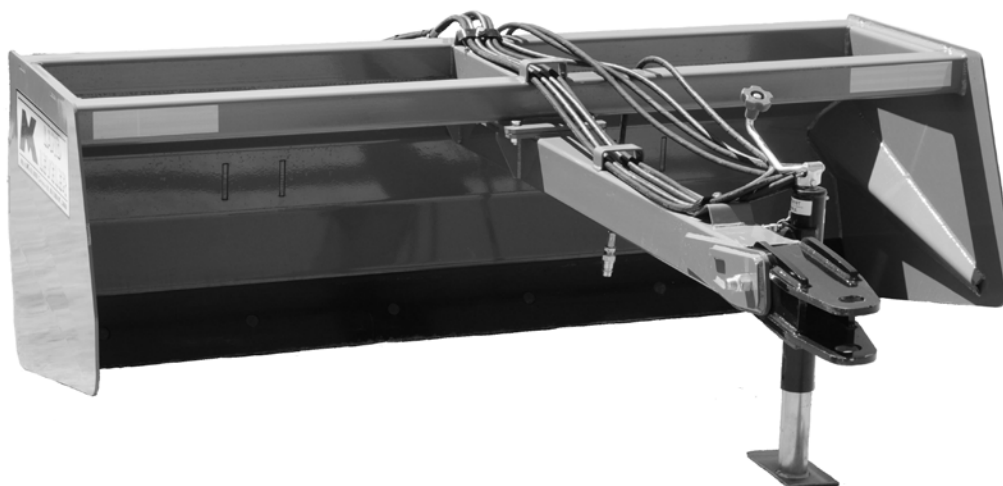


LAND LEVELER

**Operators and parts Manual
Standard & Tilt Models 8-10-12 ft**



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Land Leveler

Please read and understand this manual before using or allowing others to use this equipment.

Warranty and Limitation of Liability

All equipment is sold subject to mutual agreement that is warranted by M M Martin Enterprise Inc.(hereafter called the company) to before of any defects of material and workmanship. But the company shall not be liable for special, indirect or consequential damage of any kind under this contract or otherwise. The company's liability shall be limited exclusively to replacing or repairing without charge at its factory or elsewhere, at its discretion, any material, or workmanship defects which become apparent within one year from the date of purchase. This will allow you to do one complete season of using the equipment, regardless of what time of the year you purchased the equipment.

The company will have no liability for damages of any kind. The buyer by the acceptance of the equipment will assume all liability for any damages which may be the result from the use or misuse by the employees or others.

Warranty coverage is null and void if any unauthorized repairs of alterations are performed to this equipment.

This Warranty does not cover **Rental/Commercial or Industrial** use of this equipment. This equipment is rated as agricultural.

Warranty is also null and void unless this warranty Registration is completely filled out and is on file at M K Martin Enterprise Inc

Purchase Date Y20__ M__
Model # _____
Serial # _____

For your Record

M K Martin Enterprise Inc
3950 Steffler Rd Elmira On Ca
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Pleas cut at dotted line and return this registration form to the company via Mail, Fax or e-mail



M K Martin Enterprise Inc
3950 Steffler Rd Elmira On Ca
N3B 2Z3

Land Leveler

Name of Purchaser

Purchase Date Y20__ M__

Name _____

Model # _____

Address _____

Serial # _____

Postal Code/Zip Code _____

Introduction

Principals of operation

The Land Leveler is made of a hitch, a Mouldboard with a replaceable cutting edge and a movable Wheel assembly. By pulling the implement over a high area and lowering the blade until it starts to shave the ground, (1 1/2 - 2") it then can be dragged to a lower spot and the contents can be left there by raising the blade a little.

This implement is not designed to carry load and carry material from one area to another.

Before using for the first time

- ✓ Read Operator's Manual
- ✓ Check all bolts for proper torque
- ✓ Grease Pivot Pins

After first 2 hours

- ✓ Retorque all bolts including wheel bolts
- ✓ Check for hydraulic leaks

After 10 hours

- ✓ Repeat 2 hour step

Using after break-in period

- ✓ Lubricate pivot pins
- ✓ Use a tractor with enough power and weight to handle the Leveler.
- ✓ Ensure the drawbar hitch pin has a mechanical retainer.
- ✓ Ensure the safety chain is installed.
- ✓ Check condition of Cutting Edge
- ✓ Check Hydraulic Oil level in the tractor. Add if required.
- ✓ Use a clean cloth to clean couplers before attaching to the tractor
- ✓ Check tire pressure. 32 psi, (220 kPa)

Tractor

- ✓ Fix drawbar in the center position to prevent it from swinging.
- ✓ After the implement is attached, raise the jack and rotate it 90° to its stowed position.

Storage

- ✓ After the seasons use, inspect the machine for wear and damage. This is a good time to repair or replace worn and damaged parts. It is then ready at the beginning of the next season.
- ✓ Wash the machine to remove all dirt and residue.
- ✓ This is also a good time to inspect the hydraulic hoses for cuts and abrasions.
- ✓ Touch-up all paint nicks and scratches to prevent rusting
- ✓ Oil exposed hydraulic cylinder shafts to prevent rusting.
- ✓ Repack wheel bearings
- ✓ Store in an area that is dry, level and safe from activity, including children.

Safety

Take Note! This safety symbol is found throughout this manual to call your attention to instructions involving yourself and others working around the machine.

- **Failure to follow these instructions can result in injury or death!**



This symbol means

**--Attention!
--Become Alert!
--Your Safety is involved!**

Signal words are used in this book.

Caution: Indicates a potentially hazardous situation that may result injury.

Warning: Indicates a potentially hazardous situation that could result in serious injury or death.

Danger: Indicates a hazardous situation that needs to be avoided. It is you the operator that needs to be aware of these dangers.

If you have any questions not answered in this manual, please contact your dealer or M K Martin Enterprise Inc.

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Safety – It's in your interest.



Safety Guidelines.

Safety of the operator is one of our main concerns, however it is up to the operator to practice caution.

To avoid personal injury, study the following precautions and insist that those working with you to follow them.

Replace any decals that may be missing or not readable. Location of decals are indicated elsewhere in this manual.

Do not use this machine while under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment should not be operated by children: or those unfamiliar with the operation. **Do not allow persons to operate this machine until they have read this manual and/or were instructed by a qualified person.**

Do not paint over, remove or deface any safety signs or warning decals on the Meteor® Blower. **Observe all safety signs and practice the instructions on them.**



Be Safe! Stay Safe!



Remember you the operator are responsible for the safe operation of this equipment. Before operating this equipment take lessons from an experienced operator, read through this manual and understand each step of operation prior to doing any work with the equipment.


Understand you are the primary safety device.

When operating this equipment keep spectators at a distance to allow you to concentrate on the job at hand.

Anybody who has not read and understood these operating and safety instructions is not qualified to operate this equipment.

Do not modify or alter this equipment in any way.

Any unauthorized modifications may impair the safety and function of this equipment.

- Read and understand the Operator's Manual
- Wear appropriate protective gear, This list may include but is not limited to: a hard hat, safety shoes, safety glasses or goggles, wet weather gear, hearing protection, respirator or filter mask.
- Do not allow riders
- Lower blade to the ground, place all controls in neutral, set parking brake, stop the engine and remove the key before servicing, adjusting or repairing this equipment.
- Review safety related items with all operators annually.
-  Hydraulic lines may have high pressure fluid in the lines, even when the lines are disconnected. **Remember** a small leak at high pressure may be invisible yet can penetrate the skin. If this happens get medical attention immediately, serious infection or toxic reaction can develop when hydraulic fluid pierces the skin. Use caution when working with hydraulic components. Ensure there are no leaks, all fittings are tight and all components are in good repair.
- Use a piece of wood or cardboard as a backstop when searching for leaks, NEVER your hand or fingers.
- Always relieve pressure before disconnecting or working on hydraulic system.
- Before transporting on a highway clean reflectors and SMV signs
- Obey all local highway laws when transporting this equipment on roads.
- Always travel at safe speeds
- Maintain and keep tires in good condition. Have a qualified serviceman perform the required maintenance.
- Ensure that all decals are legible. See your dealer parts department for replacements.



Decal Location



Serial Number



Amber Reflector ea side

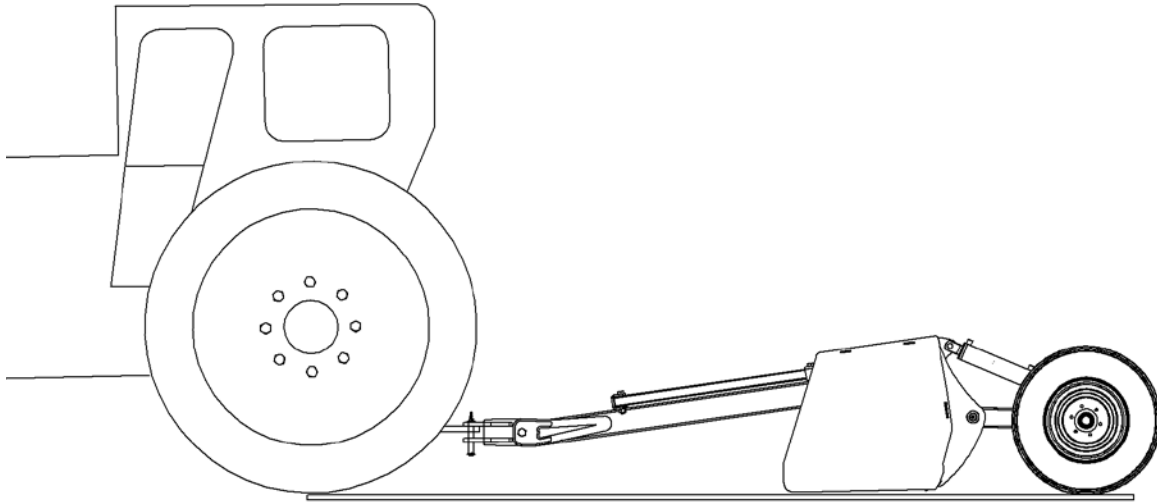


Red Reflector ea side



Operating the Leveler

The leveler will work better and easier if the soil is plowed and disked before leveling. The Land Leveler blade is situated between the tractor wheels and the leveler wheels and will shave or plane off the high areas and fill in low areas. For leveling purposes' adjust the rear wheels with the hydraulic cylinder so that the rear tractor wheels, the cutting edge and the rear leveler wheels form a straight line *as shown*. If the rear wheels are lower the leveler will progressively add soil and if the wheels are higher the leveler will progressively cut deeper.



It may be necessary to repeat the operation in cases of severe irregularity. After your field is leveled you may find that the filled in areas have settled and need more leveling the following year, this is normal.

Sign-Off Form

M K Martin Enterprise Inc follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the Cutter must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

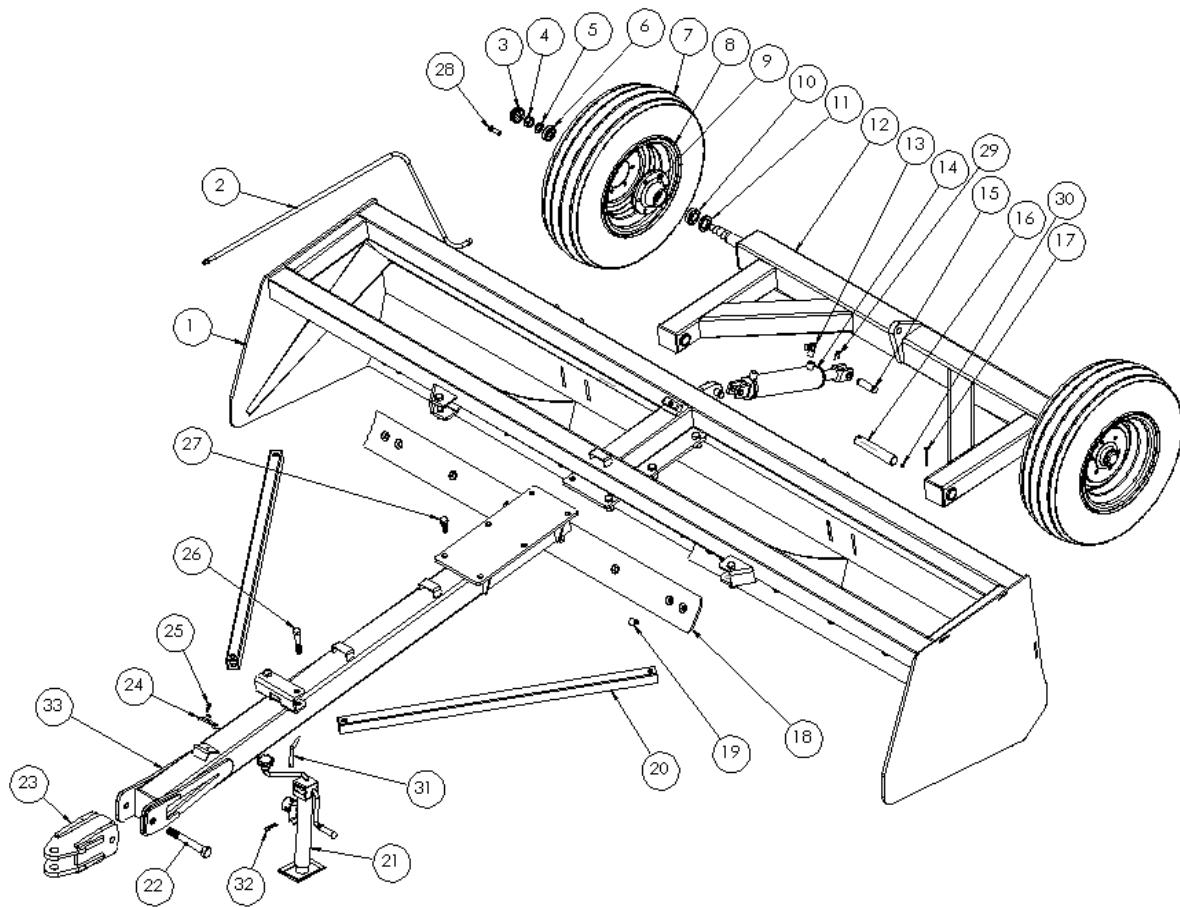
Make these periodic reviews of SAFETY and OPERATION a standard practice for all your equipment. We feel that the untrained operator is unqualified to operate this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understood the information in the Operator's Manual and have been instructed in the operation of the equipment.

Sign Off Form

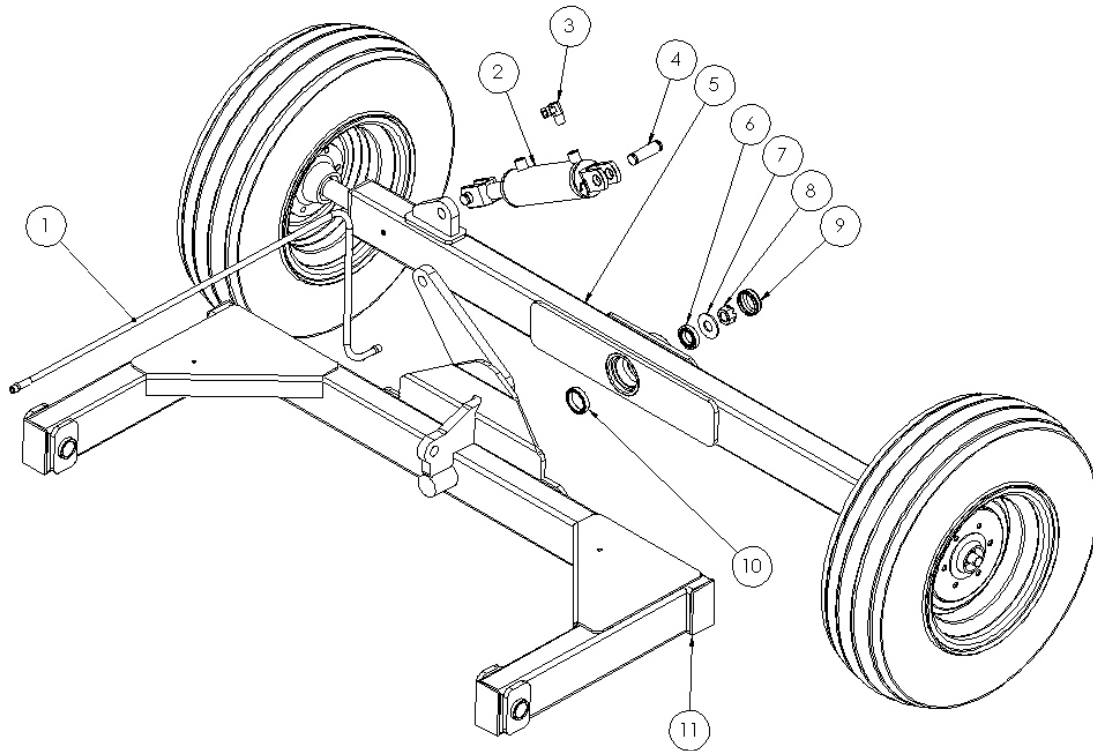
Date	Employee's Name	Employer's Name

Land Leveler Parts



Item #	Description	Part #	Qty
1	8 ft Main Mouldboard	10194	1
	10 ft Main Mouldboard	30980	
	12ft Main Mouldboard	10186	1
2	Hydraulic Hose	32502	2
3	Dust Cap	TG-017	2
4	Nut	TG-016	2
5	Washer	TG015	2
6	Outer Bearing	TG-014	2
7	#4000 Hub	TG-013	2
8	Rim 15x8x6	OL	2
9	Tire 9.5x15 8ply	OL	2
10	Inner Bearing	TG012	2
11	Seal	TG-011	2
12	8-10 ft Axle	30983	1
	12 ft Axle	10189	1
13	Hyd Fitting	TLM571	2
14	Lift Cylinder	21914	1
15	Cylinder Pin	OL	2
16	Lift Swivel Pin	30971	2
17	1/4x3 Boltc/w ln	OL	2
18	8ft Cutting Edge	783-100-804	1
	10ft Cutting Edge	783-100-504	2
	12ft Cutting Edge	873-100-604	2
19	8 ft Plowbolt 5/8x1 3/4 c/w n	OL	10
	10 ft Plowbolt 5/8x1 3/4	Ol	14
	12 ft Plowbolt 5/8x1 3/4 c/w n	OL	16
20	Brace	30979	2
21	Jack	21915	1
22	Bolt 1x8 c/w ln	OL	1
23	Hitch	30982	1
24	Hose Clamp	10211	2
25	Bolt 5/16x1 c/w lw	OL	2
26	Bolt 3/4x4 c/w ln	OL	4
27	Bolt 3/4x2 c/w ln	OL	6
28	Wheel Stud 9/16	OL	10
29	Cylinder Pin Clip	OL	2
30	Grease Fitting 1/4-28 straight	OL	2
31	Jack Pin 1/2" Bent Pin	OL	1
32	Hair Pin	OL	1
33	8 ft Main Tongue	10191	1
	10-12 ft Main Tongue	30981	1

Land Leveler Tilt Option



Item #	Description	Part #	Qty
1	Hydraulic Hose	32503	2
2	Hydraulic Cylinder 3x6	21916	1
3	Hydraulic Fitting	TLM575	2
4	Cylinder Pin	OL	2
5	8-10 ft Axle	31790	1
	12 ft Tilt Axle	31792	1
6	Inner Bearing Cup	25520	1
	Inner Bearing Cone	25590	
7	Washer	SAE-1000	1
8	Outer Bearing Cup	25821	1
	Outer Bearing Cone	25877	
9	Dust Cap	D-6000	1
10	Rear Seal	CR20148	11
11	8-10 Ft Tilt Yoke	31789	
	12 ft Tilt Yoke	31791	1

Note: see standard leveler parts for hubs, bearings, rims and tires

Bolt Torque

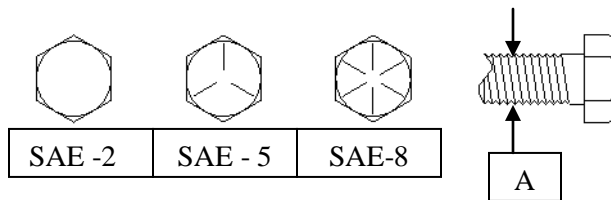
As used on this equipment

Bolt torque table shown below gives torque values for the various bolts used.
 This chart is for non-lubricated threads.
 Replace with the same strength bolt.

Torque Specifications. Torque values are identified by their head markings

Diameter	SAE 2		SAE 5		SAE 8	
"A"	Lb-ft	N.m	Lb-ft	N.m	Lb-ft	N.m
1/4	6	(8)	9	(12)	12	(17)
5/16	10	(13)	19	(25)	27	(36)
3/8	20	(27)	33	(45)	45	(63)
7/16	30	(41)	53	(72)	75	(100)
1/2	45	(61)	80	(110)	115	(155)
5/8	95	(128)	160	(215)	220	(305)
3/4	165	(225)	290	(390)	400	(540)
1	225	(345)	630	(850)	970	(1320)

Allen head cap screws are similar to SAE 8 quality.



These torques are for a reference only. Not all these sizes and grades are necessarily used in this machine. Bolts that are used as a pivot or hinge have to be used with a locknut, therefore only tighten enough to secure the bolt and still allowing the part to rotate freely.