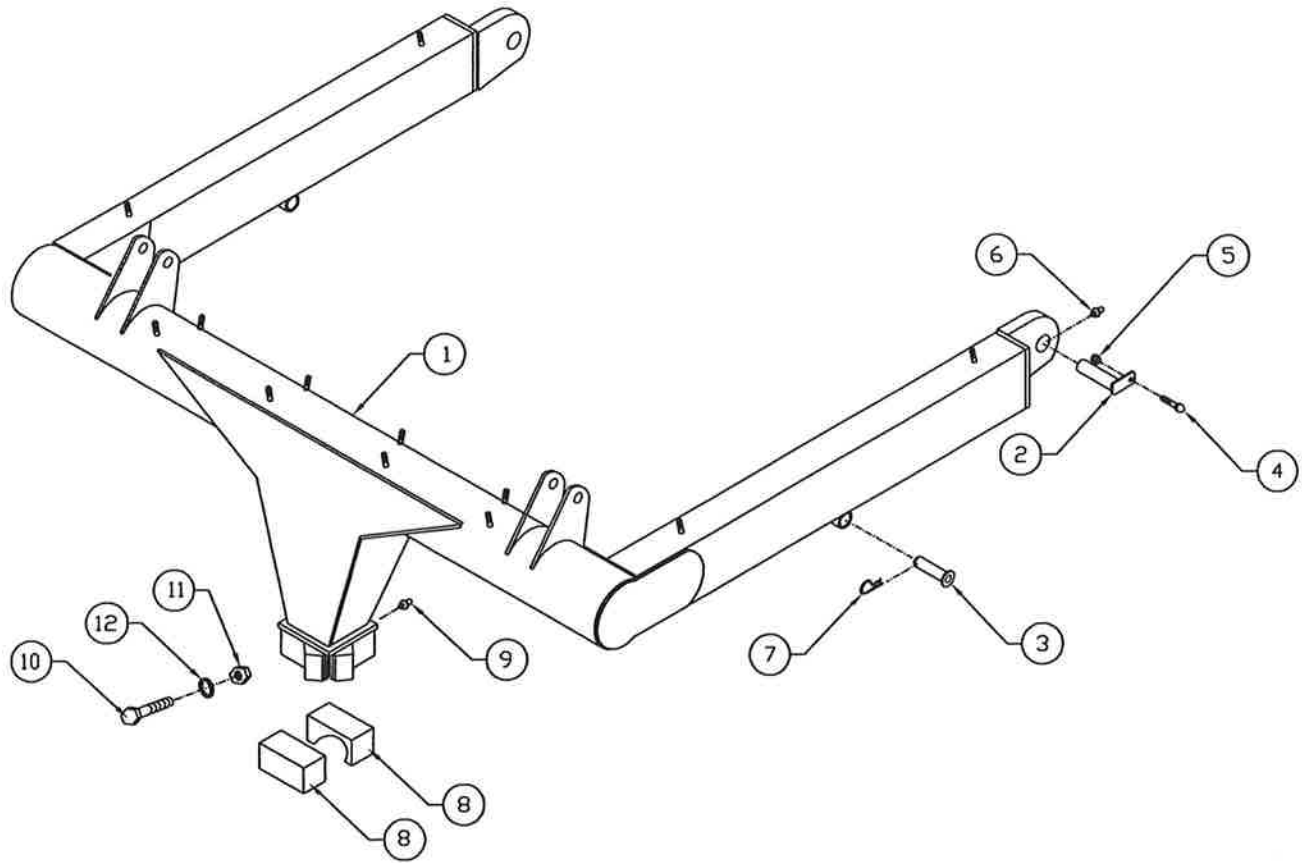
REF. NO.	PART #	QTY.	DESCRIPTION
1	1851238	1	REAR GATE BRACE-LEFT
1A	1851239	1	REAR GATE BRACE-RIGHT
2	1851167	1	REAR GATE CYLINDER GUARD
3	1851168	2	SIDE EXTENSION (OPTIONAL-1350)
6	1851220	1	MAIN FRAME
7	1851096	1	FRONT FRAME
8	1850079	1	FRONT GATE
9	1851080	1	REAR GATE
10	1851181	1	HITCH POLE
11	1850731	2	REAR AXLE
12	1135024	2	RIM - W16C X 16.1 - 8 BOLT
13	1135018	2	RIM - W16L X 26 - 10 BOLT
14	1135040	2	TIRE - 21.5L X 16.1 - 10 PLY RIB IMPLEMENT
15	1135048	2	TIRE - 18.4 X 26 - 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	1125970	1	HYDRAULIC CYLINDER CW-5.00-76.00-3.00(ORB)
19	1850706	1	HITCH TONQUE

# 1350 MAIN FRAME



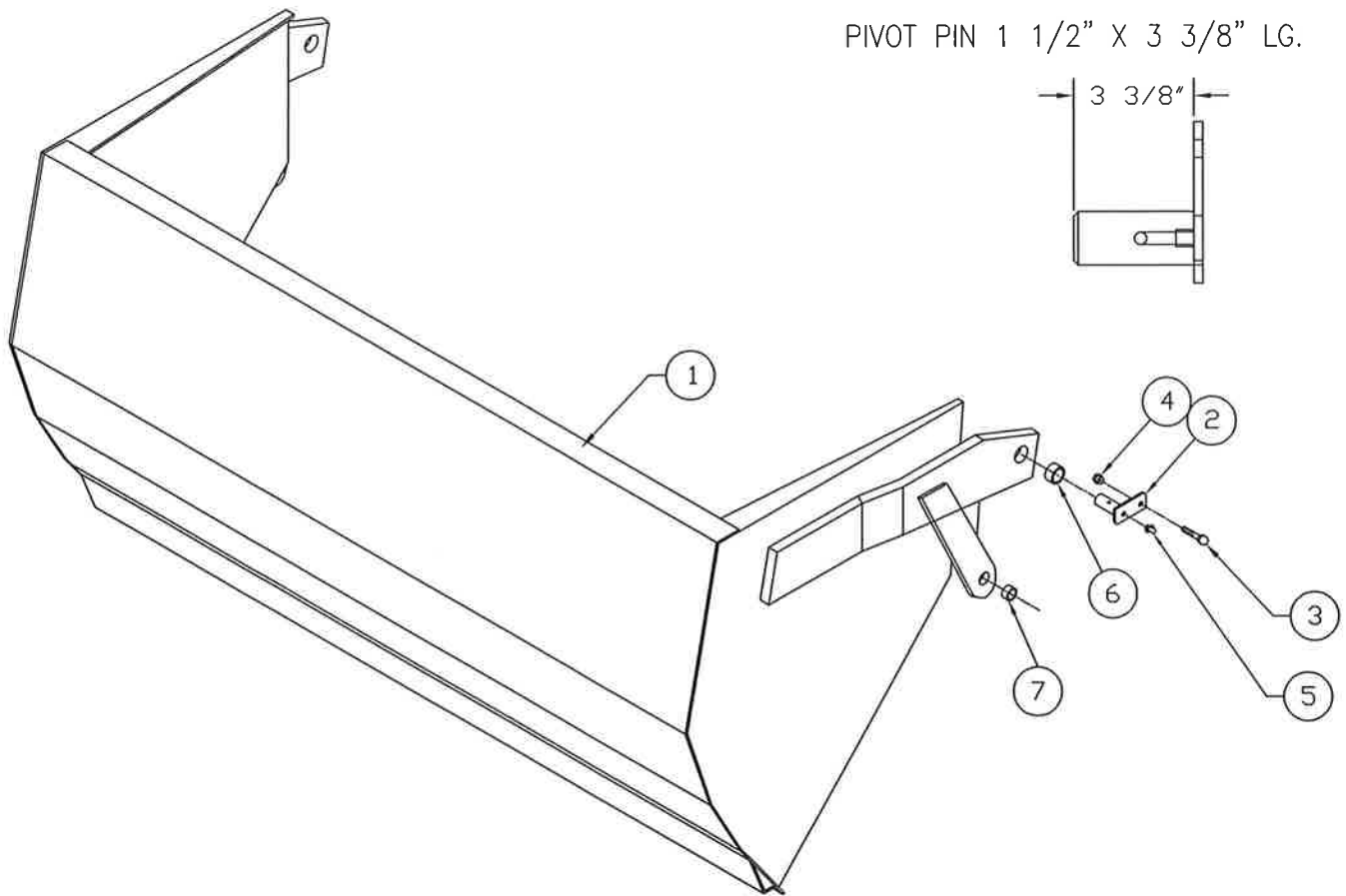
REF. NO.	PART #	QTY.	DESCRIPTION
1	1851220	1	MAIN FRAME
2	1102325	2	SCRAPER BOLT, 5/8" UNC x 1 3/4" LG.
3	1102366	6	SCRAPER BOLT, 3/4" UNC x 2 1/2" LG.
4	1102546	6	HEX NUT, 3/4" UNC GRADE 8
5	1102596	6	LOCKWASHER, 3/4" DIA.
6	1162814	1	CORNER CUTTING EDGE, 5/8" x 6" x 19 1/2", LEFT HAND
7	1162815	1	CORNER 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	1851168	2	SIDE EXTENSION (OPTIONAL-1350)
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	1851645	2	SIDE COVER - (OPTIONAL)
18	1851650	2	SIDE COVER SUPPORT - (OPTIONAL)

# 1350 FRONT FRAME



REF. NO.	PART #	QTY.	DESCRIPTION
1	1851096	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, $\phi 1/4$ "
8	1144242	2	COUPLING SOCKET HALF (TAPPED)
9	1122798	1	GREASE NIPPLE- LONG BASE, $\frac{1}{8}$ " NPT
10	1102204	2	HEX HEAD BOLT, $\frac{7}{8}$ " UNC X 7" LONG
11	1102550	2	HEX HEAD NUT, $\frac{7}{8}$ " UNC
12	1102598	2	LOCKWASHER $\frac{7}{8}$ " DIA

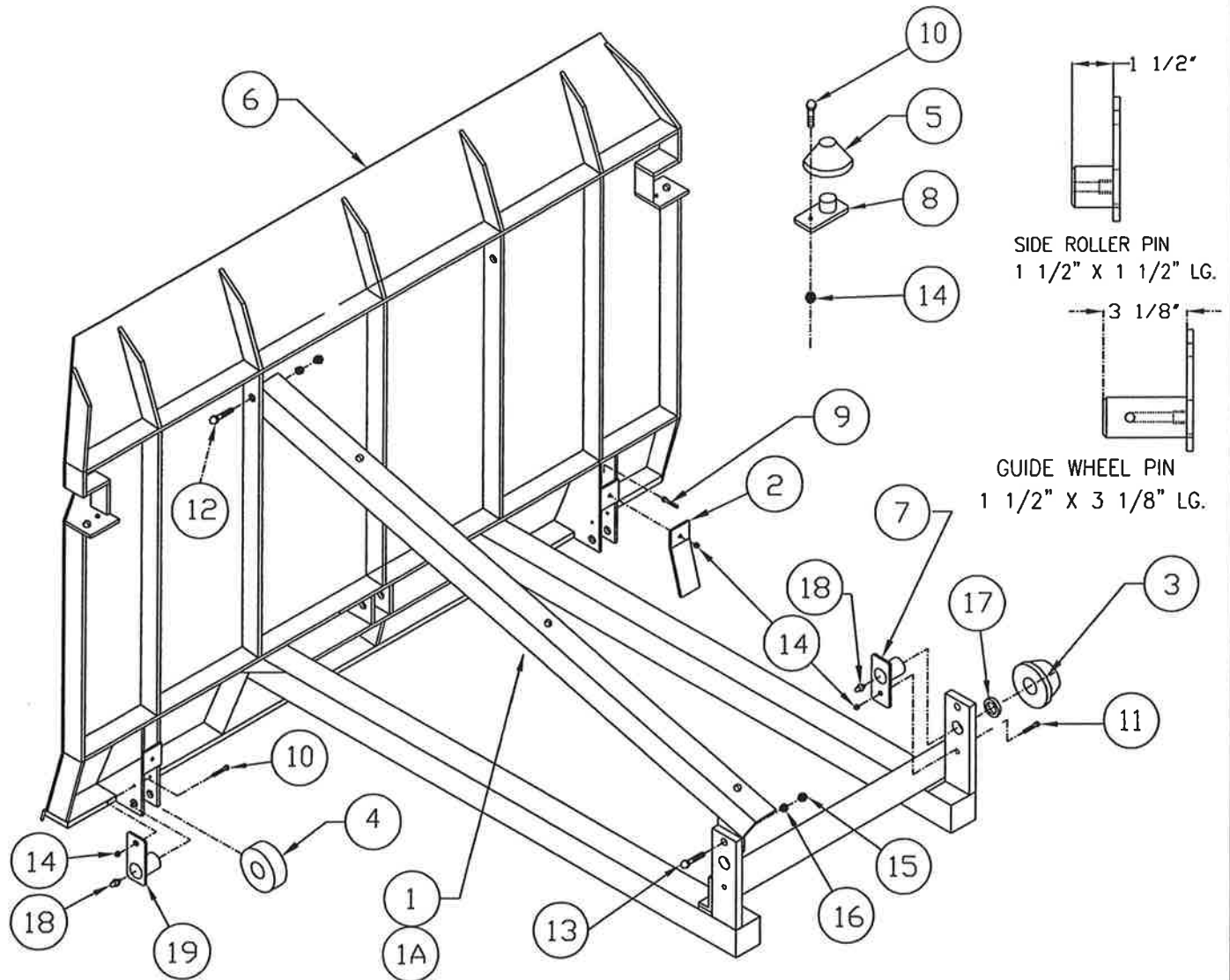
# 1350 FRONT GATE



PIVOT PIN 1 1/2" X 3 3/8" LG.

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.

# 1350 REAR PUSH GATE

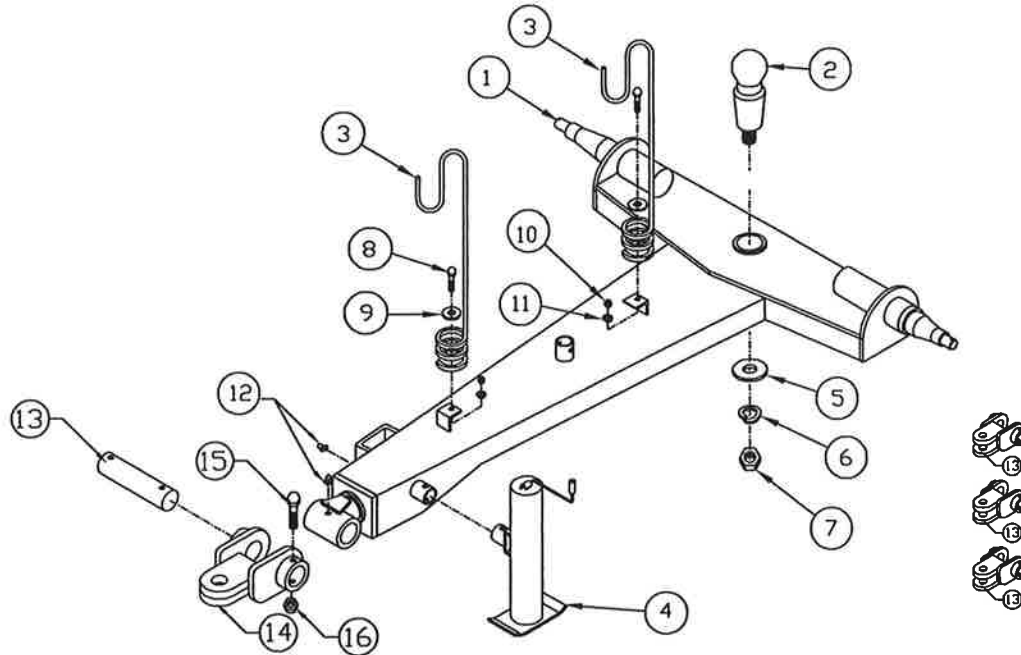


ROLLER PIN 1 1/2" X 3 1/4" LG.

# 1350 REAR PUSH GATE

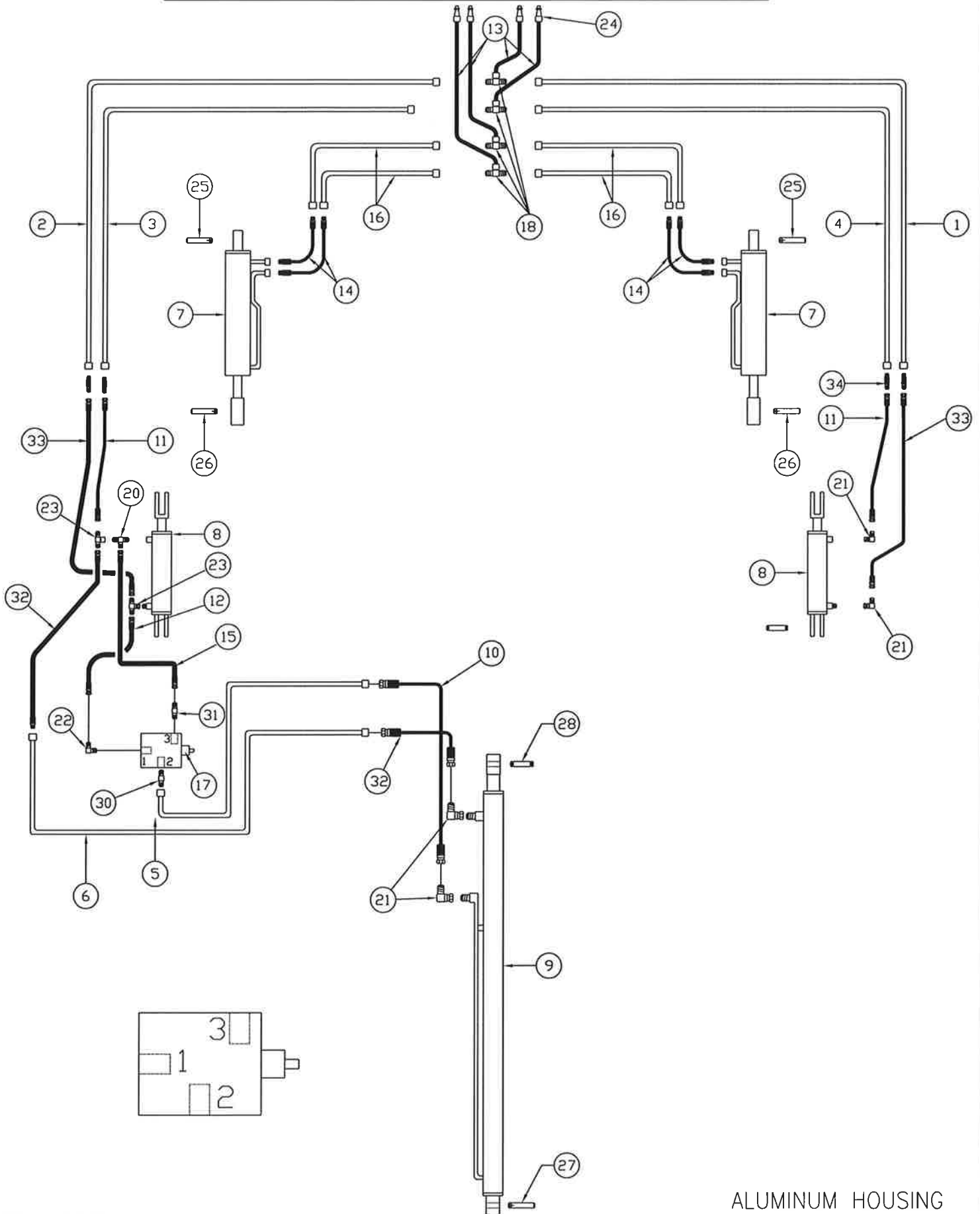
REF. NO.	PART #	QTY.	DESCRIPTION
1	1851238	1	REAR GATE BRACE-LEFT
1A	1851239	1	REAR GATE BRACE-RIGHT
2	1850169	2	REAR GATE ROLLER SCRAPER
3	1175573	2	REAR GATE GUIDE WHEEL
4	1175572	2	REAR GATE ROLLER, 4" DIA.
5	1850180	2	REAR GATE SIDE ROLLER
6	1851080	1	REAR PUSH GATE
7	1850171	2	REAR GATE GUIDE WHEEL 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.

# 1350 HITCH POLE



REF. NO.	PART #	QTY.	DESCRIPTION
1	1851181	1	HITCH POLE
2	1850655	1	COUPLING BALL
3	1105556	1	HOSE HOLDER - SPRING TYPE
4	1173410	1	HITCHJACK
5	1850668	1	FLATWASHER - 3 7/8 OD X 1 9/16 ID
6	1102606	1	LOCKWASHER - 1 1/2" DIA
7	1105246	1	HEX NUT - 1 1/2" UNF
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	1850704	1	TONQUE PIN
13	1850820	1	HTICH CLEVIS - 2" PIN - 2" SPACE
13	1850825	1	HTICH CLEVIS - 2" PIN - 2 1/2" SPACE
13	1850830	1	HTICH CLEVIS - 2" PIN - 3" SPACE
14	1850706	1	HITCH TONQUE
15	1122798	1	HEX HEAD BOLT - 3/4" UNC X 4 1/2" LG
16	1122798	1	HEX LOCK NUT - 3/4" UNC

# 1350 HYDRAULIC ASSEMBLY



NOV-2014

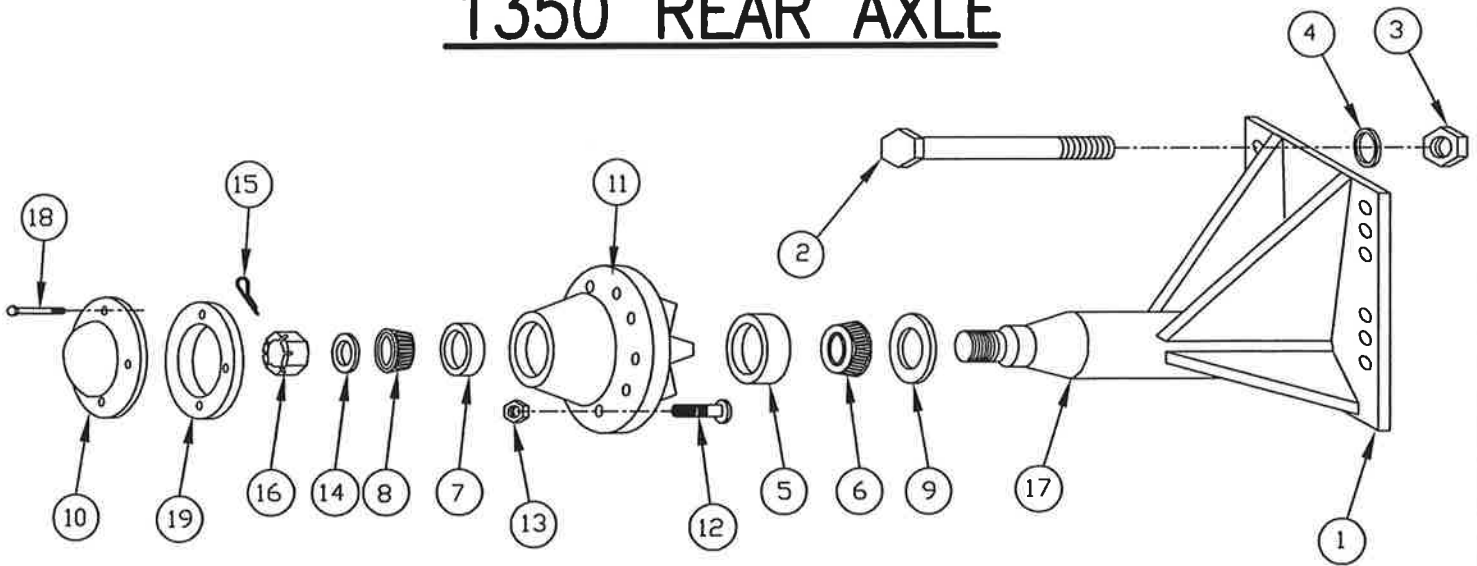
ALUMINUM HOUSING  
SEQUENCE VALVE



# 1350 HYDRAULIC ASSEMBLY

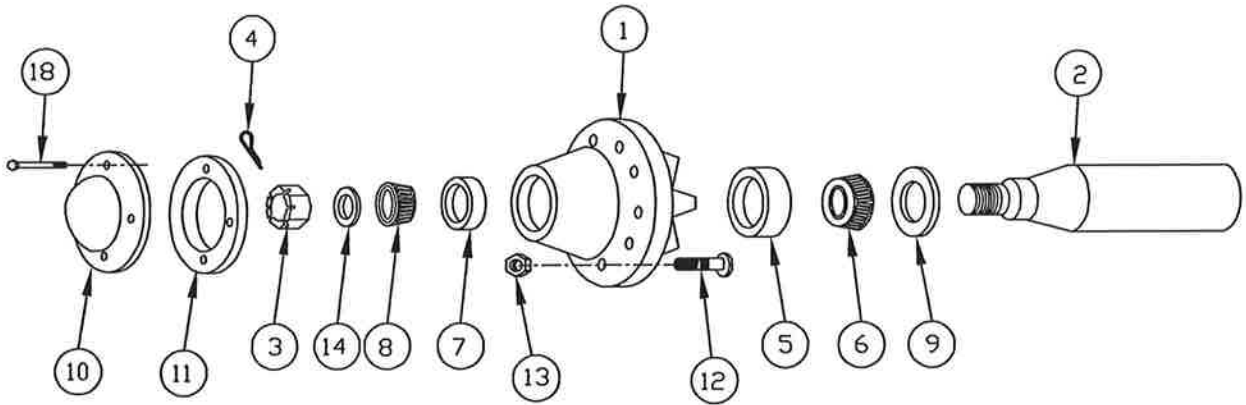
REF. NO.	PART #	QTY.	DESCRIPTION
1	1124869	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
2	1124870	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
3	1124868	1	HYDRAULIC TUBE, 1/2" DIA. X 119 1/2" LG. - 3/4"-16 JICF(2)
4	1124871	1	HYDRAULIC TUBE, 1/2" DIA. X 123 1/2" LG. - 3/4"-16 JICF(2)
5	1124877	1	HYDRAULIC TUBE, 1/2" DIA. X 103" LG. - 3/4"-16 JICF(2)
6	1124876	1	HYDRAULIC TUBE, 1/2" DIA. X 97 1/4" LG. - 3/4"-16 JICF(2)
7	1850480	2	LIFT CYLINDER
8	1850470	2	FRONT GATE CYLINDER
9	1125970	1	REAR PUSH CYLINDER
10	1124609	1	HYDRAULIC HOSE, 1/2" x 30" LG., 3/4" JICM X 3/4" JICF
11	1123583	2	HYDRAULIC HOSE, 1/2" x 30" LG., 3/4" JICFSW(2)
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	2	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	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 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
33	1123435	2	HYDRAULIC HOSE, 1/2" x 40" LG., 3/4" JICF X 3/4" JICF
34	11124408	4	CONNECTOR, 1/2" #8 JICM
	1707130	25	2 LINE PIPE CLAMPS
	1102526	25	3/8" UNC LOCK NUT

# 1350 REAR AXLE



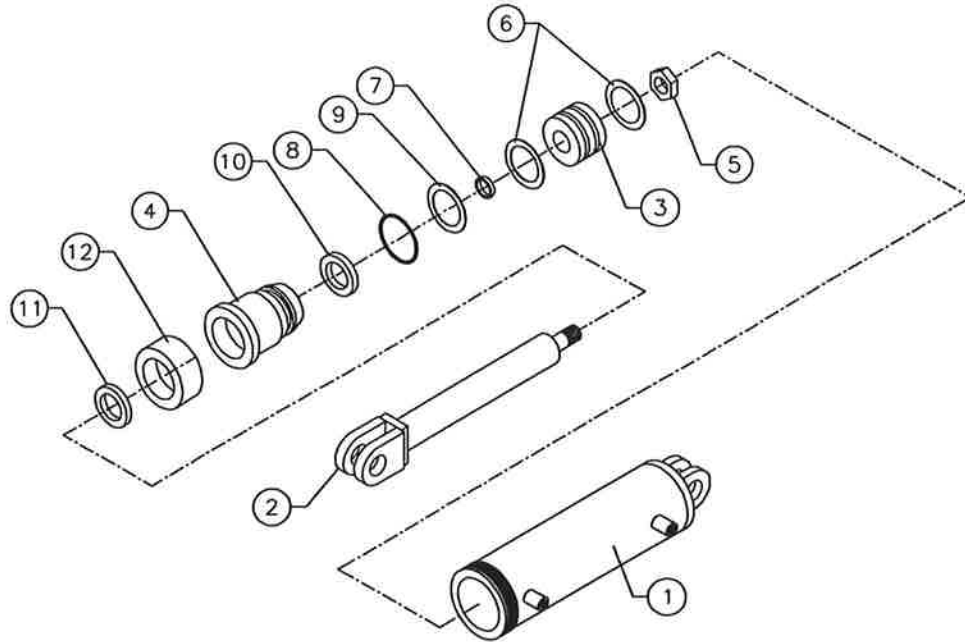
REF. NO.	PART #	QTY.	DESCRIPTION
1	1850731	1	REAR AXLE
2	1102186	6	HEX HEAD BOLT, 3/4" UNC x 9" LONG, GRADE 8
3	1102545	6	HEX HEAD NUT, 3/4" UNC
4	1102596	6	LOCKWASHER, 3/4" DIA.
5	1135316	1	INNER CUP
6	1135317	1	INNER CONE
7	1135318	1	OUTER CUP
8	1135319	1	OUTER CONE
9	1135320	1	GREASE SEAL
10	1135321	1	DUST CAP
11	1135322	1	HUB CASTING
12	1135323	10	WHEEL BOLT STUDS
13	1135324	10	WHEEL NUTS, 3/4" UNF HEX FLANGED, GRADE 8
14	1135397	1	WASHER, 1 1/4" DIA.
15	1102762	1	COTTER PIN
16	1135398	1	CASTELLATED HEX NUT, 1 1/4" - 12UNF
17	1784199	1	SPINDLES, 3 1/2" DIA. x 17 3/8" LG.
18	1135325	4	HEX HEAD BOLT, 5/16" UNC x 1/2" LG. (DUST CAP)
19	1135326	1	DUST CAP SEAL
	1135048	1	TIRE, 18.4 X 26, 10 PLY DIAMOND IMPLEMENT (NOT SHOWN)
	1135018	1	RIM, W16 X 26, 10 BOLT (NOT SHOWN)
	1135155	1	VALVE STEMS (NOT SHOWN)
	1135315	1	HUB ASSEMBLY (ITEMS 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19)

# 1350 FRONT AXLE



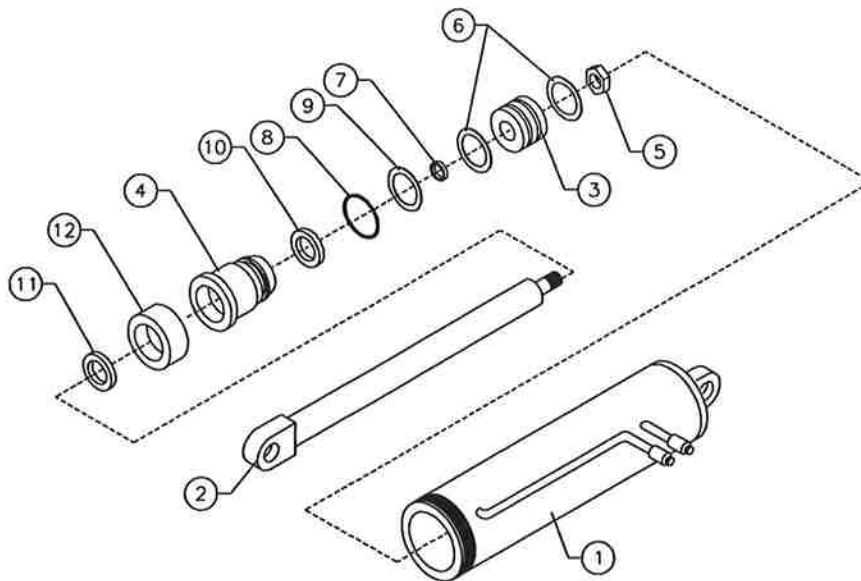
REF. NO.	PART #	QTY.	DESCRIPTION
1	1144009	1	HUB - 8-BOLT
2	1784199	1	SPINDLE - 3 1/2" DIA. X 17 3/8" LG
3	1135398	1	CASTELLATED HEX NUT, 1 1/4" - 12UNF
4	1102762	1	COTTER PIN
5	1135312	1	INNER CUP
6	1135311	1	INNER CONE
7	1135314	1	OUTER CUP
8	1135313	1	OUTER CONE
9	1135306	1	GREASE SEAL
10	1135329	1	DUST CAP
11	1135326	1	DUST CAP SEAL
12	1102664	8	WHEEL BOLT STUDS
13	1135505	8	WHEEL NUTS, 5/8" UNF HEX TAPERED
14	1135397	1	WASHER, 1 1/4" DIA.
15	1101949	4	HEX HEAD BOLT, 5/16" UNC x 3/4"
	1135040	1	TIRE, 21.5 x 16.1 -10 PLY AWT - RIB IMPLEMENT
	1135024	1	RIM, W18C X 16.1 -8 BOLT
	1135150	1	VALVE STEM
OPTIONAL	1135047	1	TIRE, 21.5 x 16.1 -12 PLY AWT -DIAMOND IMPLEMENT

# 1350 FRONT GATE CYLINDER



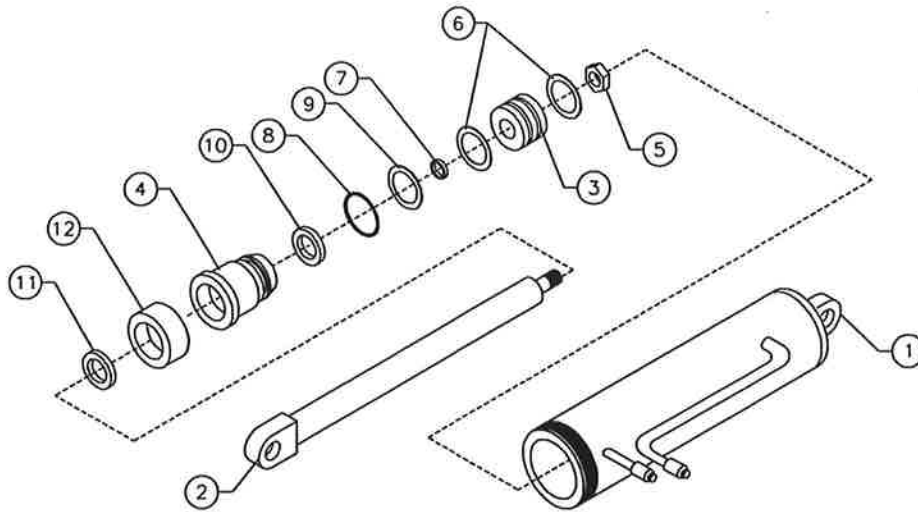
REF. NO.	PART #	QTY.	DESCRIPTION
	1850470	1	CYLINDER ASSEMBLY CW-3.00-10.00-1.50
1	1850471	1	CYLINDER BARREL
2	1850472	1	CYLINDER SHAFT
3	1126533	1	PISTON
4	1126570	1	GLAND
5	1126426	1	NUT, 1" - 14 UNF, GRADE 8 LOCKNUT
6	1126540	2	PISTON SEAL (D)
7	1126428	1	PISTON SEAL (S)
8	1126538	1	GLAND STATIC SEAL
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

# 1350 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)
	1225627	1	PIN - GROOVE 1" DIA X 3 3/8"
	1225654	1	PIN - GROOVE 1" DIA X 2 7/8"
	1500115	4	PIN RETAINER

# 1350 PUSH CYLINDER

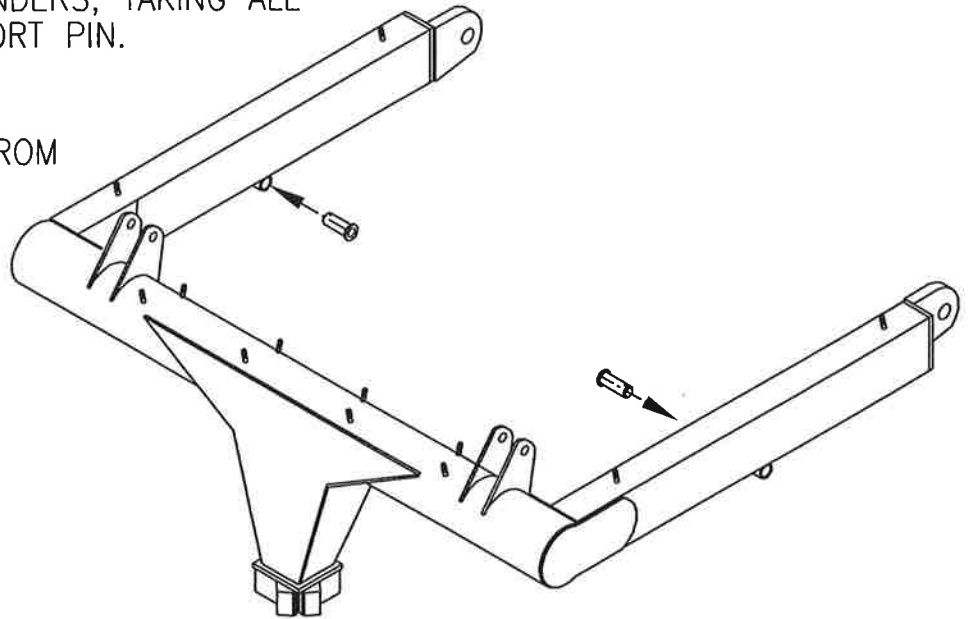


REF. NO.	PART #	QTY.	DESCRIPTION
	1125970	1	CYLINDER ASSEMBLY CW-5.00-76.00-3.00
1	1125971	1	CYLINDER BARREL
2	1125972	1	CYLINDER SHAFT
3	1125973	1	PISTON
4	1125974	1	GLAND
5	1102549	1	NUT, 1" -14 UNF GRADE 8, LOCKNUT
6		2	PISTON SEAL (D)
7		1	PISTON SEAL (S)
8		1	GLAND STATIC SEAL
9		1	GLAND STATIC SEAL BACKUP
10	3500047	1	ROD SEAL
11	3500076	1	ROD WIPER
12	1125975	1	GLAND COLLAR
	1125976	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

# 1350 TRANSPORT PIN

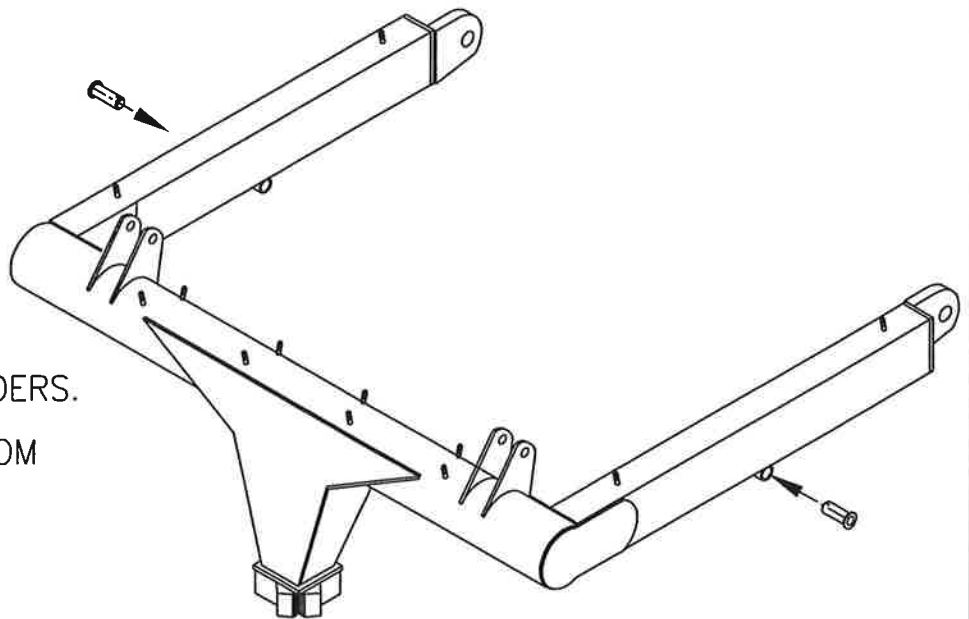
## PIN POSITION FOR WORK MODE

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.



# PILOT OPERATED SEQUENCE VALVE

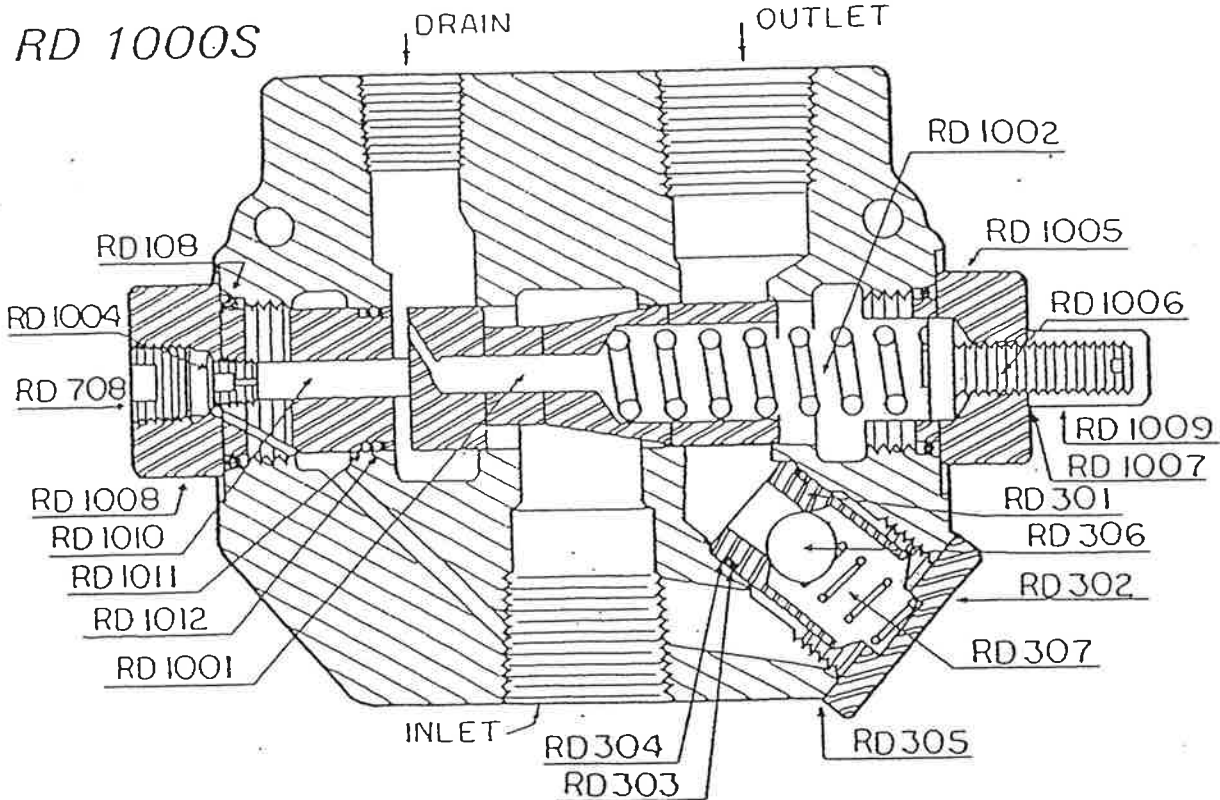
## MODEL RD 1000S

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



Internal pilot and external drain



