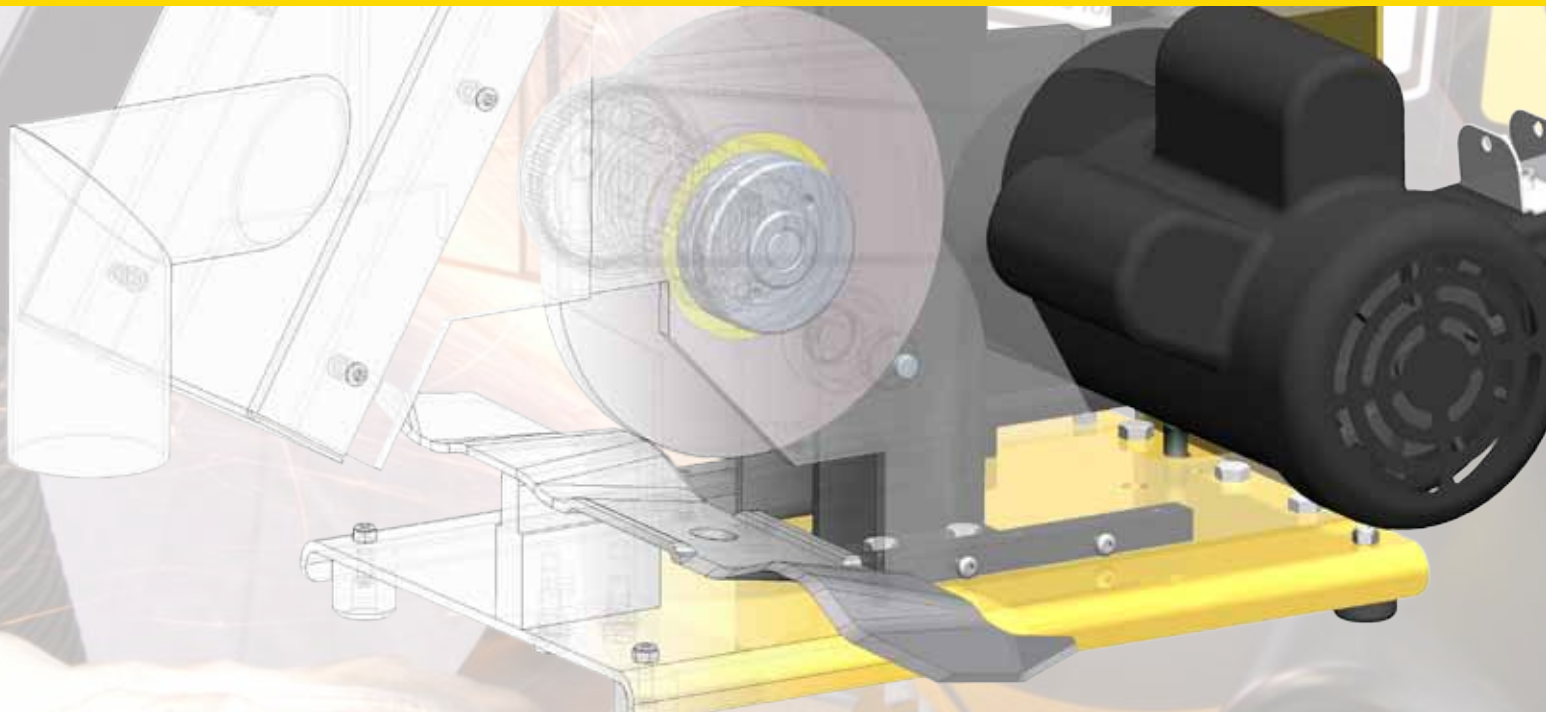


PRODUCT CATALOG 2010

PRECISION - TECHNOLOGY - INNOVATION



Magna-Matic Corporation
W4599 County Road IW
Waldo WI 53093 USA
Phone: (920) 564-2366
FAX: (920) 564-2368
Toll Free USA & Canada **1-800-328-1110**

WELCOME

<http://www.magna-matic.com>
sales@magna-matic.com

The Magna-Matic Mission

Magna-Matic Corporation prides itself in producing premium-quality, high-performance service tools for the outdoor power equipment (OPE) industry. Magna-Matic is committed to customer satisfaction through the continued innovation of new ideas, improvement on current products, and comprehensive customer education.

To Our Valued Customers and Potential Customers

Thank you for your interest in Magna-Matic. Within this eighth edition, full-line product catalog you will find information, specifications, and pricing for our high-performance service tools.

In our 52nd year we would like to thank you, the lawn care professional, landscaper, servicing dealer, and grounds superintendents for your years of continued support and business. You have helped us grow as a third-generation family-owned company and as a leading manufacturer of lawn mower blade service tools in the United States of America.

Since 1958, with the original invention of the MAG-1000 Lawn Mower Blade Balancing Instrument, Magna-Matic continues to innovate new products while continually improving current products. For instance, we soon will be releasing the 2nd generation of the MAG-12000 Cleaner, which will be dramatically less expensive, and more compact. Our sharpener line has been redeveloped with an easier system for changing grinding wheels, more motor power, improved grit guards, and a selection of specialty work tables. In a time when most companies are reducing quality in the name of profit margin, Magna-Matic continues to improve on product construction and design.

For further information, photos, and videos, please visit our web site at www.magna-matic.com. In early 2009 we launched a completely new secure online store www.magna-matic-direct.com for ease in purchasing equipment and replacement parts.

Thank you for the privilege of serving your needs.



GUARANTEE

We feel the best test for a piece of equipment is in the hands of the user.

The **MAGNA-MATIC GUARANTEE** allows **you** to personally test our equipment to see if it meets **your standards**. The MAG-1000, MAG-8000, MAG-9000, and MAG-12000 series products come with a (30 days from invoice date) 100% satisfaction guarantee. In the event you are not satisfied with any of the above products we will provide you with a return authorization and a UPS call tag for pick-up. You will be provided with 100% credit minus the shipping costs (to & from) your facility and one grinding wheel. The returned product must be in good order or further charges will apply.

MAGNA-MATIC START-UP SERVICE & LIFETIME TOLL FREE PHONE SUPPORT

After receiving one of our products and you are ready to operate CALL US at 800-328-1110 and we will gladly instruct you of the proper operating procedure. We want you to be the most profitable with all of our high-performance tools. With all of our products you receive, **LIFETIME PHONE SUPPORT**. Call our toll free number to speak to a live person and get personalized help.

TERMS & SHIPPING

We accept all major credit cards via phone, fax, or our secure online store. All prices are subject to change without notice. Shipping is via UPS GROUND unless otherwise requested.



Call 800-328-1110 for orders or questions

MAG-1000 ORIGINAL

STATIC ROTATIONAL BLADE BALANCING INSTRUMENT

FAST EASY USE <> PRECISE <> CONVENIENT <> LONG LASTING CONSTRUCTION <> MADE IN THE USA



Since 1958 Magna-Matic Corporation has been the original inventor and patent holder of the lawn mower blade balancer, and continues to be the leader in precision engineered tools for lawn mower blade service.

How does it work?

1. Locate blade hole on the cone
2. Slide the magnetic chuck forward to contact the blade
3. Rotate the blade to the horizontal position
4. Let go, and let it freely rotate
5. If the blade stays horizontal, it is in horizontal balance
6. If one end of the blade rotates to 6 o'clock, that end requires weight to be removed

MANUFACTURED BY THE ORIGINATOR <> UNMATCHED ACCURACY 21 gmm <> INDUSTRY STANDARD

MAG-1000 Features

- CNC precision crafted components
- Steel-encased, powerful, polarized permanent magnet to hold large blades safely
- Free rotating on dual-instrument bearings
- Adjustable gauge rod to check if blade is bent
- Cast aluminum wall-mounting base bracket
- High-gloss powder coated finish
- Permanently lubricated, internal helical grease groove for longevity
- Blade hole range of 5/16" to 1-1/2" diameter
- Designed to balance lawn mower blades, circular saw blades, flywheels, impellers, wheels, pulleys, or any rotational part made from ferrous metal with a center mounting hole
- Hard chrome plated cone for long lasting durability under commercial load.
- Ability to be used with the MAG-10300 Service Center Stand or MAG-103 Arm Stand
- 1-year warranty

Vibration caused by an unbalanced mower blade will:

- Damage crank shaft or bearing blocks/spindles
- Loosen other components of the entire mower
- Cause the mower to become a safety hazard
- Decrease forward mowing speed
- Reduce mower performance
- Decrease fuel efficiency
- Cause discomfort to the operator



For more info, or to order:

magna-matic.com -or- 800-328-1110

PRICE: \$198.00

F.O.B. WALDO WI USA

Balance by Definition: The blade is in static balance when the center of mass and the center of rotation are at the same location or have identical coordinates e.g. (x=0,y=0).

MAG-1000 vs Nail-in-the-Wall



Using a nail-in-the-wall method to try and balance a lawn mower blade is always a waste of time because the balance reading is not consistent.

The nail-in-the-wall measure of balance is so inaccurate that it simply has no value in reducing blade vibration.

Consistent accurate balance measure can only be obtained at the "center-of-rotation" i.e. in the center of the lawn mower blade's mounting hole.



MAG-1000 vs Table-Top-Cone



Using the plastic table-top-stepped-cone is an attempt to improve the balance reading consistency over the nail-in-the-wall method.

The table-top-stepped-cone is also inaccurate because the steps never locate the center of the hole.

Consistent accurate balance measure can only be obtained at the "center-of-rotation" i.e. in the center of the lawn mower blade's mounting hole.



NOT IN THE CENTER

Why Choose the MAG-1000?

- Mounts permanently on wall or MAG-103 stand
- Permanently assembled no loose parts, no set-up, always ready to use
- Cone centers the blade for accurate balance readings
- Permanent Magnetic Chuck slides forward to hold blade concentric on cone. Ultra-strong magnet (150 lbs of breakaway force)
- Super accurate instrument (21 gmm balance accuracy)
- Precision made tool, hand-crafted in the USA
- Adjustable Gauge Rod checks blade straightness i.e. tip tracking

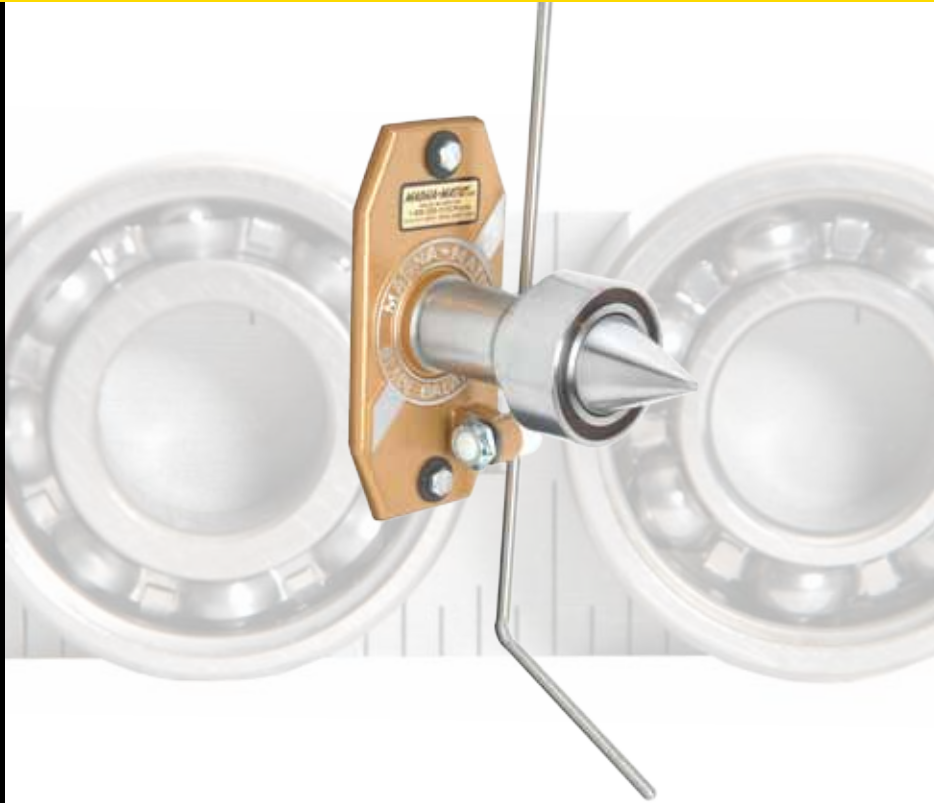
MAG-1000G & MAG-1000GC

STATIC ROTATIONAL BLADE BALANCING INSTRUMENT

Originally released in 2001, the gold edition balancers provide an even more accurate and precise balancing instrument for the demanding customer or application.

MAG-1000G = "G" is signified by a metallic gold powder coated base bracket and ultra-precise instrument bearings with eight balls versus the standard seven balls. This reduces the frictional resistance - making the balancer 2x more sensitive than standard.

MAG-1000GC = in addition to the "G" the "C" stands for the carbide shaft that the bearings are mounted on to eliminate any deflection caused by heavier blades/parts being balanced.



For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE G: \$250.00 & PRICE GC: \$290.00

F.O.B. WALDO WI USA

MAG-9000 SERIES

LAWN MOWER BLADE SHARPENER

page 7

Since 1987 the MAG-9000 has quickly become the most trusted lawn mower blade sharpener for lawn care professionals and landscape contractors.

Its compact design, economical price, and outstanding performance make the MAG-9000 the best sharpener in the industry

Quickly sharpen straight (conventional) commercial lawn mower blades and easily maintain the proper angle every time to ensure a perfectly cut lawn.

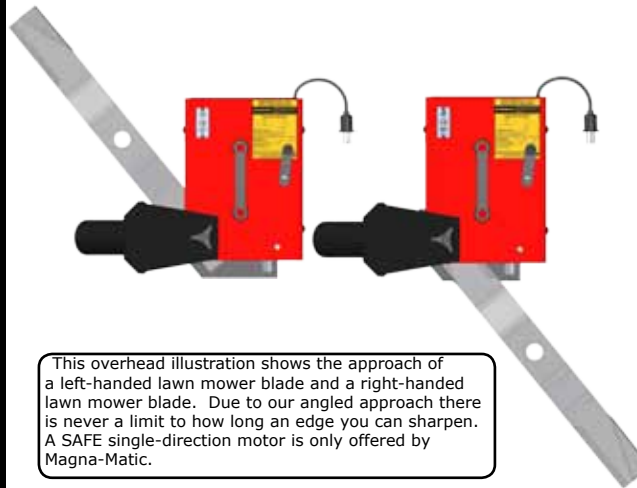


FOR LANDSCAPE CONTRACTORS TO SHARPEN:

Straight (conventional) edge lawn mower blades
UNLIMITED cutting edge length
Right & left-handed edge configuration
Chipper blades small & large

MAG-9000 Features

- Ability to sharpen a blade in 60 seconds or less at a consistent 30 degree angle
- Ability to sharpen straight (conventional) lawn mower blades
- Ability to sharpen left or right-handed edges
- 7 gage steel super heavy-duty construction
- Ability to adjust for grinding wheel wear or choose different angles/bevels on the lawn mower blade
- Ability to use shop vac (6 HP and larger) with a 2-1/2" diameter hose to collect dust and grit
- Lexan window enclosed design provides you with view of the work space
- INDUSTRIAL Baldor motor for long lasting quality and power
- Ability to be used in portable situations with generators on site
- Ability to be bolted to a work bench or just set on a work bench. Bolting down is optional because of the weight of the MAG-9000. Can be used with the MAG-10300 Service Center Stand
- 1-year Warranty



MAG-9000 SPECIFICATIONS

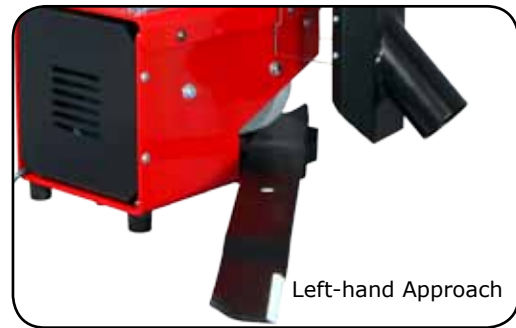
L x W x H	12 x 8 x 8 inches
Weight	48 lbs
Ship Weight 1 box	50 lbs
Motor Specs	Baldor Electric
Horse Power	3/4
RPM	3450
Duty Cycle	Std/Intermittent
Hertz	60
Volts	115
Amps (start)	15
Amps (run)	7.7
Phase	Single
Capacitors	Single
Solid State Switch	No
Thermal Protection	Yes
Motor Type	Industrial - Totally Enclosed
Direction	Single Direction
Fan Cooled	Yes
Transmission	Direct Drive
Grinding Wheel	Norton Abrasives
Wheel Dimensions	7" dia x 1" thick x 1-1/4" dia arbor (9000-23)

For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE: \$630.00
 F.O.B. WALDO WI USA

MAG-9000 SERIES

LAWN MOWER BLADE SHARPENER



Hands have been removed from photo to better show the product.

The MAG-9000 has **additional features** to make it even more useful to landscapers and lawn care pros. All Magna-Matic blade sharpeners are available with 220V 50Hz motors for export.

Why Choose the MAG-9000?

Safety guards included
Vac attachment standard

WEAR GOGGLES
WHILE USING
THIS MACHINE

Carry handle for on-site use

Single crank wheel angle/wear adjustment

Industrial 3/4 HP
3450 RPM Motor

When the grinding wheel
is adjusted down to the
worktable, all blades
will be consistently
ground to 30 degrees

Ultra-strong 7 gauge steel
body and internal components,
all powder coated finish

CAUTION
WEAR GOGGLES
WHILE USING
THIS MACHINE

MAGNA-MATIC

Specialized grinding wheel
will not burn blades or
need any dressing

Clear super strong LEXAN
guards allow vision and safety

Specialized worktable allows smooth
motion, and no limit to blade edge length

Ridgid design does not require
the MAG-9000 to be bolted down



Most often asked questions about the MAG-9000.

What is the difference between the MAG-8000 and MAG-9000?

The MAG-9000 is designed for the use of landscapers and lawn care professionals. It is designed for conventional blades with straight flat cutting edges (lift configuration does not affect the type of blade you can sharpen). It is compact, portable, and lower cost than the MAG-8000 (without lower quality or performance) to serve the needs of lawn care professionals. The MAG-8000 and MAG-9000 are equal in performance, but their applications are different. There are many other technical differences, please review the specifications of the two units.

What comes with the MAG-9000?

In the box you will find: the sharpener - all the safety guards, with vacuum hook-up - two wrenches for removing the wheel - one 1" wide grinding wheel. Everything is included to start sharpening quickly and safely out-of-the-box.

Why do you sharpen the blade on an angle to the grinding wheel with the MAG-9000? Does the wheel come angled?

The angled approach to the wheel allows clearance for both right and left-handed blades with unlimited cutting edge lengths. The wheel will become angled as you sharpen; that is the natural wear pattern. This angled approach will also provide a wider than 1 inch cutting surface area on the wheel.

Must the MAG-9000 be bolted to a table or work bench?

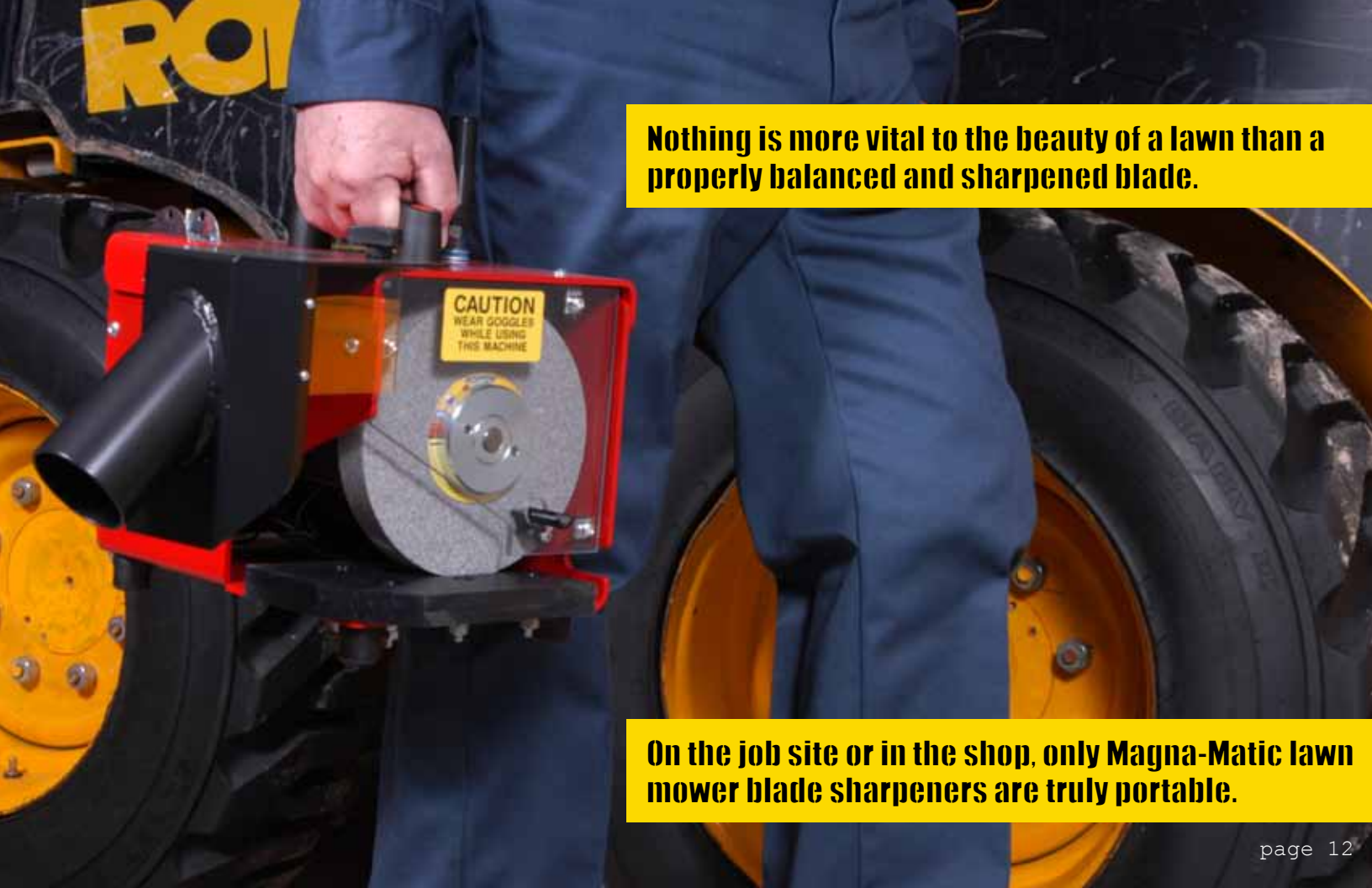
No, the MAG-9000 can be simply placed on a table or work bench and is ready for use. If you use our MAG-10300 Service Center Stand, or other pedestal, then we strongly recommend to bolt it to the pedestal for your safety.

Do I need to buy a diamond tip dressing tool for the MAG-9000?

No. None of the sharpeners manufactured by Magna-Matic require any dressing tools.

Can the MAG-9000 sharpen mulching blades?

No, the MAG-9000 can only do flat cutting edged conventional blades. The MAG-9000 can do the most critical first 2 inches of most mulching blades, but it cannot follow the curved surfaces. (see MAG-8000 for mulching blades)



Nothing is more vital to the beauty of a lawn than a properly balanced and sharpened blade.

On the job site or in the shop, only Magna-Matic lawn mower blade sharpeners are truly portable.

MAG-8000 SERIES

LAWN MOWER BLADE SHARPENER

The MAG-8000 Universal Lawn Mower Blade Sharpener is the most advanced, highest performance, most patented lawn mower blade sharpener in the outdoor power equipment (OPE/Green) industry.

The MAG-8000 is able to sharpen curved (mulching) edge blades by using a 1/2" wide grinding wheel and a curved worktable that follows the curvatures of the blade. This allows the MAG-8000 to keep the same angle along the length of the cutting edge.

The MAG-8000 can quickly switch back to sharpening straight (conventional) edge blades with its flat mobile worktable, which clamps over the mulching blade worktable.



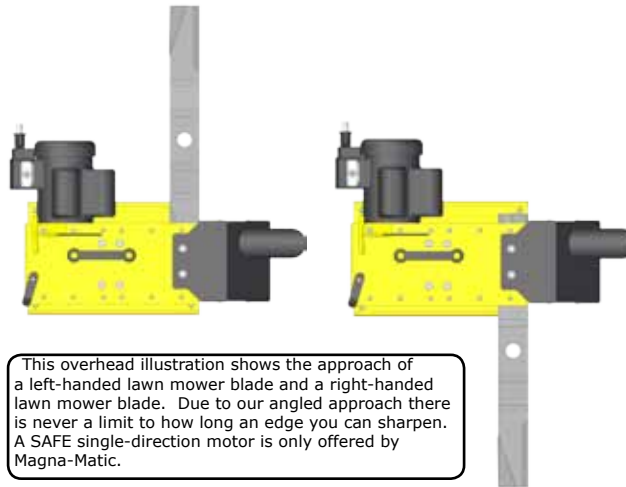
FOR SERVICING DEALERS & LANDSCAPERS TO SHARPEN:

Curved (mulching) edge lawn mower blades & Straight (conventional) edge lawn mower blades
 Right & left-handed edge configuration & UNLIMITED cutting edge length
 Chipper blades small & large

Protected by patent # 6,368,196 – 6,364,750 – 6,572,448

MAG-8000 Features

- Ability to sharpen a blade in 60 seconds or less at a consistent 30 degree angle
- Ability to sharpen straight (conventional) edge lawn mower blades
- Ability to sharpen mulching (curved) edge lawn mower blades
- Ability to sharpen left or right-handed edges
- Ability to adjust for grinding wheel wear, choose different angles/bevels on the lawn mower blade, or maintain consistent angle on sharpened blades
- INDUSTRIAL Baldor Motor for long lasting quality and power
- Ability to use shop vac (6 HP and larger) with a 2-1/2 inch diameter hose to collect dust and grit
- Lexan window enclosed design - provides you with full view of the work space
- Ability to be used in portable situations with generators on site
- Ability to be bolted to a work bench or just set on a work bench. Bolting down is optional because of the weight of the MAG-8000. Can be used with the MAG-10300 Service Center Stand
- Ability to be used with the MAG-3000 and MAG-3001 Chipper Blade Vices
- 1-year warranty



This overhead illustration shows the approach of a left-handed lawn mower blade and a right-handed lawn mower blade. Due to our angled approach there is never a limit to how long an edge you can sharpen. A SAFE single-direction motor is only offered by Magna-Matic.



MAG-8000
right-handed blade
approach shown

MAG-8000 SPECIFICATIONS

L x W x H	24 x 12 x 17 inches
Weight	80 lbs
Ship Weight 1 box	85 lbs
Motor Specs	Baldor Electric
Horse Power	1
RPM	3450
Duty Cycle	Continuous
Hertz	60
Volts	115
Amps (start)	30
Amps (run)	10
Phase	Single
Capacitors	Dual (2)
Solid State Switch	Yes
Motor Type	Industrial - Totally Enclosed
Direction	Single Direction
Fan Cooled	Yes
Transmission	Timing belt/pulley
Grinding Wheels	Norton Abrasives
Wheel Dimensions	7" dia x 1" thick x 1-1/4" dia arbor (9000-35) 7" dia x 1/2" thick x 1-1/4" dia arbor (8000-30)

For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE: \$1,120.00
 F.O.B. WALDO WI USA

MAG-8000 SERIES

LAWN MOWER BLADE SHARPENER



Mulching Worktable



Standard Worktable



Extended Worktable



Mulching Worktable



Standard Worktable



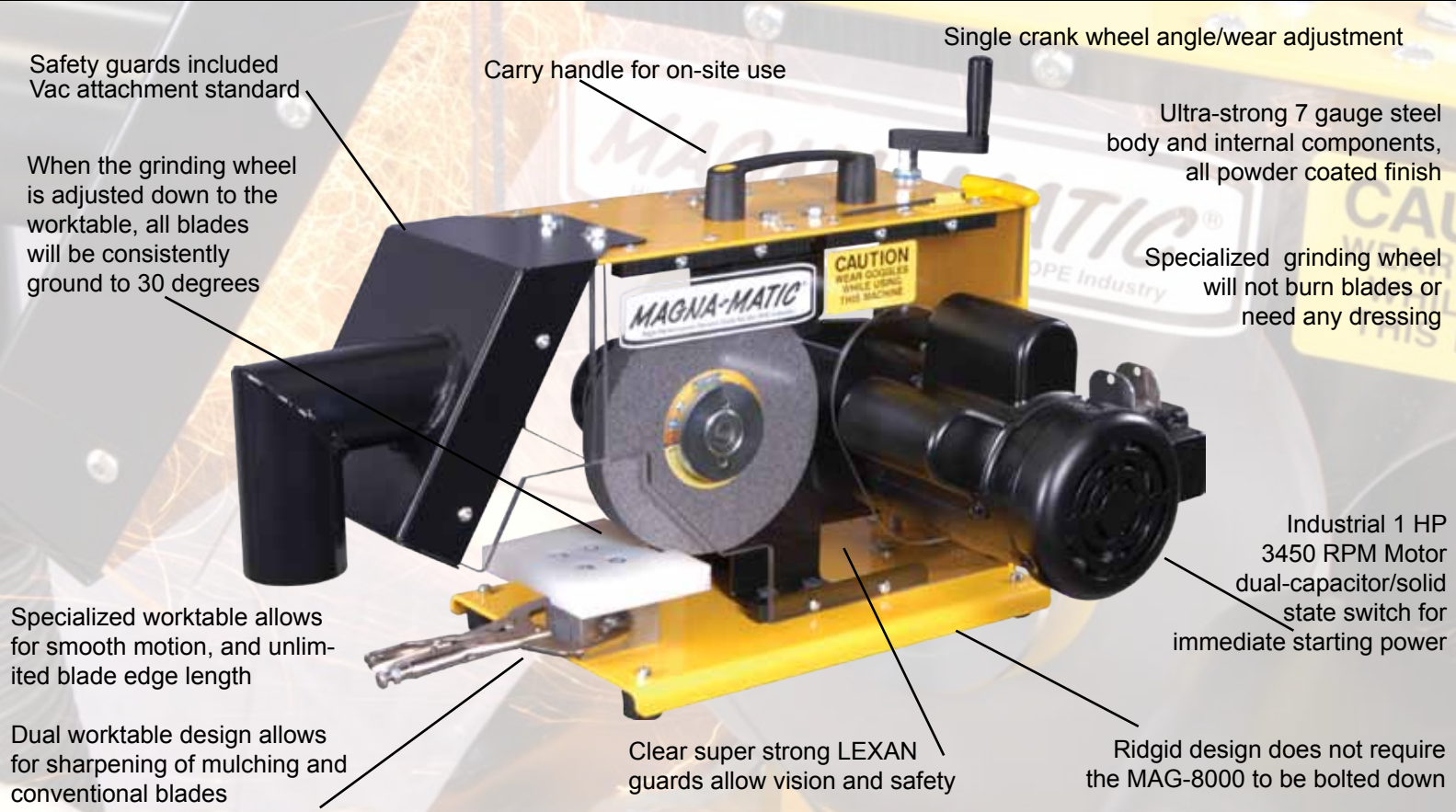
Left-hand Approach

Hands have been removed from photo to better show the product.

The MAG-8000 has the **versatility** to sharpen almost every lawn mower blade type.

All Magna-Matic blade sharpeners are available with 220V 50Hz motors for export.

Why Choose the MAG-8000?



Safety guards included
Vac attachment standard

Carry handle for on-site use

Single crank wheel angle/wear adjustment

Ultra-strong 7 gauge steel
body and internal components,
all powder coated finish

When the grinding wheel
is adjusted down to the
worktable, all blades
will be consistently
ground to 30 degrees

Specialized grinding wheel
will not burn blades or
need any dressing

Industrial 1 HP
3450 RPM Motor
dual-capacitor/solid
state switch for
immediate starting power

Specialized worktable allows
for smooth motion, and unlim-
ited blade edge length

Clear super strong LEXAN
guards allow vision and safety

Ridgid design does not require
the MAG-8000 to be bolted down

Dual worktable design allows
for sharpening of mulching and
conventional blades

What is the difference between the MAG-8000 and MAG-9000?

The MAG-8000 is designed as a universal sharpener (for both conventional and curved-edge mulching blades) making it ideal for servicing dealers, sharpening shops, or large landscapers. It is better suited for larger volumes of left-handed blades and brush cutter blades. The MAG-8000 and MAG-9000 are equal in performance, but their applications are different. There are many other technical differences, please review the specifications of the two units.

What comes with the MAG-8000?

In the box you will find: the sharpener - all the safety guards, with vacuum hook-up - two wrenches for removing the wheel - one 1" wide grinding wheel - one 1/2" wide grinding wheel - one T-handle Allen wrench for removing guards - both the mulching blade worktable and conventional blade worktable. Everything is included to start sharpening quickly and safely out-of-the-box.

Why are there vice grips on the MAG-8000, and are they included?

The removable worktable for sharpening conventional blades clamps to the mulching blade worktable, which is bolted to the MAG-8000. The vice grip is one of the best over-center-clamps designed; we simply re-machine a vice grip and weld it to the removable flat worktable to provide a super fast attach/detach.

Must the MAG-8000 be bolted to a table or work bench?

No, the MAG-8000 can be simply placed on a table or work bench and is ready for use. If you use our MAG-10300 Service Center Stand, or other pedestal, then we strongly recommend to bolt it to the pedestal for your safety.

How does the MAG-8000 sharpen mulching blades?

The best way to show this is by watching the videos at our web site. The rounded worktable follows the underside of the mower blade, matching the contours and maintaining the same angle along the whole cutting edge. "Think of its operation as a manual key cutter."



ONLY the MAG-8000 can properly sharpen mulching lawn mower blades.

The MAG-8000 holds 3 U.S. patents for its unique design and ability.

Only Magna-Matic provides full blade service systems for both servicing dealers and lawn care professionals.

LOT#4 SERVICING DEALERS SYSTEM

LOT#3 LAWN CARE PROS SYSTEM



Part Number	Balancer*	Sharpener	Stand	Retail Price	Cost Savings	Discounted Price
Lot#1	MAG-1000	MAG-9000	no stand	\$828	\$29	\$799
Lot#2	MAG-1000	MAG-8000	no stand	\$1,318	\$50	\$1,268
Lot#3	MAG-1000	MAG-9000	MAG-10300	\$1,178	\$43	\$1,135
Lot#4	MAG-1000	MAG-8000	MAG-10300	\$1,668	\$69	\$1,599

* Substitutions for MAG-1000G & MAG-1000GC will also be discounted accordingly

MAG-10300 SERIES

SERVICE CENTER STAND

MAG-10300 Features

- Super heavy-duty construction 7 & 12 gage steel thickness
- Ergonomically correct
- Leveling foot pads to ensure stability
- High-gloss powder coated finish for durability
- Hollow center column which can be filled with aggregate material for improved weight and rigidity
- MAG-103 balancer stand included to mount the MAG-1000
- Intelligent, versatile design

MAG-10300 Specs

Width	23.5 inches
Height (table)	41-3/16 inches
Height (overall)	69 inches
Foot Print	18.25 inches dia
Weight	70 lbs
Steel Thickness	7 & 12 gage
Ship Weight 2 boxes	66 lbs & 10 lbs



The MAG-10300 Blade Service Center Stand brings sharpening and balancing into one convenient location to reduce the time spent servicing lawn mower blades. For use with all sharpeners and MAG-1000 series balancers.

Creating a **system** to allow the user to efficiently balance and sharpen a lawn mower blade without wasting time walking between equipment.

For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE: \$350.00

F.O.B. WALDO WI USA

MAG-103 SERIES

BALANCER TEST STAND/BRACKET

MAG-103 Features

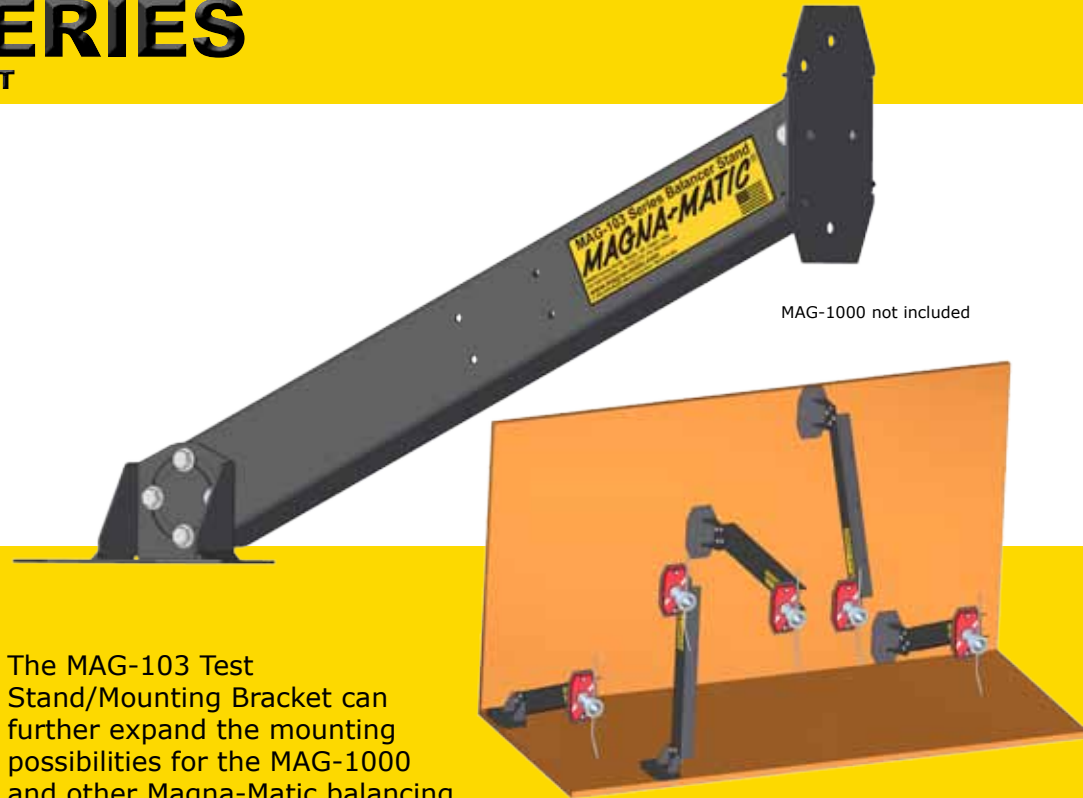
Released in 2004, the MAG-103 Balancer Test Stand/Mounting Bracket is a great way for you to mount your Magna-Matic balancer. This stand can be mounted in up to 5 different positions.

The two ends of the stand have slots with stop-points to easily set up the MAG-103 in any one of its 5 positions square to the balancer.

1. Table top mount directly vertical.
2. Table top mount 30 degree angle (see picture).
3. Wall mount 30 degree angle downward.
4. Wall mount straight out.
5. Wall mount 30 degree angle upward.

MAG-103 Specs

Depth	7 inches
Width	6-3/16 inches
Height	29-3/8 inches
Weight	8 lbs
Steel Thickness	12 gage
Ship Weight	9 lbs



MAG-1000 not included

The MAG-103 Test Stand/Mounting Bracket can further expand the mounting possibilities for the MAG-1000 and other Magna-Matic balancing instruments. The MAG-103 will extend over the deepest work benches to keep your balancer within reach and increase your productivity.

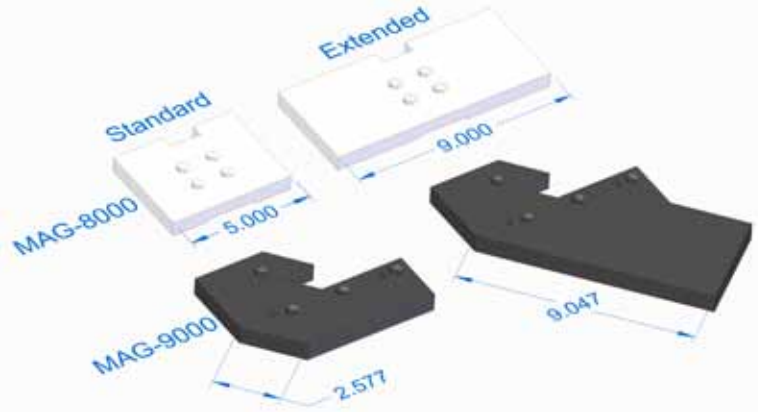
For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE: \$73.00
F.O.B. WALDO WI USA

MAG-ACCESSORIES

GENUINE MAGNA-MATIC ACCESSORIES

Part #	Description	Price
9000-22	MAG-9000 standard work tables (2 req)	\$14.50
9000-38	MAG-9000 extended work table	\$45.00
9000-60	MAG-9000 extended (dovetail)	\$55.00
8000-03	MAG-8000 standard work table	\$14.50
8000-32	MAG-8000 extended work table	\$20.50



EXTENDED / HIGH-LIFT OPTIONAL WORKTABLES

Shown above are the standard and extended versions of the worktables for both the MAG-8000 and MAG-9000.

The extended worktables provide more contact with the blade to make the sharpening of high-lift blades easier. A high-lift blade has less flat underside near the tip. The extended worktables use more of the blade to help you stay flat and keep a consistent blade edge angle.

The 9000-60 is for blades with a center bend down the length of the blade; the work table can split via a dovetail.

BLADE TRANSPORT BOX

PROFESSIONAL BLADE PACKAGING

Blade Box Features

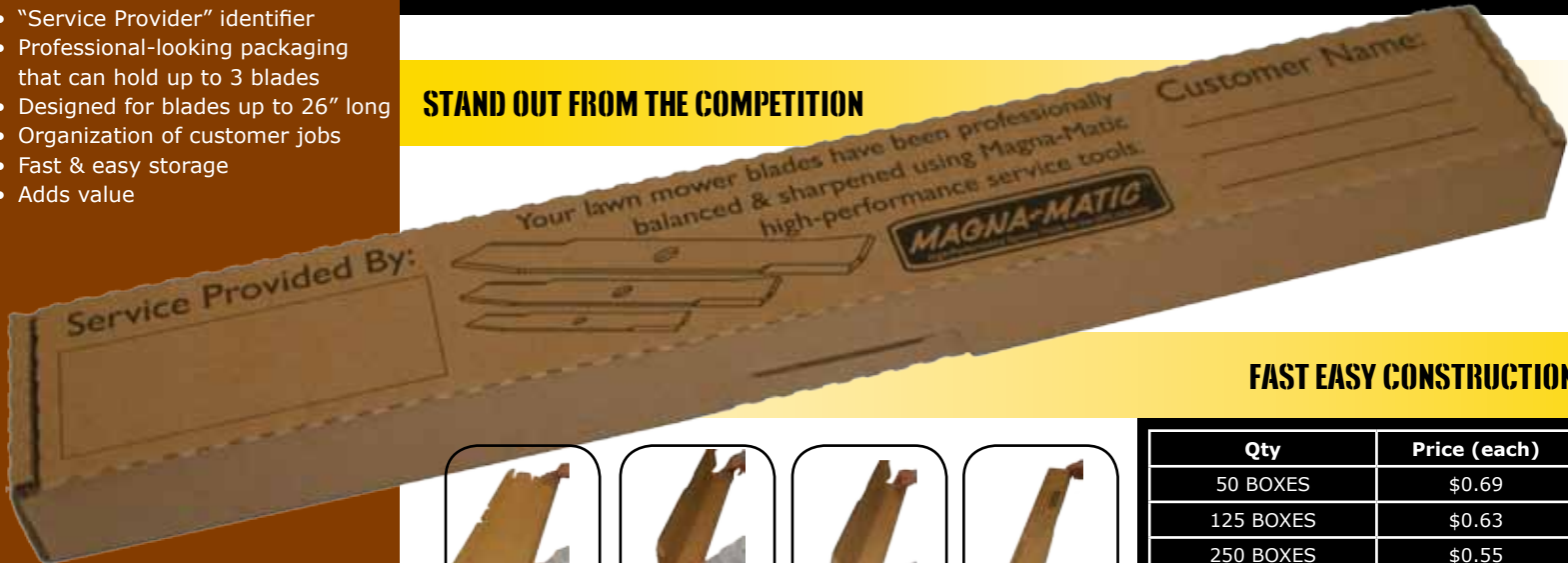
- For the safe handling of blades before & after servicing
- Conveys that blades have been properly serviced
- "Customer Name" identifier
- "Service Provider" identifier
- Professional-looking packaging that can hold up to 3 blades
- Designed for blades up to 26" long
- Organization of customer jobs
- Fast & easy storage
- Adds value

Blade Transport Box is a great organization tool.

Service Providers/Sharpening shops can identify customers' blades, and whether they have been serviced or not.

Landscapers/Municipalities can identify blades for certain machines, whether they have been serviced or not, and can safely keep blades in trucks or large tool boxes.

STAND OUT FROM THE COMPETITION



FAST EASY CONSTRUCTION

Easy assembly, no tape or glue required.



Qty	Price (each)
50 BOXES	\$0.69
125 BOXES	\$0.63
250 BOXES	\$0.55
500 BOXES	\$0.50

GRINDING WHEELS

HIGH QUALITY NORTON ABRASIVES

Part#	Hardness	Dimensions	Sharpener	Price 1-9	Price 10 & >
9000-23	I	7"x1"x1-1/4"	Both	\$28.50	\$26.50
9000-35	J	7"x1"x1-1/4"	Both	\$28.50	\$26.50
9000-34	L	7"x1"x1-1/4"	Both	\$31.50	\$29.50
8000-30	J	7"x1/2"x1-1/4"	MAG-8000	\$21.50	\$19.50

The 9000-23 wheel (our most popular wheel and OEM wheel for the MAG-9000) can have a wheel life of approximately 100 to 300 blades. The life of the grinding wheel is directly related to how much steel is ground from the blade; wheel life can vary. Well-maintained blades keep grinding wheel costs down. Magna-Matic provides various hardness so that you may find the BEST solution for your needs. No two users are the same; at Magna-Matic we tailor to your grinding needs.

Part#	Approximate Life	Approximate Performance
9000-23	Shortest	Fastest
9000-35	Medium	Medium
9000-34	Longest	Slowest



NORTON

For more info, or to order:

magna-matic.com -or- 800-328-1110

MAG-12000 SERIES

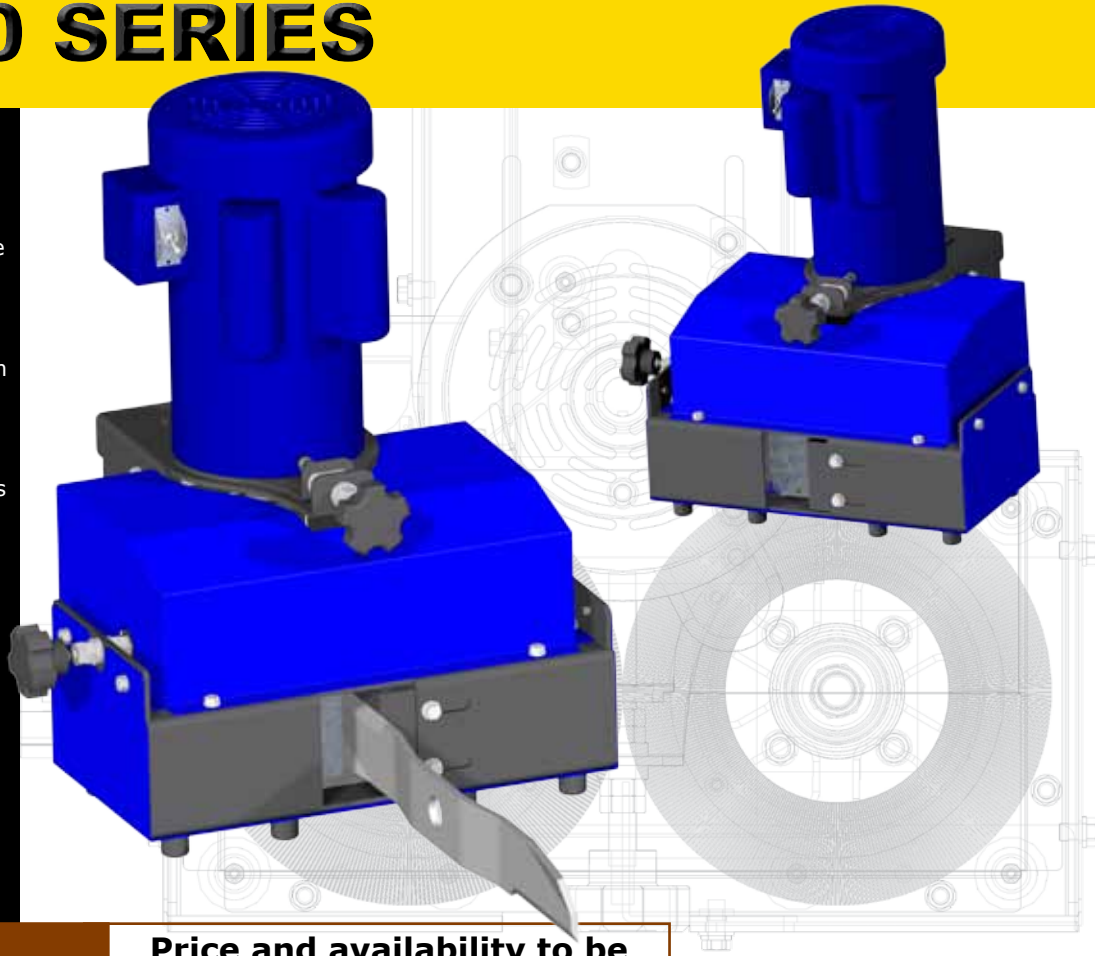
LAWN MOWER BLADE CLEANER

MAG-12000 Features

- The FIRST machine in the world designed to clean mower blades.
- Able to clean a whole lawn mower blade in less than one minute
- Super heavy-duty construction 7 & 12 gauge steel thickness
- Clean enclosed design ready for vacuum or air cleaner hook-up
- High-gloss powder coated finish for durability
- Two 8" counter-acting steel brush gangs allow you to clean the top and bottom of the mower blade at the same time
- Safe enclosed design, will not push or pull the blade.
- Totally enclosed fan cooled industrial motor available in 110v or 220v

MAG-12000 Specs

Width	20 inches
Depth	20 inches
Height (overall)	23 inches
Weight	100 lbs (approx)



For more info, or to order:
magna-matic.com -or- 800-328-1110

Price and availability to be
announced Winter 2009

CHIPPER BLADE VICES

SAFELY HOLD CHIPPER BLADES AND SHARPEN IN MAGNA-MATIC SHARPENERS

FAST • EASY OPERATION • FITS VARIOUS SIZES • LONG-LASTING CONSTRUCTION
DESIGNED FOR USE WITH THE MAG-8000 AND MAG-9000

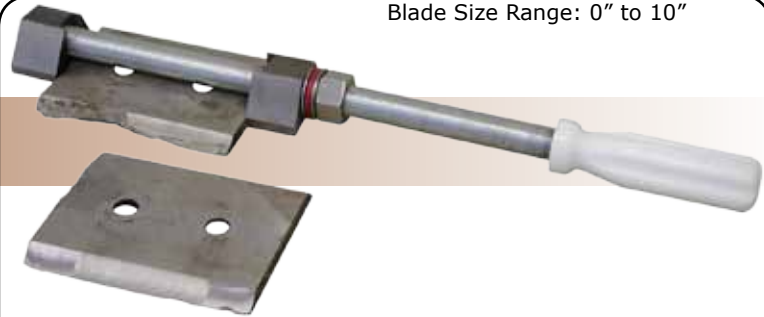
• **ELIMINATE** THE NEED FOR ADDITIONAL SHARPENING EQUIPMENT

MODEL: MAG-3000



Blade Size Range: 1-1/2" to 4-1/2" (optional longer rods)

Blade Size Range: 0" to 10"



MODEL: MAG-3001

For more info, or to order:
magna-matic.com -or- 800-328-1110

PRICE: See online store or call
F.O.B. WALDO WI USA

MAG-7000 SERIES

STATIC ROTATIONAL CLUTCH BALANCING INSTRUMENTS

Arbor balancing instruments designed for balancing primary and secondary variable clutches of snowmobiles and ATVs

MODEL	DESCRIPTION	PRICE
MAG-7000	Primary variable clutch balancer (30 mm 5% taper) (euro taper) for use with Polaris, Arctic-Cat, Ski-Doo, and Yamaha snowmobiles	\$455.00
MAG-7002	Secondary variable clutch balancer (1" dia straight arbor)	\$455.00
MAG-7003	Primary variable clutch balancer (33 mm taper) for use with Ski-Doo snowmobiles	\$455.00
MAG-7004	33 mm Artic-Cat primary clutch balancer	\$455.00
MAG-7005	Straight taper arbor balancer (25 mm)	\$455.00
MAG-7006	ACT Drive - driven clutch - 7/8" dia straight spline shaft	\$455.00
MAG-7007	Clutch balancer for M1000 Arctic-Cat	\$455.00
MAG-7008	Clutch balancer for M7 & M8 Artic-Cat	\$455.00



For more info, or to order:
magna-matic.com -or- 800-328-1110

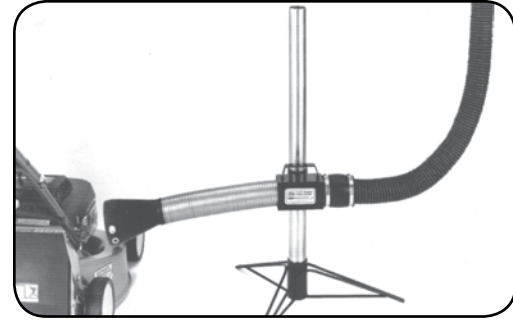
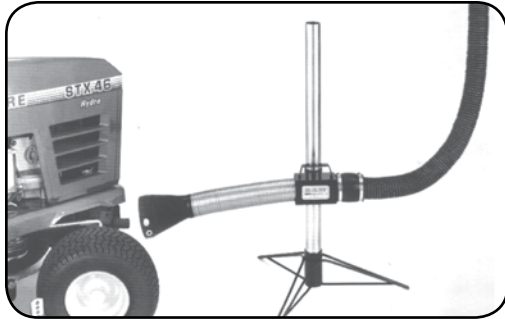
Custom balancing instruments can be
manufactured for any application.

MAG-11000 SERIES

CO EXHAUST REMOVAL SYSTEMS FOR INDOOR ENGINE TESTING

MAG-11000 Features

- 12-1/2 ft of 4" dia NEO-FLEX hi-temp hose
- Adjustable to various heights
- Rigid tri-pod stand & stainless steel upright
- Directionally adjustable stainless steel flex-hose
- Designed for outdoor power equipment applications
- Can be used with up to 8 cyl automotive engines
- Designed to handle up to 400° F



Locate close to the exhaust port & turn the blower on to remove carbon-monoxide from the engine source.

The MAG-11000 is great for: lawn mowers, garden tractors, small tractors, skid steer loaders, chain saw testing stations, ATVs, snowmobiles, motorcycles, and any exhaust pipe where it is difficult to attach traditional exhaust removal systems.

For more info, or to order:
magna-matic.com -or- 800-328-1110

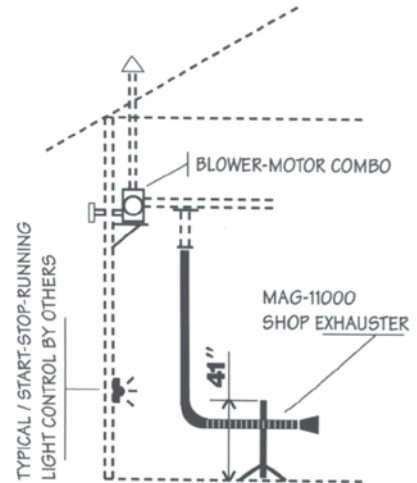
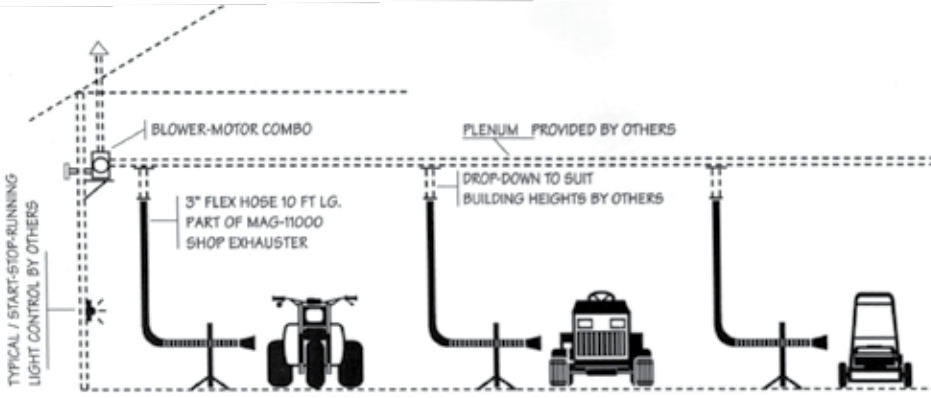
PRICE: \$340.00

F.O.B. WALDO WI USA

MOTOR BLOWERS

AIR HANDLING BLOWERS FOR USE WITH MAG-11000 SERIES EXHAUSTERS

	11002	11003	11003-Dyno
Motor	Baldor	Baldor	Baldor
Horsepower	1/2	3/4	3/4
RPM	3450	3450	3450
Volts/Hz	115V,60Hz	115V,60Hz	115V,60Hz
CFM @ 3"	425	600	600
Mounting Base	Yes	Yes	Yes
# of Exhausters (max)	2	3	3
Intake/Exhaust Ports	No	No	Stainless Steel Intake & Exhaust
Price	\$550.00	\$660.00	\$740.00



MAG-11000 PORTABLE

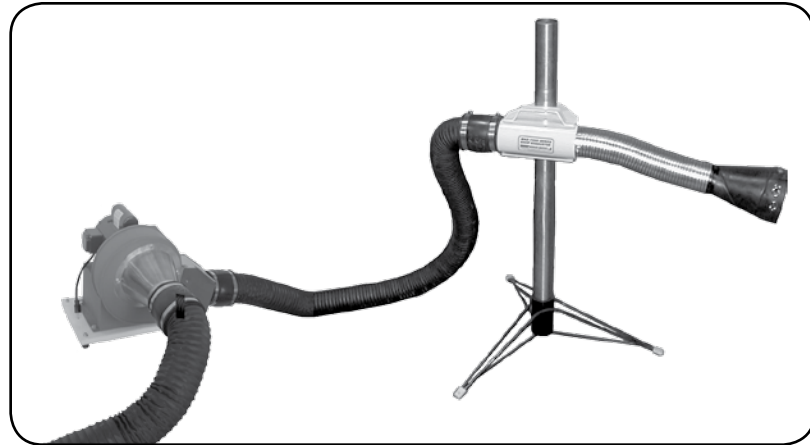
PORTABLE CO REMOVAL SYSTEMS FOR INDOOR ENGINE TESTING

The MAG-Series Portable Exhaust System Consists of:

Qty	Model#	Description	Price
1	MAG-11000	Shop Exhauster	\$340.00
1	11000-26	25 ft 4 in dia. Neo-Flex Hose	\$290.00
2	11000-20	4" to 4" Coupler	\$17.00
1	11003-Dyno	Dyno-motor-blower 600 CFM @ 3 in static pressure, stainless steel intake & exhaust, 3/4 HP single phase motor.	\$740.00
TOTAL		PRICE F.O.B. Waldo WI	\$1,387.00

Features

- No building infrastructure alteration required
- Portable for use at various locations
- Easily move from bay to bay
- Designed to handle up to 400° F
- Can be used with up to 8 cyl automotive engines
- Adjustable to various heights
- Rigid tri-pod stand & stainless steel upright



Blade Tip GEOMETRY

TIP

What part of a lawn mower blade cuts the grass?

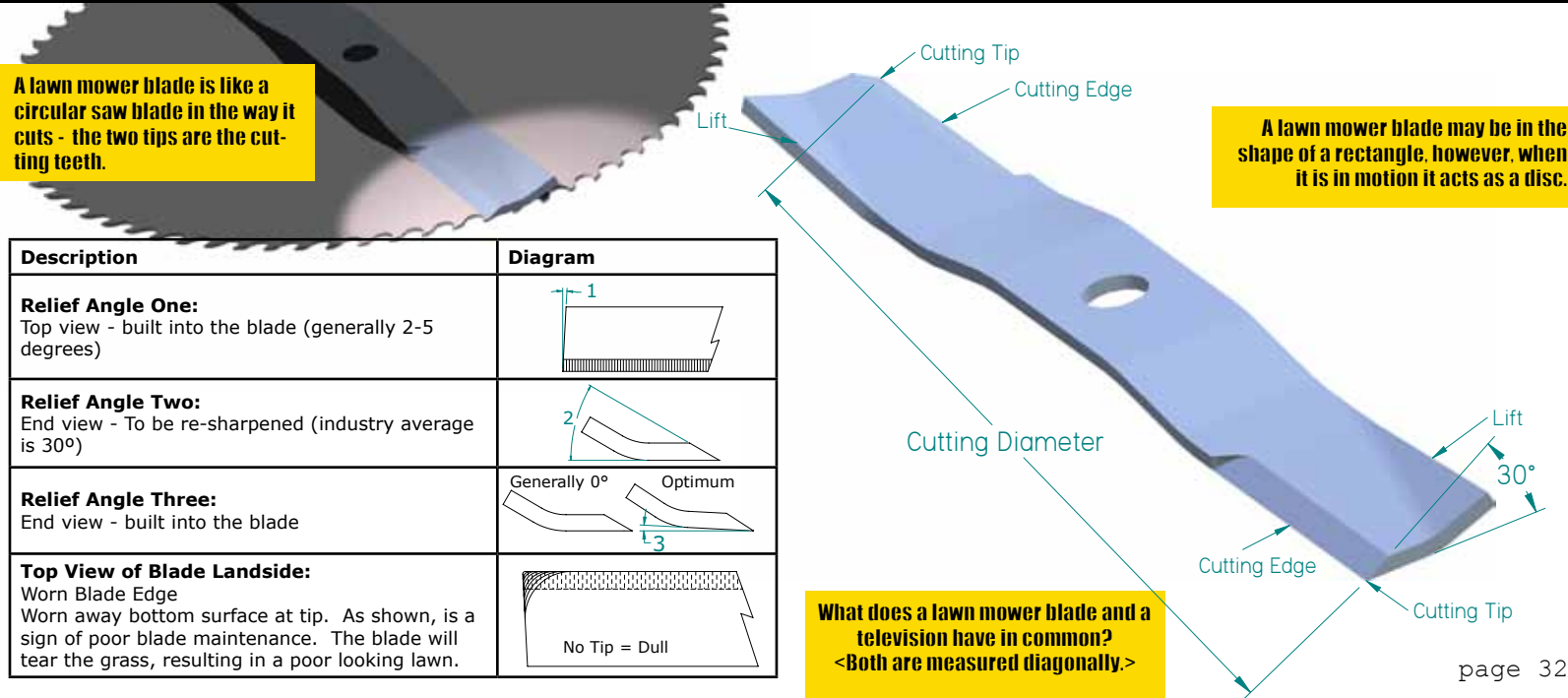
Rotary lawn mower blades are measured from tip to tip, and the tip of the blade does the majority of the cutting work. Repeated observation of worn cutting edges shows that the first inch does the majority of the cutting work. To produce a cutting tip, three relief angles are necessary.

IMPORTANT NOTES:

Welding, straightening, sharp corners, and overheating the lawn mower blade may create fractures that break the blade under normal use and may cause injury.

A lawn mower blade is like a circular saw blade in the way it cuts - the two tips are the cutting teeth.

A lawn mower blade may be in the shape of a rectangle, however, when it is in motion it acts as a disc.



Description	Diagram
Relief Angle One: Top view - built into the blade (generally 2-5 degrees)	
Relief Angle Two: End view - To be re-sharpened (industry average is 30°)	
Relief Angle Three: End view - built into the blade	Generally 0° Optimum
Top View of Blade Landside: Worn Blade Edge Worn away bottom surface at tip. As shown, is a sign of poor blade maintenance. The blade will tear the grass, resulting in a poor looking lawn.	

What does a lawn mower blade and a television have in common?
 <Both are measured diagonally.>

Why are MAGNA-MATIC Lawn Mower Blade Sharpeners the performance leaders of the industry?

DESIGN!

History

Around 1940, the rotary lawn mower blade was introduced as a low cost, quick, and easy way to cut large grass areas. The typical lawn mower blade has two sharp tips with extended knife edges that wear and require frequent re-sharpening. The blade works on the principal of the sharp edge colliding with the grass at a high speed.

Around 1960 the pedestal grinder began its transformation in becoming a specific lawn mower blade sharpener. The basic pedestal grinder was modified to extend the output shaft. The work rest was modified to permit edge angle and wheel wear adjustments. The result is a modified pedestal grinder type sharpener.

The most common sharpening machine is the pedestal grinder. The pedestal grinder sharpens drills, chisels, cutting bits, etc. in a grinding process called "free-hand" where the part is held by hand and guided to the grinding wheel. These tools are made from very hard steels (65 Rockwell). In this sharpening process only very small amounts of steel are removed. The rotary mower blade is made from a soft tempered steel (45 Rockwell). A lot of steel must be removed to sharpen a lawn mower blade.

Conclusion: The pedestal grinder is not very effective in sharpening the rotary mower blade. Generally available pedestal grinder wheels are too hard for mower blades. They tend to burn the tempered blade, reducing the original quality.

Basic performance of pedestal grinder

Time to sharpen a lawn mower blade: *About 6 to 12 min*

Quality of sharpening process: *Poor to questionable*

Basic performance of modified blade grinder

Time to sharpen lawn mower blade: *About 4 to 8 min*

Quality of sharpening process: *Medium to poor*

Other industry developments

Mechanical blade clamping arrangements with an x and y slide guide the movement and the feed of the blade edge against the grinding wheel. Generally, in the time that it takes to properly clamp down and accurately set the x and y slide, the "free-hand" method of grinding can be finished with the re-sharpening. Clamping arrangements with a x and y slide, utilizing a "milling machine-like" drill press, using solid carbide end mills. Again, the time that is taken in the set up of this type of process *far exceeds the time available to make the re-sharpening of a lawn mower blade economical*. Milling is a very slow and costly metal removal process, which is usually reserved for high-cost, high-precision parts.



It is astonishing that the majority of blade sharpeners being manufactured today are the same 1950s modified bench grinder style.

In 1988 Magna-Matic Corporation introduced the industry's first high-tech MAG-9000 Lawn Mower Blade Sharpener.

For straight (conventional) edged commercial & walk behind rotary mower blades

Basic Performance

Time to sharpen a lawn mower blade: 60 seconds or less

Quality of sharpening process: Repetitive high quality

In the early 1990's the mulching blade (recycler lawn mower blade) was introduced. These new blades with multi-level curved edges were designed to re-cut the cut grass clippings. This new type of blade with its curved edges quickly became a problem to sharpen.

The pedestal grinder, modified pedestal lawn mower blade grinders, or the MAG-9000 Blade Sharpener cannot sharpen these blades. In fact any grinder or sharpener with a flat work table cannot sharpen the edge of a mulching blade.

In 1999 Magna-Matic Corporation introduced the MAG-8000 Universal Blade Sharpener, the industry's first sharpener to have the ability to sharpen both **straight edge and curved edge** mower blades to their original quality.

Basic Performance

Time to sharpen one blade: 60 seconds or less

Quality of sharpening process: Repetitive high quality

Safety and Convenience Features

Only Magna-Matic blade sharpeners comply with ANSI B7.1 (American National Standard Institute, NOTE: OSHA adopts ANSI's design specifications as a basis of their regulation)

Magna-Matic provides grinding wheels that are speed tested and balanced at 5500 RPM for extra safety. Standard industry rating is 3600 RPM.

Magna-Matic complies with ANSI, which dictates the use of grinding wheel flanges to hold the grinding wheel.

Magna-Matic complies with ANSI, which dictates that the arbor nut thread must be so that the nut will tighten as the spindle rotates (left-handed nut).

Magna-Matic complies with ANSI, which dictates a maximum 90 degree opening of the grinding wheel guard (1/4 of the periphery).

Magna-Matic complies with ANSI, which dictates work rest that does not permit jamming between the abrasive wheel and guard.

The MAG-8000 and MAG-9000 are fully enclosed grinding machines that offer protection to the operator.

Magna-Matic Sharpeners provide a single clockwise direction grinding wheel rotation. You control the work piece. In the event that you loose control, the work piece is pushed away from the grinding wheel, not jammed between the grinding wheel and worktable.

The MAG-8000 and MAG-9000 are mobile to go-anywhere. Just lift at the handle (MAG-9000 = 50 lbs.) (MAG-8000 = 80 lbs). Rubber feet keep the grinder where you place it.

The MAG-8000 and MAG-9000 are impressively quiet in operation.

Built-in valve stem grinding guide is part of the MAG-9000.

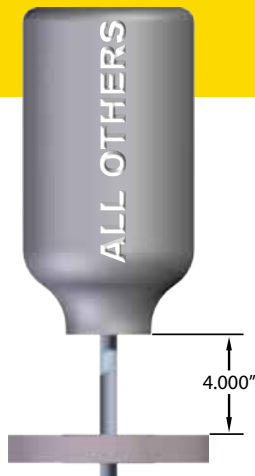
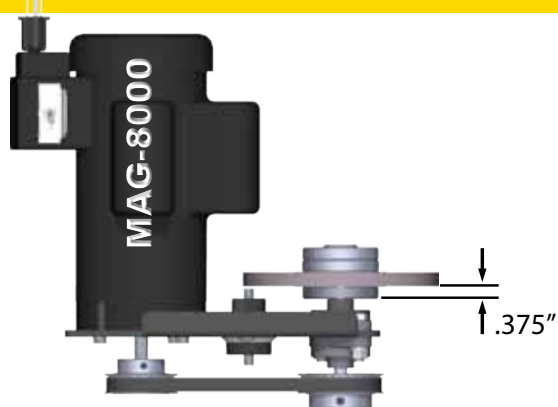
Built-in chain saw bar squaring guide is part of the MAG-9000.

A grit guard to deflect the grit to the floor, vacuum grit guard that connects to any standard shop vacuum having a 2.5" diameter hose. Standard on the MAG-8000 and MAG-9000.

Magna-Matic Corporation is the only lawn mower blade sharpener manufacturer that provides **100% satisfaction guaranteed** (if you are not satisfied with any of our products you may return them within the first 30 days for a refund). This allows you to try the equipment in your shop and let you put it to the test.

Design and Performance Comparison

Displaying Overhung Load



MOTOR DESIGN



The MAG-8000 has .375 inches overhung load. The MAG-9000 has .375 inches overhung load.

Others can have as much as 4 inches overhung load.

Overhung load is defined as the radial load on the output shaft extension produced by a grinding wheel, pulley, chain sprocket, gear, crank arm, cam or other similar device. It is simply unsupported load that will reduce rigidity and create vibration.

Design and Performance Comparison

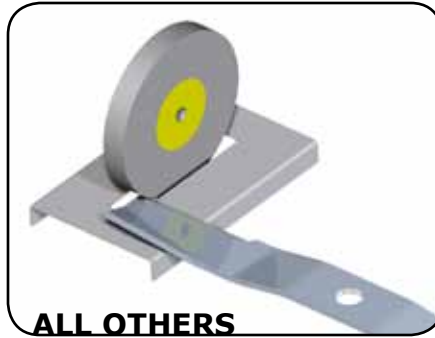
Displaying a Supported Blade

VIBRATION - To achieve vibration-free, rigid, efficient grinding, a proper work table design is required. As shown in the diagram to the right, all other blade grinders (the pedestal type sharpeners) have a worktable that provides VERY LITTLE support under the blade edge being sharpened. The slot where the grinding wheel lowers into (to adjust cutting angle) is the exact place where the grinding wheel comes in contact with the blade edge being sharpened. Therefore, there is VERY LITTLE support for the blade edge being sharpened, resulting in vibration.

NOISE - You will notice when using other blade grinders, they are extremely noisy in operation. Hearing protection must be worn. This is caused by the lack of rigidity, and the sheet metal design.

ELIMINATE VIBRATION & NOISE - In the diagrams below of the MAG-8000 and MAG-9000 you are able to see that their work tables completely support the blade. Magna-Matic blade sharpeners have worktables that are made from UHMW (ultra-high molecular weight) abrasion resistant engineered plastic. This plastic is used to eliminate noise and to reduce the friction between the blade and the worktable, allowing for ease of blade motion when sharpening.

WORKTABLE DESIGN

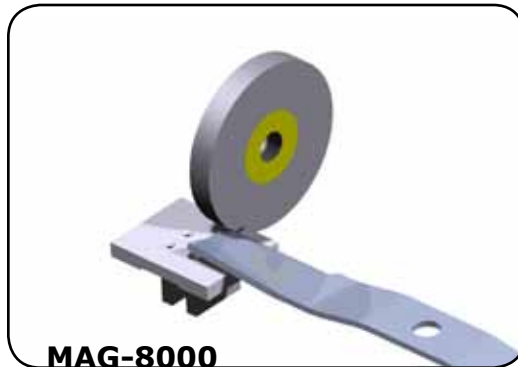
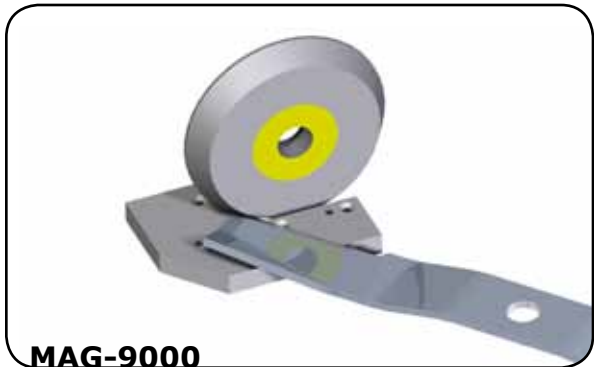


30° Angle Reference Point

As discussed earlier, MAGNA-MATIC lawn mower blade sharpeners have an **"angle-reference-point."** See in the diagram to the left, the grinding wheel lowers and raises vertically in a slot in the worktable. Because of this design you can never tell what angle you are producing on the blade.

MAGNA-MATIC sharpeners have an **"angle-reference-point"** built in to our grinding wheel adjustment. When the grinding wheel is almost contacting the edge of the worktable you will have produced a 30° angle on the blade no matter what diameter the grinding wheel is.

It is the simplest single-crank angle adjustment in the industry.



ROI - Return on Investment

What does it cost you to service a blade?

How many blades will pay for the equipment?

MAG-8000 / MAG-9000

171 Blades will Pay for the MAG-9000

305 Blades will Pay for the MAG-8000

MAG-9000 ROI Details

\$4.50 is the cost to have a blade sharpened

HIDDEN COSTS (pick-up, drop-off, poor quality)

(National range of mower blade service cost is \$3.00 to \$12.00)

MAG-8000 ROI Details

\$4.50 is the price of sharpening service

\$0.82 = cost to sharpen

\$3.68 = profit made

* 60 second sharpening time based on the following constraints:

Blade = 24 inch long, 1/4 inch thick commercial mower blade

Wear = 20 machine hours of mowing

Sharpen = both full edges

The above information is based on reasonable approximations, your results may vary.

Cost to Sharpen 1 Blade with MAG-8000 / MAG-9000	
Grinding wheel cost per blade \$28.50 divided by 200 blades per grinding wheel = \$0.15	\$0.15
Labor cost per blade \$40 per hr divided by 60 min = \$0.67 per min (1 minute per blade)	\$0.67
Cost to sharpen 1 blade	\$0.82

MAG-9000 Calculation (cost of MAG-9000 \$630)

$\$4.50 - \$0.82 = \$3.68$ (your savings per blade)

$\$630 \div \$3.68 = 171$ (blades)

MAG-8000 Calculation (cost of MAG-8000 \$1120)

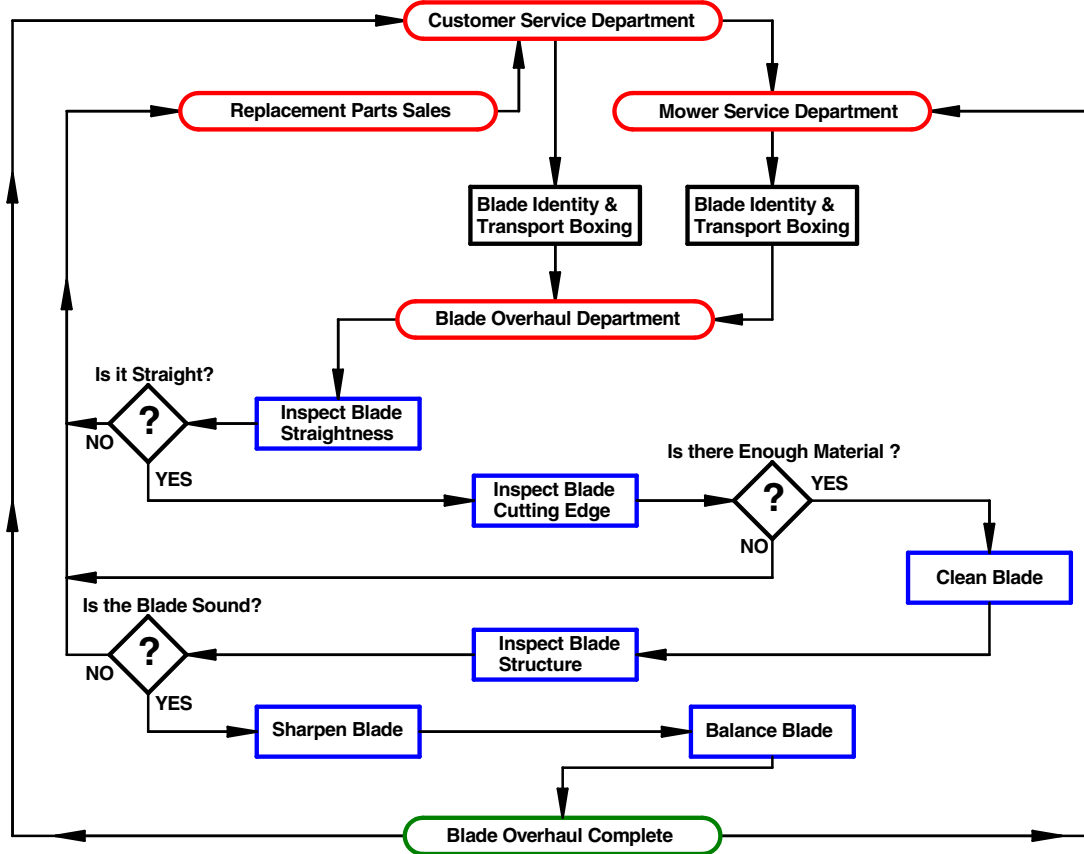
$\$4.50 - \$0.82 = \$3.68$ (your profit per blade)

$\$1120 \div \$3.68 = 305$ (blades)

Process ANALYSIS

FLOW

How should a blade be processed through a dealer?



The flow chart to the left represents the process of a lawn mower blade through a lawn mower dealership. The lawn mower blade or lawn mower itself is brought to the dealership service counter. From there the lawn mower blade is overhauled or replaced as shown.

When a blade(s) is received or removed from a mower, it needs to be identified to whom it belongs. The Magna-Matic blade box makes this an easy, streamlined process.

Inspecting blade straightness is done with the MAG-1000 using its straightness gauge rod.

Inspecting the amount of material left of the cutting edge and blade structure (cracks etc) is done visually.

Cleaning of the blade is done with the MAG-12000 or by hand with a wire brush.

Sharpening of the blade is done with either the MAG-8000 or MAG-9000.

Balance is indicated by the MAG-1000 with an accuracy of 21 gmm.

MADE IN THE USA FOR OVER 50 YEARS

MAGNA-MATIC[®] Cut
WALDO, WI 53985 USA
1-800-328-1110 Phone
US Patent No. 4,812,812

MAGNA

BLADE-BAL