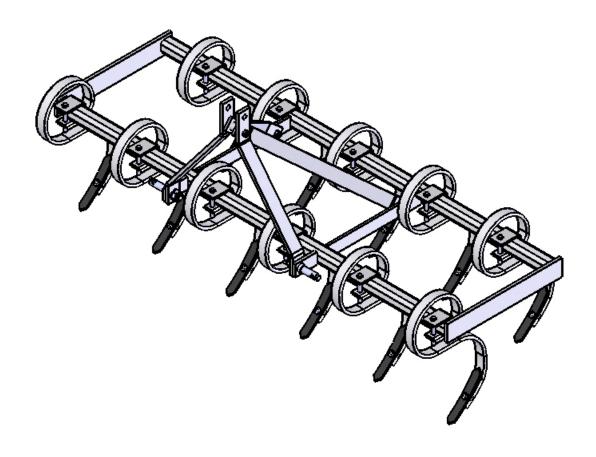


Cultivator 60" 72" 84"





Manufactured by

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

Table of Content

Warranty
Safety
Decal Location
Assembly
Operation
Maintenance
Parts

Bolt torque

Warranty and Limitation Of Liability

All equipment is sold subject to mutual agreement that it is warranted by M K Martin Enterprise Inc. (hereafter called the company) to be free of any defects of material and workmanship. But the company shall not be liable for special, indirect or consequential, damages of any kind under this contract or otherwise. The company's liability shall be limited exclusively to replacing or repairing without charge, at it's factory or elsewhere, at it's discretion, any material, or workmanship defects, which becomes apparent within one year from the date of purchase. 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 result from the use or misuse by the employees or others. The buyer shall maintain and service the equipment as recommended in this Operators manual.

Warranty is voided if changes or alterations have been made without the written consent of the company.

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

For **Rental/Commercial** use, Warranty is for defects in material and workmanship, <u>90 days</u> from date of purchase.

Warranty coverage is null and void unless the Warranty Registration form has been completely filled in and is on file at

M K Martin Enterprise Inc 3950 Steffler Road Elmira Ont. Ca. N3B 2Z3

Purchase Date Y20__ M___

For your record

Model #		
Serial # Please cut at dotted line and return (519-664-3695) or e-mail the info	n this registration form to the compartment to: ca">sales@mkmartin>ca	ny via Mail, Fax
M K Martin Inc 3950 Steffler Road Elmira Ont. Ca. N3B 2Z3	Cultivator	
1130 223	Buyers	
Purchase Date Y20_ M Model #	Name Address	
Serial #		
	Postal Code	

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. 3950 Steffler Rd Elmira On Ca N3B 2Z3 Tel; 1-855-664-2752 (519)-664-2752 Fax; (519)-664 3695 e-mail; sales@mkmartin.ca



Safety – It's in your interest.

A

Safety Guidelines.

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

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

The MK Cultivator is designed for tilling soil and should not be used to transport material or equipment.

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 of the MK Cultivator. **Do not allow persons to operate this machine until** they have read this manual and/or were instructed by a qualified person.

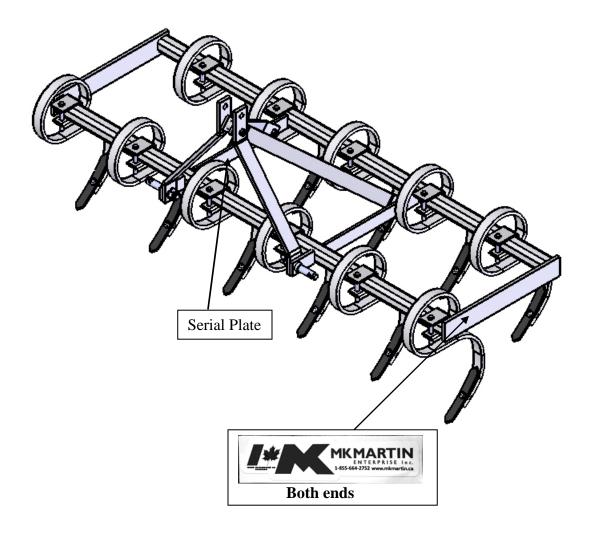
Do not paint over, remove or deface any safety signs or warning decals on the Meteor® Blower. **Observe all safety signs and practice the instructions on them.**

Do not allow anybody to ride on this equipment.

Please be careful with the extra weight on the back of the tractor. It may be necessary to add weights on the front of the tractor to keep it balanced properly.

Stop engine and remove key when attaching and un-attaching equipment from tractor.

MK Cultivator Decal Location



MK Cultivator Assembly Instructions

Parts and Components

- 1. Main Frame
- 2. Cultivator Shanks
- 3. Cultivator Teeth
- 4. Cultivator tooth bolt c/w nut
- 5. Cultivator Shank Clamp
- 6. Cultivator Shank Clamp Bolt c/w n
- 7. 2 pc Front "A" Frame
- 8. 2 pc "A" Frame Brace
- 9. 2 pc Cat #1 Hitch Pin
- 10. 1 pc Spacer
- 11. 1 pc "A" Frame Bolt
- 12. 2 pc "A" Frame Brace Bolt

Upon Receiving the MK Cultivator

Shipped in a packaged state

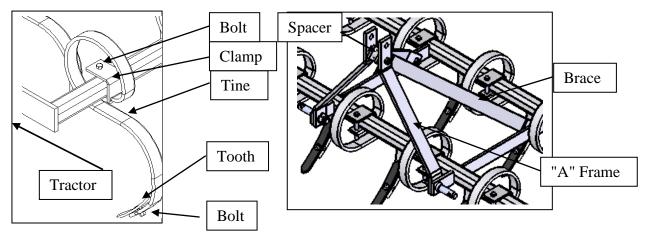
The number of Shanks or Tines varies depending on the size of the cultivator.

The 60 in has 9 Tines, - the 72 in has 11 Tines, - the 84 in has 13 Tines.

Unpack the package and inspect the produce for damaged and/or items missing.

Set Frame on sturdy Blocks approx 16"-18" high

Locate tine clamp according to dimensions on following page and place Clamp on frame, and insert tine as shown.



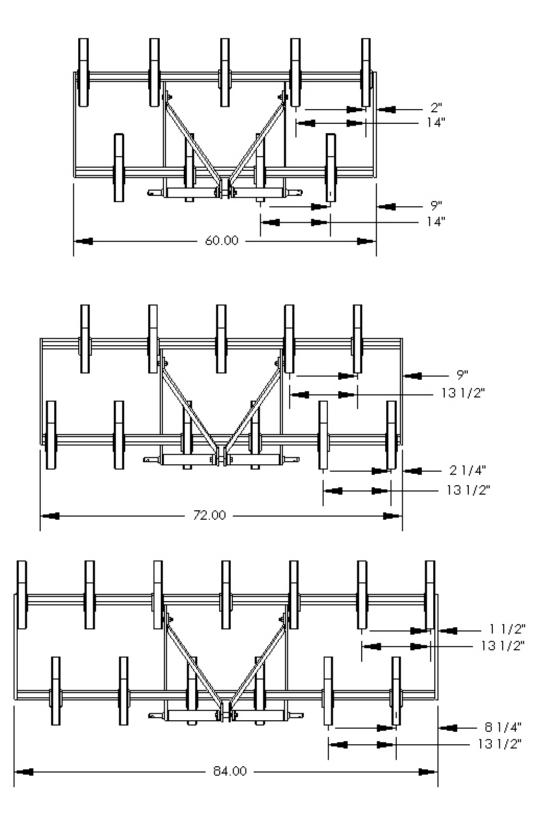
Insert Hitch Pin with "A" Frame, lightly secure with nut and lockwasher.

Assemble brace onto main frame, lightly secure with bolt, lockwasher and nut.

Assemble "A" Frame and Brace with spacer between brace plates, lightly secure with bolt, lockwasher and nut.

Finish by tightening all nuts and bolts to recommended torque.

MK Cultivator Tooth Spacing



Operating the MK Cultivator

Lower the cultivator to the ground and slowly start driving forward while moving the depth control on the tractor until the teeth are 3-4" in the soil, or whatever your preference is.

Set the tractor hydraulic stop to this point. Check the orientation for the frame to see if it is level to the soil when at the proper working depth, adjust the top link accordingly.

With the proper depth and speed the tines will move independently, ie. Vibrate back and forth and side to side producing a viable seed bed.

Replacing Teeth on cultivator

When the teeth become worn or chipped they can be rotated or turned upside down to use the other end.

Place the cultivator on solid blocks and remove the Plowbolt holding the tooth, turn the tooth around and refasten, if the bolt head is worn replace.

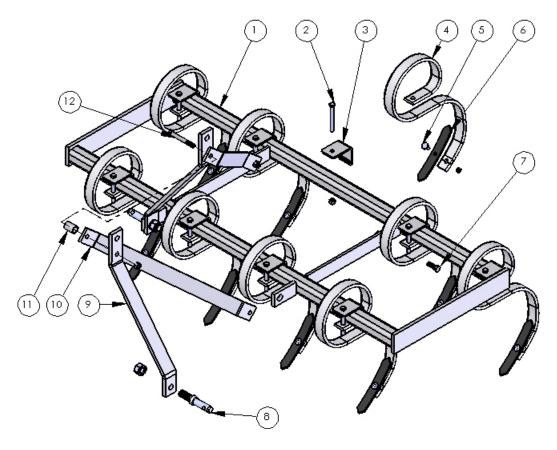
Maintenance

This is very low maintenance equipment.

After the first 1-2 hours of use retorque all bolts

Check again at 5-6 hr intervals, when no more loose bolts are noticed then they will probably stay tight.

MK Cultivator 60" 72" 84"



Item#	Description	Part #	Qty 60''	Qty 72''	Qty 84''
1	60" Main Frame	10136	1		
	72" Main Frame	10138		1	
	84" Main Frame	10140			1
2	Bolt 7/16x3 1/2 c/w ln	OL	9	11	13
3	Tine Clamp	783-100-108	9	11	13
4	" S "Tine	783-100-107	9	11	13
5	Plow Bolt	200011	9	11	13
6	Cultivator Point	783-100-109	9	11	13
7	Bolt 1/2x1 1/2 c/w ln	OL	2	2	2
8	Cat#1 Lower 3ph Pin	783-10-110	2	2	2
9	"A" Frame Bar	10005	2	2	2
10	Brace	10006	2	2	2
11	Spacer	10007	1	1	1
12	Bolt 1/2x4 c/w ln	OL	1	1	1

Bolt Torque

As used on this equipment

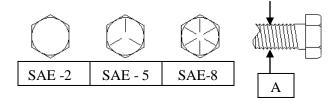
Bolt torque table shown below gives torque values for the various bolts used. This chart is for non-lubricated threads.

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.