

LEON

Operator Manual



Rear Blade Units Model 165

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INTRODUCTION

This manual provides recommended operation and service instructions for your Leon's Product.

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. Correct operation and maintenance will save you time and expenses.

Please, read this manual carefully and follow the instructions provided to insure long life of your implement.

With proper operation, your implement will give maximum performance, low maintenance and long life.

A WORD ON SAFETY

- Always be safety conscious person.
- Put safety into each step of your workday;
- Read your owner's manual thoroughly;
- Know how to operate each machine properly and safely;
- Take the safety precautions specified;
- Think before you act.
- Make sure you think about tomorrow.
- Safety today insures health and life for tomorrow.
- Outfit yourself with a safety program now.
- Don't approach the blades until hydraulic cylinders have been charged.

As a person, you cannot be replaced. *Think about it.*

The following safety precautions should be thoroughly understood before attempting to begin assembling this machine:

- Select an area for assembly that is clean and free of any debris which might cause persons working on the assembly to trip.

- Do not lift heavy parts or assemblies. Use crane, jack, tackle, fork trucks or other mechanical devices.
- Preview the assembly instructions in your operator's manual before proceeding further.
- If the assembly instructions call for parts or assemblies to be blocked up, use, only, blocking material that is in good condition and is capable of handling the weight of the assembly to be blocked. Also insure that the blocking material is on a clean, dry surface.
- Never put hands, or any part of body, under blocked up assemblies if at all possible.
- After completing assembly, thoroughly inspect the machine to be sure that all nuts, bolts, hydraulic fittings or any other fastened assemblies have been thoroughly tightened.
- Before operating the machine, thoroughly read the operation section of your operator's manual.
- Before operating, read the maintenance section of your operator's manual to be sure that any parts requiring lubrication, such as gearboxes, are full, to avoid any possible damage.

Before operating equipment – If you have any questions regarding the proper assembly or operation, contact your dealer.

Model 165: REAR MOUNTED BLADE

Your blade is engineered for category II & III three point and quick hitch wheel type tractors, up to but no exceeding (165 HP) engine size rating*. It is designed for extra heavy duty service.

Moldboard rotation is accomplished through hydraulic actuation. Moldboard tilt can be adjusted (15°) left or right hydraulically. The cutting edge angle can be adjusted by the tractor top link. The moldboard is available in 8 foot, 9 foot and 10 foot lengths.

The main frame assembly can be adjusted 45° left or right using the hydraulics.

Three hydraulic cylinders make this dozer very versatile for almost any use imaginable.

MOUNTING INSTRUCTIONS

1. Attach the standard A-frame assembly to the tractor draft links and stabilizers with the wrist pins and lift pin supplied.
2. Secure with retaining pins supplied.
3. Connect the tractor top link to A-frame upright and adjust the top link to achieve the desired cutting edge angle, FIG. (1).

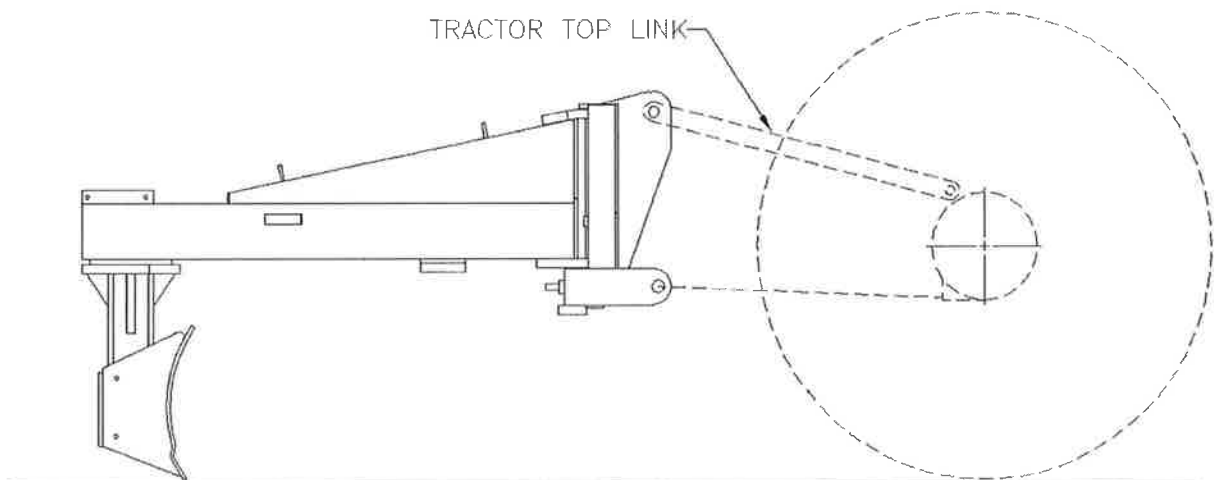


FIG (1): A-frame adjustment with the tractor.

4. Hydraulic blade side tilt control, FIG. (2).

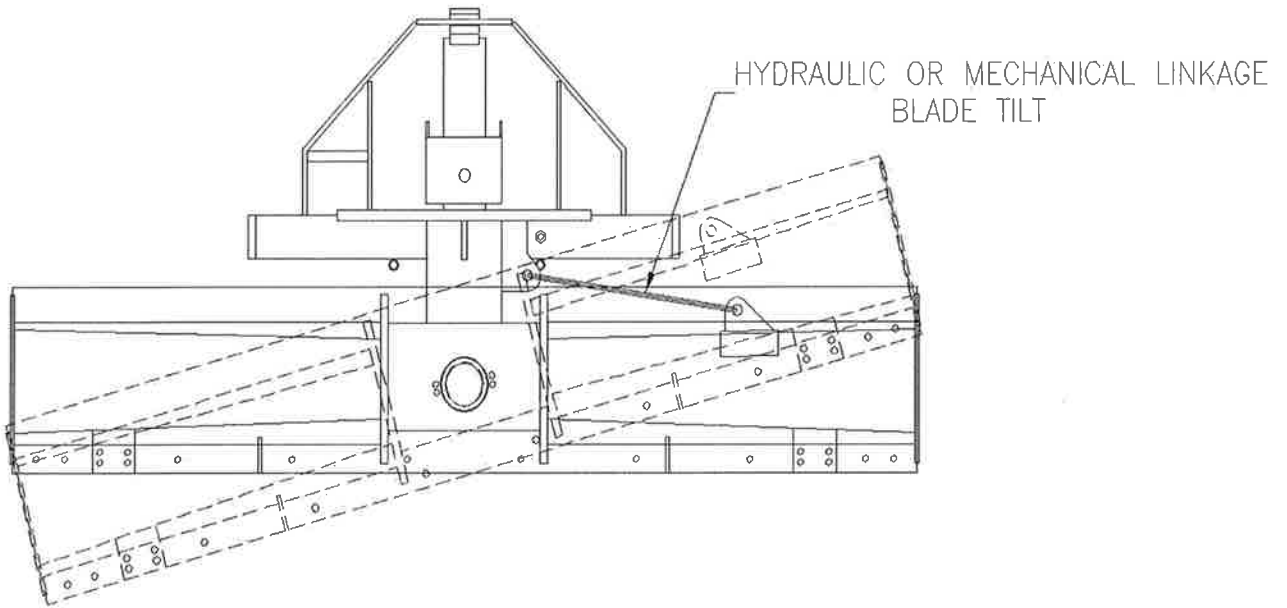


FIG (2): Blade Tilt Mechanism.

5. For non-hydraulic setup, 7 manual adjustment of the three mechanical linkages to the preferred angle, FIG. (3).

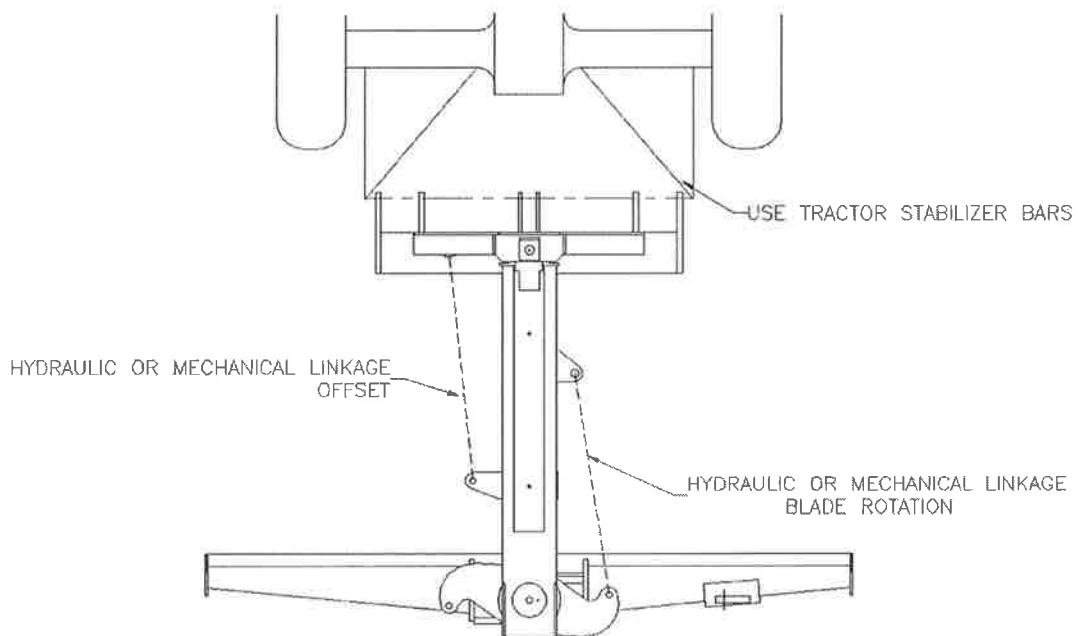


FIG (3): The Cutting edge angle is controlled by tractor top link adjustment.

DITCHING AND TERRACING

1. Offset the main frame to the left or right by adjusting the offset cylinder.
2. Rotate the moldboard to the desired angle by the angle cylinder.
3. Tilt the moldboard to the appropriate setting by adjusting the tilt cylinder. The tractor implement leveling device may be adjusted for additional tilt.
4. Adjust the moldboard cutting edge angle by adjusting the tractor top link.

BACKFILLING AND UTILITY

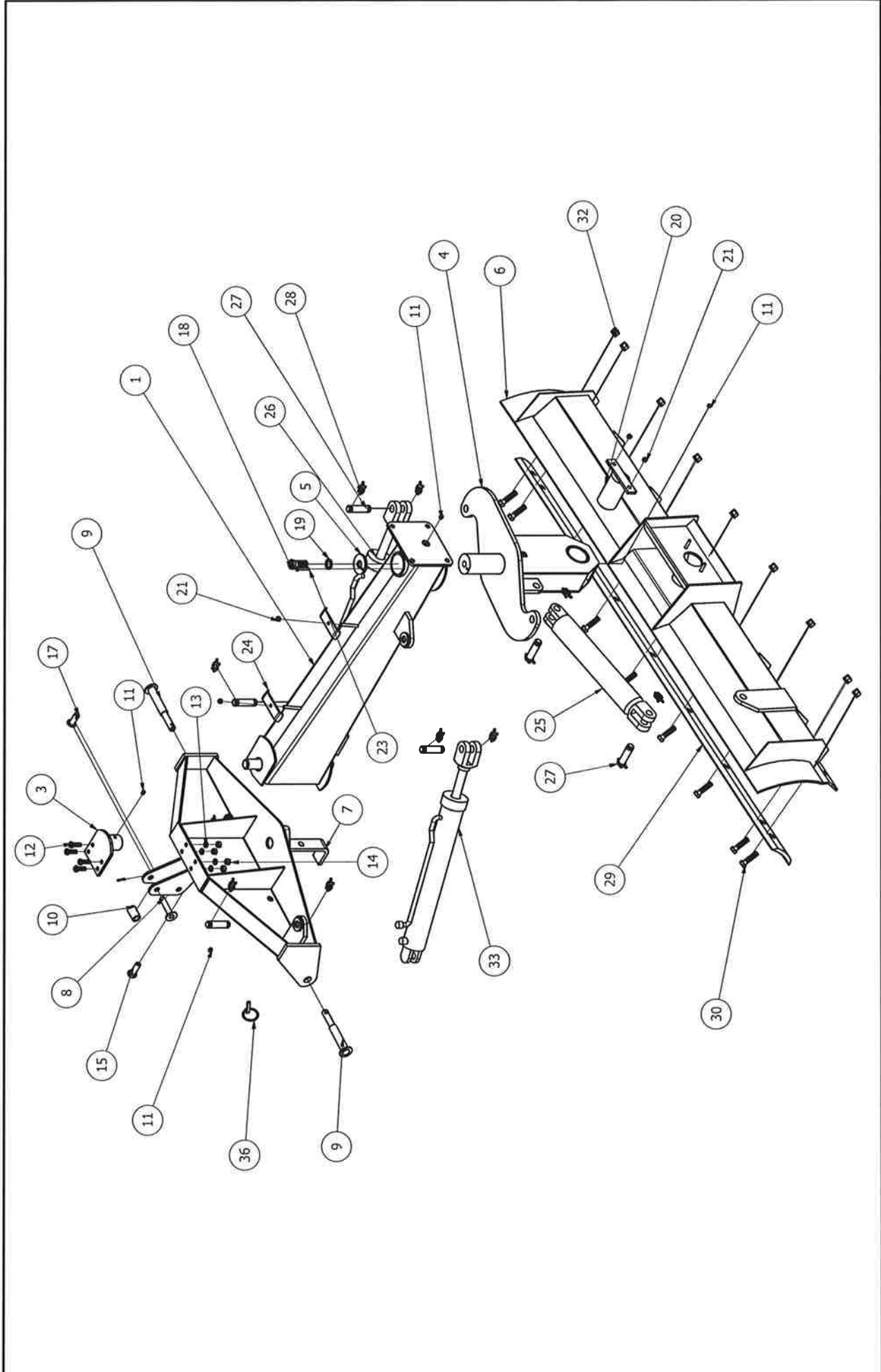
For conventional backfilling, rotate the moldboard (180°) and use the tractor in reverse gear.

For backfilling a ditch or cleaning close to buildings or fences, offset the main frame and adjust the moldboard so material will flow in the desired direction with the tractor moving in a forward position.

Material conditions will determine the adjustments necessary to achieve proper rolling action.

MAINTENANCE

1. Replace excessively worn or broken cutting edges, especially when ditching since using a broken or worn cutting edge, results an increased stresses in the blade and extra strain on the tractor.
2. Periodically lubricate the moldboard king pin to reduce wear,(item #11).
3. Check all bolts to insure that all parts are fitting properly.
4. If hydraulic kits are used where the maximum system pressure to be use with the hydraulic kits is recommended @ 2500 Psi:
 - Keep hoses free of moving parts.
 - Keep cylinders and hoses free of internal contamination by capping hose ends and cylinder ports when the unit in not in use.



LEON MODEL M165 REAR BLADE

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1397001	M165 MAIN FRAME WELDMENT
2	1	1397015	M165 A FRAM WELDMENT
3	1	1397025	M165 TOP PIVOT WELDMENT
4	1	1397030	M165 KING PIN WELDMENT
5	1	1397036	KING PIN RETAINER PLATE
6	1	1397050 1397070 1397090	8 FT- MOLDBORD ASSEMBLY 9 FT 10FT
7	1	1397027	PARK STAND FLAT
8	1	1690672	LIFT PIN
9	2	1390219	WRIST PIN
10	1	1390237	LIFT PIN SLEEVE
11	3	1122797	GREASE ZERK, 1/8-27 NPT
12	4	1102051	1/2" X 1 1/2" UNC GR. 5 PLATED HEX BOLT
13	4	1102592	1/2" SPLIT SPRING LOCK WASHER, PLATED
14	4	1102535	1/2" UNC HEX NUT GR.5 PLATED
15	1	1102151	3/4" X 2" UNC GR. 5 PLATED HEX BOLT
16	1	1102551	3/4" UNC HEX LOCKNUT GR.5 PLATED-NYLON
17	1	1397029	PARK STAND PIN WELDMENT
18	1	1102252	1" X 2 1/2" UNC GR. 5 PLATED HEX BOLT
19	1	1102600	1" SPLIT SPRING LOCK WASHER, PLATED
20	1	1390201	TOP PIVOT WELDMENT
21	4	1102536	3/8" UNC HEX LK. NUT GR.5 PLATED
22	2	1102774	HAIR PIN 3/16" DIA
23	1	1102799	5/16" X 1 1/2" LG. ROLL PIN
24	2	1707120	HYDRAULIC TUBING CLIP
25	1	1397053B	HYDRAULIC TILT CYLINDER
26	1	1397052	HYDRAULIC ANGLE CYLINDER
27	6	1225654	PIN - GROOVE - 2 7/8
28	12	1500115	PIN RETAINER
29	1	1162826 1162827 1162828	CUTTING EDGE - 96" 108" 120"
30	9	1102103	5/8" X 2 1/2" UNC GR. 5 PLATED HEX BOLT
31	9	1102594	5/8" SPLIT SPRING LOCK WASHER, PLATED
32	9	1102541	5/8" UNC HEX NUT GR.8 PLATED
33	1	1397062	HYDRAULIC OFFSET CYLINDER
36	2	1105696	LYNCH PIN 7/16 DIA X 1 1/2" DIA. X 1 3/4" LG

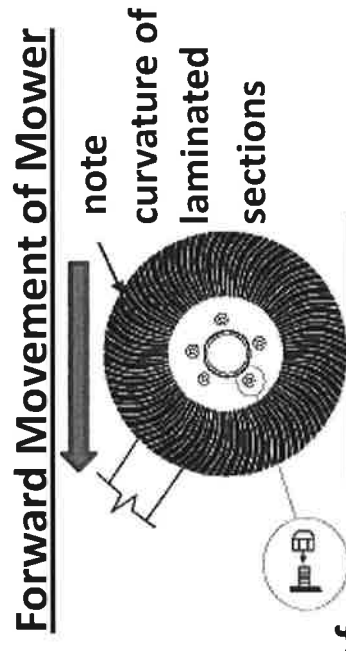
Leon's Manufacturing Co. Inc.

Tire Mounting Guide

To ensure the maximum life of the tire it is essential to follow the mounting instructions:

- 1) Always check the condition of all tires.
- 2) Verify the flat side of the lug nut is against the wheel rim.
- 3) Lug nuts should be torque 70 - 75 lb.- ft (101Nm)
- 4) To prevent tire and or machine damage,

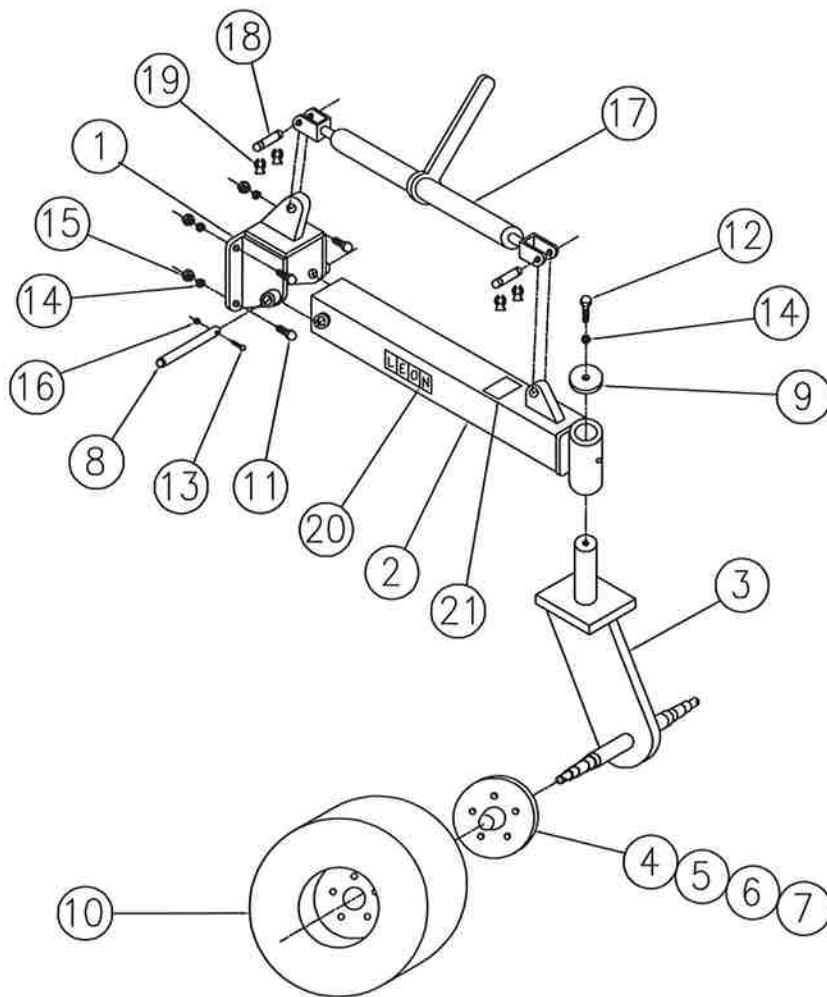
DO NOT EXCEED 20 mph transportation speed



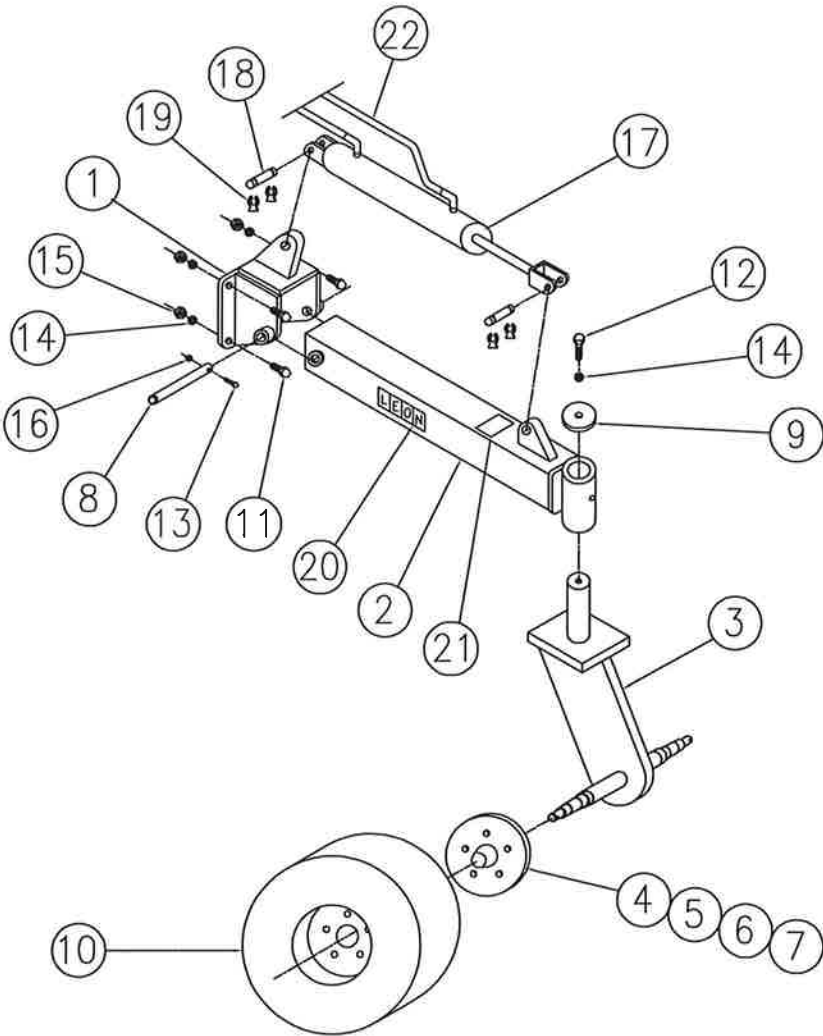
place flat side of
lug nut against wheel

Laminated tire

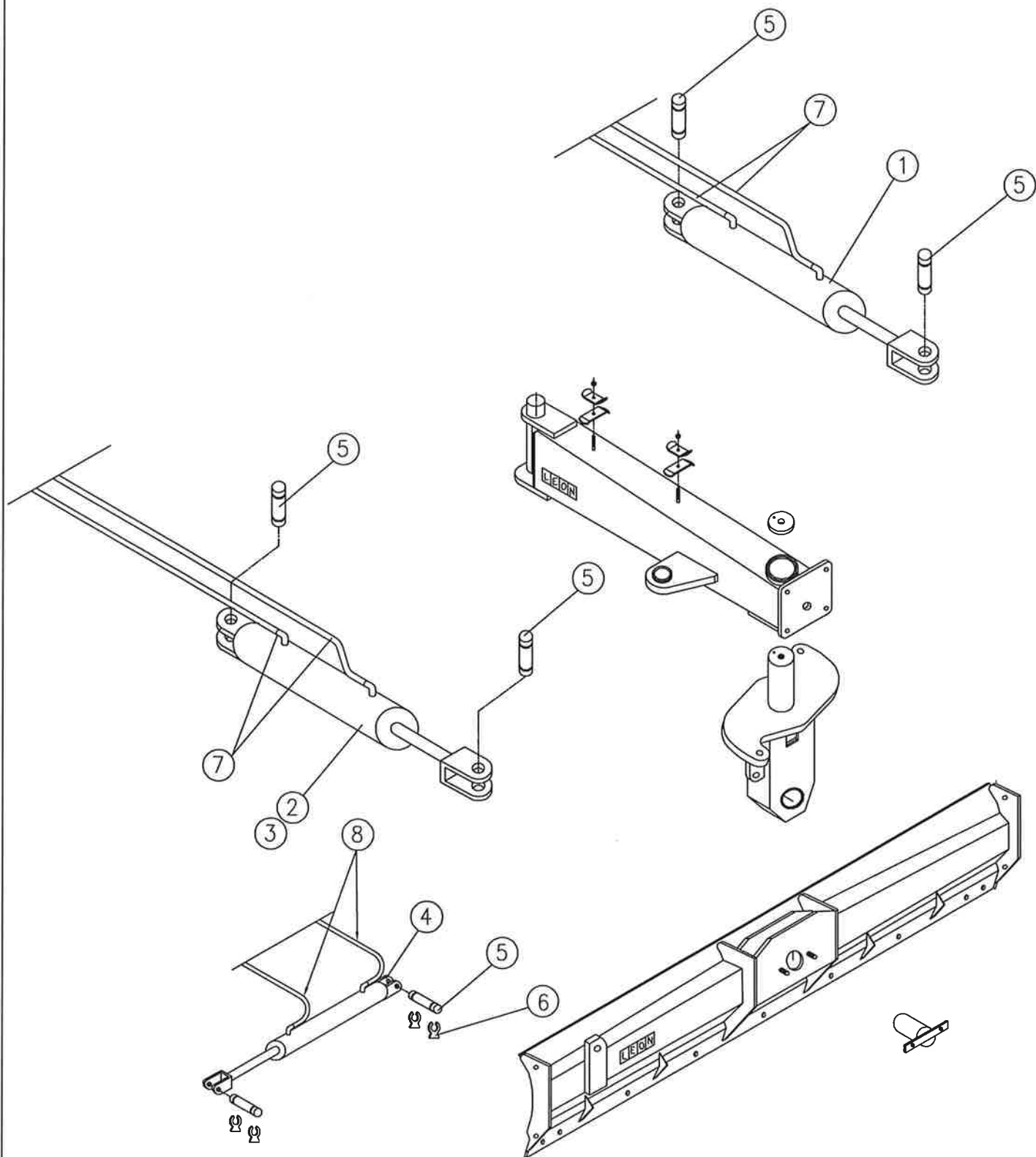
LEON MODEL M85/M125/M165 REAR BLADE
DUAL GAUGE WHEEL ASSEMBLY – MANUAL
1397058 – ALL MODELS



LEON MODEL M85/M125/M165 REAR BLADE
DUAL GAUGE WHEEL ASSEMBLY – HYDRAULIC
1397059 – ALL MODELS



LEON MODEL M85/M125/M165 REAR BLADE
CYLINDER ASSEMBLY
ALL MODELS



CYLINDER PARTS LIST
 MODEL M85/M125/M165 REAR BLADE
 ALL MODELS

ITEM NUMBER	PART NUMBER	PART DESCRIPTION	QTY.
ANGLE	1397051	HYDRAULIC ANGLE CYLINDER KIT -M85/M125/M165	1
1	1397052	HYDRAULIC CYLINDER - RT30-16-150	1
2	-----	-----	-
3	-----	-----	-
4	-----	-----	-
5	1225654	GROOVE PIN - 1 X 2 7/8	2
6	1105698	LUNCH PIN	4
7	1123121	HYD. HOSE - $\frac{3}{8}$ X 96 - 1/2-14NPTM	2
8	-----	-----	-
OFFSET A	1397055	HYDRAULIC OFFSET CYLINDER KIT -M85/M125	1
1	-----	-----	-
2	1397052	HYDRAULIC CYLINDER - RT30-16-150	1
3	-----	-----	-
4	-----	-----	-
5	1225654	GROOVE PIN - 1 X 2 7/8	2
6	1105698	LUNCH PIN	4
7	1123121	HYD. HOSE - $\frac{3}{8}$ X 96 - 1/2-14NPTM	4
8	-----	-----	-
OFFSET B	1397063	HYDRAULIC OFFSET CYLINDER KIT -M165	1
1	-----	-----	-
2	-----	-----	-
3	1397062	HYDRAULIC CYLINDER - RT35-16-150	1
4	-----	-----	-
5	1225654	GROOVE PIN - 1 X 2 7/8	2
6	1105698	LUNCH PIN	4
7	1123121	HYD. HOSE - $\frac{3}{8}$ X 96 - 1/2-14NPTM	4
8	-----	-----	-
TILT	1397053	HYDRAULIC TILT CYLINDER KIT -M85/M125/M165	1
1	-----	-----	-
2	-----	-----	-
3			
4	1397054	HYDRAULIC CYLINDER - RT-30L-4.5	
5	1225654	GROOVE PIN - 1 X 2 7/8	2
6	1105698	LUNCH PIN	4
7	-----	-----	-
8	1123565	HYD. HOSE - $\frac{3}{8}$ X 144 - 1/2-14NPTM	2

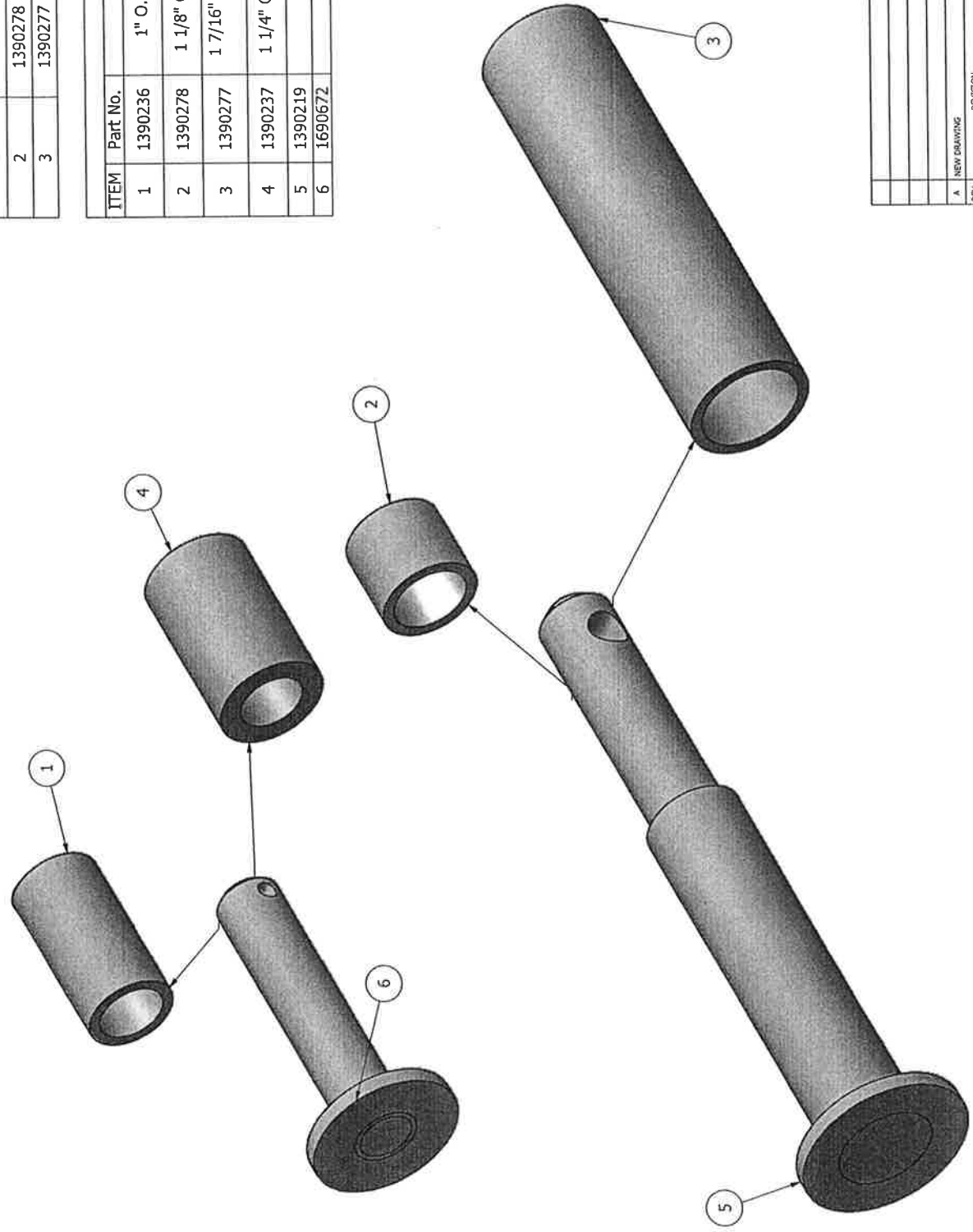
NOTE : OPTIONAL ORB ADAPTERS FOR ORB PORT CYLINDER (2 per CYLINDER).

Items per Model

Item	Part No.	M85	M125	M165
1	1390236	1	1	1
2	1390278	2	2	2
3	1390277	0	2	2

Parts List

ITEM	Part No.	Description	Qty.
1	1390236	1" O.D., 3/4" OS I.D., 2" LENGTH, CAT II	1
2	1390278	1 1/8" O.D., 7/8" OS I.D., 1" LENGTH, CAT II	2
3	1390277	1 7/16" OD, 1 1/8" OS I.D., 5 9/16" LENGTH, CAT III	2
4	1390237	1 1/4" O.D., 3/4" OS I.D., 2" LENGTH, CAT III	1
5	1390219	WRIST PIN, CAT. I	2
6	1690672	LIFT PIN, CAT. I	1



CATEGORIES	
CAT.	PARTS
I	5, 6
II	5+2, 6+1
III	5+3, 6+4

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TITLE
CATEGORY ASSEMBLY DRAWING

REV.	NEW DRAWING	REVISION	DATE	DRAWN	SCALE	SHEET	DRAWING NUMBER
A						1	

* *WARRANTY VOID IF USED TRACTORS IN EXCESS OF 165*

HP.



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