



# Instruction Addendum: NEW [gen6] Worktable Insert Use

MAG-8000 Series Sharpener Protected by US Patent# 6,368,196 - 6,364,750 - 6,572,448



## WARNING

WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY.



## CAUTION

TURN OFF AND UNPLUG  
BEFORE SERVICING!

This instructional bulletin will guide you through the steps required use the new [gen6] style mulching and flat blade worktables.

### BOX CONTENTS

- Crank Handle
- Arbor Wrench
- Spanner Wrench
- 9000-35 wheel
- 8000-30 wheel
- Rounded worktable insert
- Flat worktable insert
- MAG-8000 Sharpener

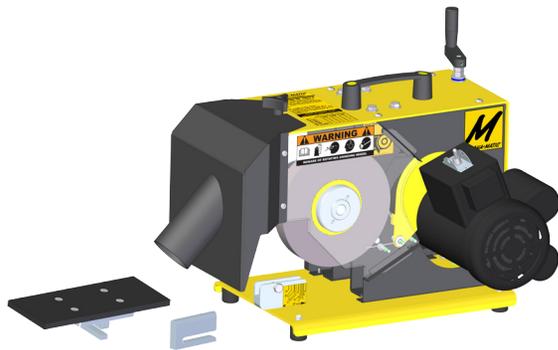


### New [gen6] worktables (blade rest)

The new change to the MAG-8000 [gen6] is the implementation of worktable inserts. This new design allows for future inserts for specific blades, and different size worktables. Additionally the worktable insert provides the ability to dial in angles from 25° to 45°.

The worktable inserts slide into a fixed vice that is clamped by tightening a 5/16" bolt with the hex end of the supplied spanner wrench or a 1/2" wrench.

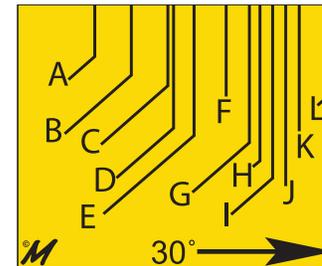
The black flat worktable insert is for straight flat. (**conventional blades**)  
The steel rounded worktable insert is for curved cutting edge. (**mulching blades**)



### Angle Indicators

These two decals are located on the MAG-8000 they indicate worktable positions required to achieve the listed cutting edge angles.

30 degrees is the ONLY angle where the worktable remains in one position over the life of a grinding wheel. All other angles require that the worktable be moved to a position corresponding with the chart on the MAG-8000. Use the chart on the MAG-8000 (shown to the right) to move the worktable insert when the grinding wheel is at a diameter listed.



### MAGNA-MATIC® ANGLE ALIGNMENT

**STANDARD 30° ANGLE**  
Align the worktable insert to the 30° mark, and keep the grinding wheel lowered within 1/32" from touching the blade rest.

30° angle is the most consistent over the life of a grinding wheel's diameter. All angles have a tolerance of 1-2 degrees.\*

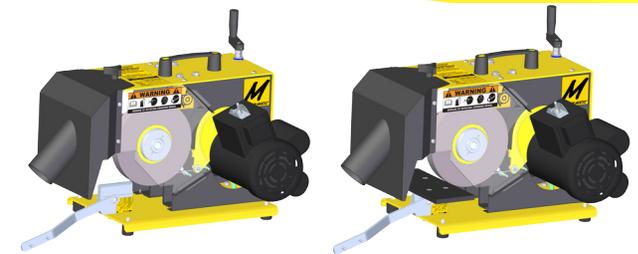
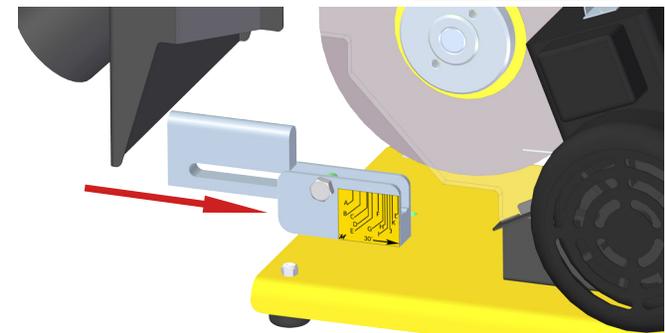
\*READ MANUAL FOR DETAILED INSTRUCTION

(optional) BLADE ANGLES				
WHEEL DIAMETER	45°	40°	35°	
7"	A	C	G	
6"	B	E	H	
5"	D	F	I	
4"	F	H	K	
3.25"	J	K	L	

### Worktable Set-up

The base of the worktable inserts are slotted. Slide the worktable insert into the vice (shown below) Once in place at the desired angle position, tighten the bolt in the worktable vice. **DO NOT OVER-TIGHTEN** (only a 1/4 to 1/2 turn is required to clamp the insert.)

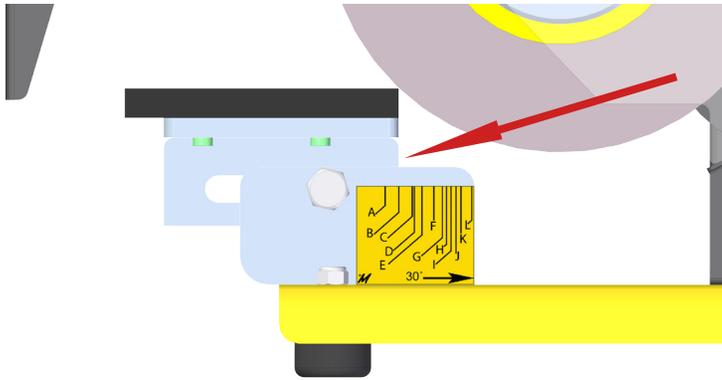
The spanner wrench has a 12 point hex wrench for the bolt to tighten the insert in place. A 1/2" wrench or socket can also be used.



Above: View of the spanner wrench used to tighten the vice to hold worktable inserts.

## Worktable Alignment

(Shown below) Align the front of the insert to the line of the letter of the angle position you desire. In the image the insert is aligned to the letter B, which is a 45° @ 6" diameter grinding wheel. The red arrow shows the front of the insert, which is the part to align.



## Visual example of setting a 45° over the life of a grinding wheel

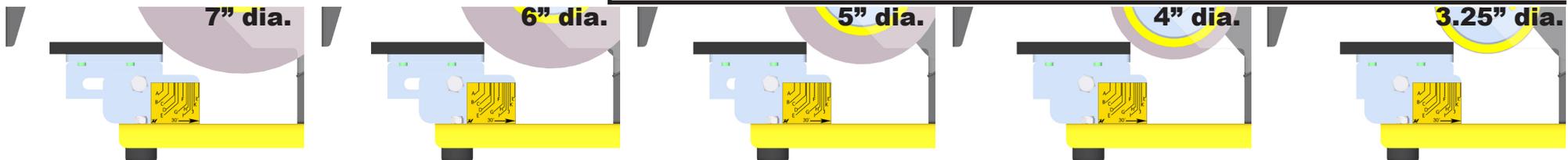
Due to the changing geometry of a grinding wheel's diameter it is necessary to move the worktable insert to different positions over the life of the wheel. Each image below shows one inch diameter grinding wheel increments. Starting at the left is a new 7" diameter wheel and the far right shows a used wheel at 3.25" diameter.

As the grinding wheel wears (becomes smaller in diameter) the worktable **MUST** be moved to maintain a consistent angle according to the charts provided on the MAG-8000.

For example if a wheel is at 6.5" diameter move the worktable insert to half-way between A and B. Remember to also adjust the wheel down to the worktable as shown in all the images.

### CUTTING EDGE ANGLE TOLERANCE:

Due to the changing variables of the grinding wheel diameter, and different blade thickness the charted angles will have an approximate tolerance of 1-2 degrees



# 30 DEGREE ANGLE

## MOST BASIC ANGLE - READ FOLLOWING INFO!

30 degrees is the most consistent and easiest angle to maintain in the MAG-8000. It is also the industry average angle on most blades. If you are looking for the most simple way to consistently sharpen your lawnmower blades, use 30 degrees according to following instructions.

Align the worktable insert (flat or rounded) to the 30° arrowed mark on the worktable vice (see yellow decal in image below). This will make the insert square to the vice (flush on back and front). Tighten it in place with the hex end of the spanner wrench.

Lower the grinding wheel with the black crank handle on the top of the MAG-8000, lower it as close as possible to the worktable without touching the worktable (approx 1/32"), so you can just see a small space.

The worktable insert **DOES NOT** need to be moved to compensate for grinding wheel diameter as other angles do. Simply keep lowering the grinding wheel within a 1/32" from the worktable. See the red arrow, showing the approx. 1/32" distance from the worktable to the wheel. Maintain this closeness to the worktable to maintain the desired angle.

