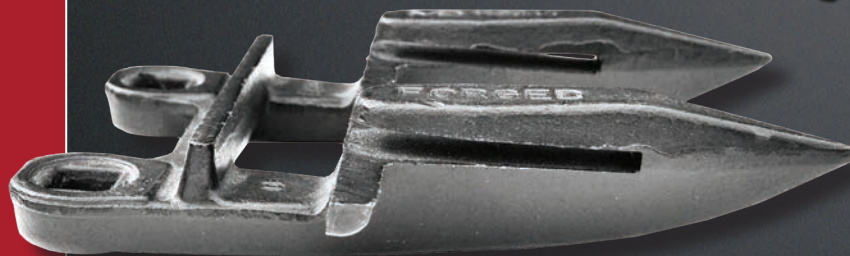


# Cutting Parts Guide



## INCLUDES:

- ✓ *Features and benefits*
- ✓ *How to choose the right product*
- ✓ *Know when to replace*
- ✓ *Options from MacDon*



### *Sickle Sections and Guards*

## **Keep your MacDon at peak performance with MacDon Performance Parts**

If you own a MacDon it's probably because you wanted a machine with a high level of performance, reliability, and quality. To keep your MacDon running at its peak performance, insist on only MacDon Performance Parts. Our parts are designed to meet MacDon's demanding performance specifications.

They are tested in the toughest real world conditions, ensuring the worry-free harvesting performance you've come to rely on with MacDon.

## **MacDon sickle sections and guards are designed to perform!**

MacDon's cutting system is designed to maximize productivity in the most challenging harvest conditions. When the time comes to replace your sickle sections and guards, insist on MacDon to ensure performance. Made from quality materials, only MacDon sickle sections and guards will meet your high expectations and our exact specifications.

MacDon Performance Parts deliver unparalleled durability and worry-free harvesting performance.

## Recommended cutting components combinations

### Pointed Guard

#### Recommended

- For rocky conditions
- On ground applications



### Stub Guard

#### Recommended

- For off ground application
- Tough cutting conditions



## MacDon sickle section performance features:

### Designed to fit your MacDon

It is imperative that you choose the right sickle section for the job. MacDon performance sickle sections are designed to fit your specific needs, to keep your MacDon performing like new. Using the wrong sickle section in the wrong conditions could decrease the wear life of your sickle section and reduce cutting performance.

#### ATTACHMENT HOLES

Holes to attach the sickle section are guaranteed to be the specified distance apart. This means your replacement sickle section will fit your MacDon perfectly. Poorly spaced holes lead to premature bolt failure, costing valuable downtime. It also decreases vibration of the blade, ensuring maximum wear life.

#### QUALITY

Created by MacDon for your MacDon, stamped official logo confirms the quality you rely on with MacDon.

#### DESIGN

Top serrated design guides crop along the induction hardened edges, sharpening teeth as you cut with MacDon's self-sharpening design.

#### AUSTEMPERED

MacDon's new Austempered sickle sections are made up of substantially tougher, longer lasting material that has proven less chipping, breakage and wear. This is achieved by a unique heat treatment process that involves through-hardening the entire sickle section, compared to only heat treating the cutting portion.



## Discover the Features and Benefits of the MacDon Austempered Sickle Section

The new MacDon sickle section undergoes a unique heat treatment process known as Austempering, which produces a tougher and more impact resistant structure for improved harvesting performance!

Competitive parts may only receive heat treatment at the cutting edge, leaving the rest of the section vulnerable to breakage. The entire MacDon sickle section is through-hardened for high ductility and high hardness. MacDon's Austempered sickle sections can be used in any harvest situation, designed and engineered to perform better than standard sickle sections.

### AUSTEMPERED HEAT TREATMENT



- Austempered sickle sections are made up of substantially tougher, longer lasting material that has proven less chipping, fewer broken sections and noticeably less wear
- Unique process that involves through-hardening the entire section, versus competitors only heat-treating the cutting portion
- Substantial lab and field testing confirm worry free harvesting performance

### HIGH PERFORMANCE CUTTING EDGE



- Designed to self sharpen as they wear, meaning your sickle sections will continue to stay sharp throughout the section life

### PRECISION SPACING AND FIT



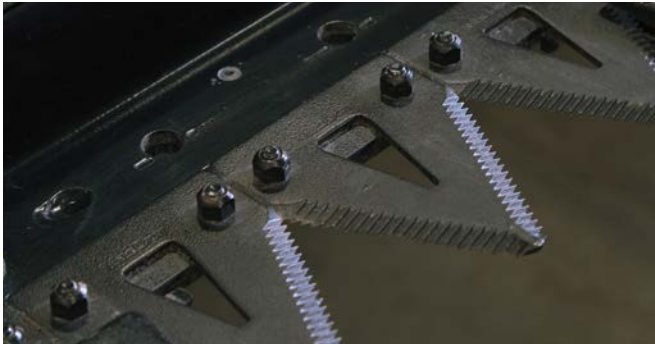
- Guaranteed hole spacing means your replacement sickle section will fit your MacDon perfectly every time, inconsistently spaced holes lead to premature bolt failure costing valuable downtime
- Best fit paired with your MacDon guards

### DISTINCTIVE MACDON AUSTEMPERED SECTION LOGO AND PACKAGE



- Distinctive MacDon box assures you of MacDon Austempered sickle sections
- Only the MacDon logo guarantees that it's original

# Cutting Parts Guide



*MacDon Austempered process involves through-hardening the entire sickle section, creating performance advantage.*

*When choosing your knife, choose a serration based on the types of crops you are cutting.*

## **FINE SECTION SERRATIONS**



- 14 serrations per inch
  - Provides optimal cutting characteristics in green forage, high moisture and hay crops
  - Delivers a clean cut, increasing efficiency and decreasing horsepower demand during harvest
- Crops: Forage, Grasses, Flax and Lentils**

## **COARSE SECTION SERRATIONS**



- 9 serrations per inch
  - Provides optimal balance of durability and cutting edge technology in thick stem crops
  - Recommended use for on the ground applications, coarse sickle sections hold their cutting edge longer in these high debris conditions
- Crops: Wheat, Soybeans, Canola, Cereals and Pulses**

## **ULTRA COARSE SECTION SERRATIONS**



- 4 serrations per inch
- Provides peak cutting performance and durability in thick stemmed crops
- Recommended use for thicker stemmed crops and adverse conditions



## MacDon guard performance features:

### ***Double heat treated***

Fully thru-hardened for toughness, these guards are then induction hardened in key high wear areas so they will keep their cutting edge longer. MacDon offers different types of guards for specific harvest needs:

## FD/D 1 Series and Prior



### ***Pointed Guards***

The pointed guard is designed to be used when your MacDon header is low or touching the ground while cutting. This guard protects your knife sections with a reinforced rib to provide stronger impact resistance against rocks and debris.



### ***Stub Guards***

The MacDon Stub guard is designed to reveal more of the sickles cutting edge, increasing cutting abilities in tough crops such as grasses and canola. Stub guards should only be used in off-ground applications where fewer rocks and debris are encountered by the cutting components. These guards are incomplete without a top half. There are two top half options: The High Performance Forged Steel Top provides stronger impact resistance to rocks and debris for longer life. To complete this option you require a bottom, a forged steel top, and an adjustment bar to complete the guard. The Sheet Metal Top works well in low debris conditions and includes a conveniently designed adjustment screw.

# Cutting Parts Guide



*Cutting surface is induction hardened providing targeted hardening in high contact areas, resulting in a superior cutting performance*

## FD2 Series



### ***Pointed Guards - ClearCut™***

The pointed guard is a multi-purpose knife guard designed to glide along the surface at high cutting speeds for a clean, even cut every time.



### ***PlugFree™ Guards - ClearCut™***

The PlugFree™ Guard is designed to get the knife as close to the ground as possible while still protecting the blade from damaging debris in the field. It resists plugging even in the nastiest conditions providing the closest, cleanest possible shave of the ground.

## Cutterbar – ClearCut™ High-Speed Cutting System

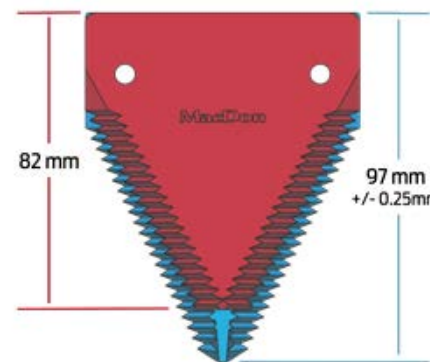
MacDon's ClearCut™ High-Speed Cutting System delivers just that; clean cutting at up to 30% faster speeds\*. Helping you get there is MacDon's improved knife drive with more power and new knife section geometry with 25% more cutting surface. A smooth close shave comes from two unique ClearCut™ Knife Guards; choose between Pointed Knife Guards or PlugFree™ Knife Guards that resist plugging even in the nastiest conditions.

\*Compared to previous model.

1-Series Section



2-Series Section



OVER  
**25%**  
MORE  
CUTTING  
SURFACE

■ 1-SERIES  
■ 2-SERIES

### 1-Series & 2-Series Differences

FD2 Series Sections are not compatible with older generation MacDon headers.



# Cutting Parts Guide



**CUT CLEANER.  
CUT FASTER.  
CUT MORE.**

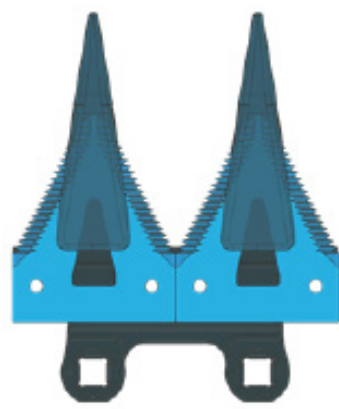
**1-Series Guard**



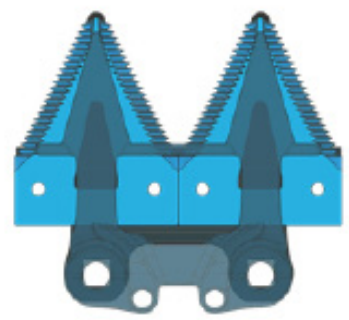
**2-Series Guard**



**ClearCut™  
Pointed Knife Guards**



**ClearCut™  
PlugFree™ Knife Guards**



**1-Series & 2-Series Differences**

FD2 Series Guards are not compatible with older generation MacDon headers.

## Know when to replace guards and sickle sections





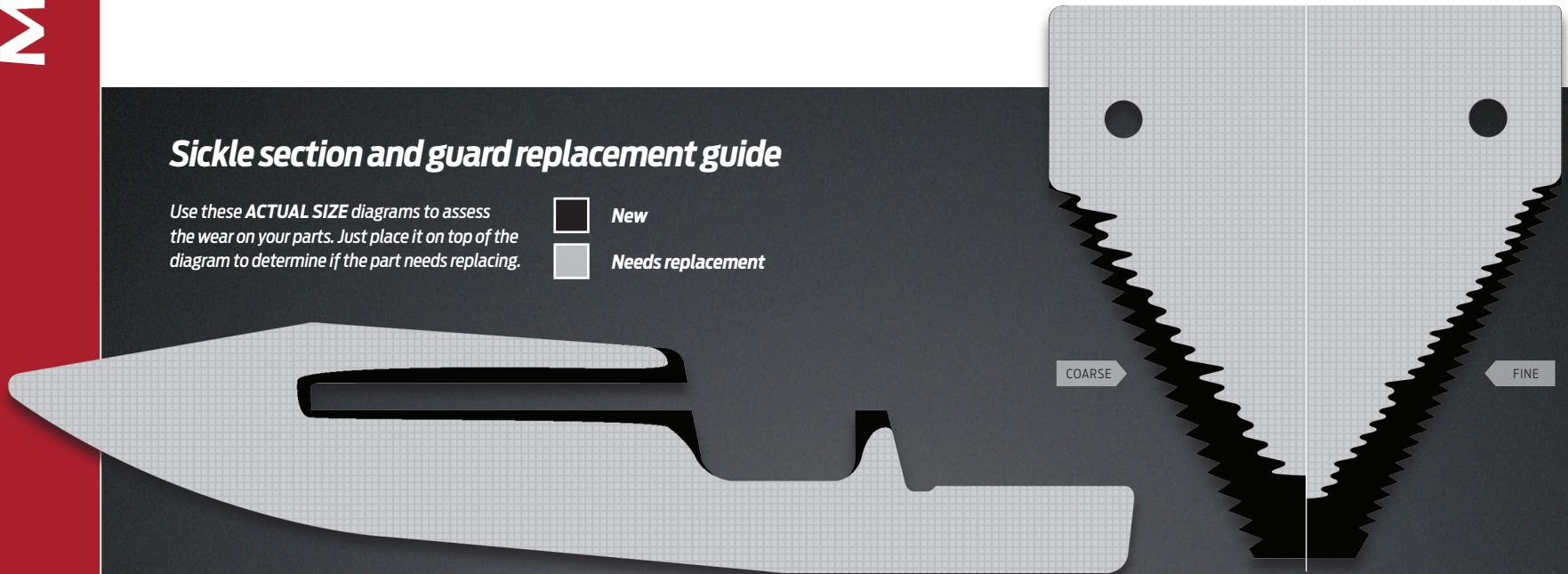
The guards and sickle sections of a MacDon header work together to cut crops and when worn, need to be replaced together to ensure optimal performance. Sickle sections are designed to wear back keeping their original shape, but wearing into a finer point that increases the distance between the two cutting surfaces. Sickle sections also develop wear grooves on top of the section from repeatedly dragging the crop between the section and the guard. Guards develop a round and smooth lower cutting edge, increasing the gap that the knife passes through. When this occurs they are ready to be replaced. Proper cutting component maintenance is critical for reliable and efficient header operation.

A clean cut promotes fast crop regrowth while a ragged cut slows regrowth. When your guards and sickle section cutting edges wear down, crop begins to pinch and rip, decreasing efficiency and increasing demand on horsepower.

### Sickle section and guard replacement guide

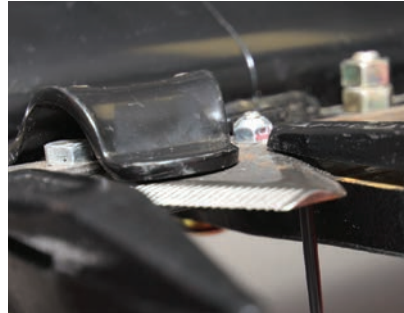
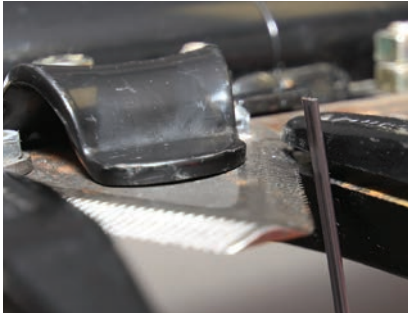
Use these **ACTUAL SIZE** diagrams to assess the wear on your parts. Just place it on top of the diagram to determine if the part needs replacing.

-  **New**
-  **Needs replacement**



# Cutting Parts Guide

## GOOD CUT



**Try using a common coffee stir stick to test whether your sickle sections and guards need replacement. If it cuts the stick they are still in good condition.**

## OKAY CUT









*In this scenario, we have a marginally worn guard and a new sickle section. The sickle section grabs the crop, pinches it between the guard and the section, and shears it off. Note the top portion of the cut crop briefly gets pulled into the gap but we still achieve an acceptable cut.*

## BAD CUT







*In the scenario to the left, we have a worn guard with a worn sickle section. Note the lower cutting edge of the guard is extremely dull and the sickle section has worn to a finer point and developed wear grooves on top of the segment. The sickle section grabs the crop and pinches it between the guard and the section. However, instead of shearing it off, the crop gets dragged through the gap in the guard. The crop in this case does not get cut at all. With the header moving forward, the crop could either tear or become uprooted. The pinched crop is now preventing the sickle section from stroking, causing a heavy load on all cutting components and possibly stalling the section. If the operator was to continue cutting in this scenario, they would have to drastically reduce ground speed and would still not guarantee clean cutting.*

## Summary - Sickles Sections

	1-SERIES SICKLE SECTIONS			2-SERIES SICKLE SECTIONS		
	<b>Coarse Sickles Section (Pack of 25)</b>	<b>Fine Sickles Section (Pack of 25)</b>	<b>Ultra Coarse Sickles Section (Pack of 25)</b>	<b>Coarse Sickles Section (Pack of 25)</b>	<b>Fine Sickles Section (Pack of 25)</b>	<b>Ultra Coarse Sickles Section (Pack of 25)</b>
						
	<i>On and off ground harvesting</i>	<i>On and off ground harvesting</i>	<i>On and off ground harvesting</i>	<i>On and off ground harvesting</i>	<i>On and off ground harvesting</i>	<i>On and off ground harvesting</i>
	<b>Crops: Wheat, soybeans, canola, cereals and pulses</b>	<b>Crops: Forage, grasses, flax and lentils</b>	<b>Crops: Thicker stemmed crops and adverse conditions</b>	<b>Crops: Wheat, soybeans, canola, cereals and pulses</b>	<b>Crops: Forage, grasses, flax and lentils</b>	<b>Crops: Thicker stemmed crops and adverse conditions</b>
<b>Premium</b>	<b>279641</b>	<b>279642</b>	<b>294947</b>	<b>286461</b>	<b>286462</b>	<b>286627</b>
<b>Value</b>	174845	118491	-	-	-	-

*Use this summary as an overview of the Sickles Sections that MacDon recommends and their intended use.*

## Summary - Guards

	1-SERIES GUARDS		2-SERIES GUARDS	
	<i>Pointed Guard</i>	<i>Stub Guard</i>	<i>Pointed Guard</i>	<i>PlugFree™ Guard</i>
				
	<i>On-ground harvesting</i>	<i>Off-ground harvesting in tough cutting conditions</i>	<i>On-ground harvesting</i>	<i>On-ground harvesting in high trash, downed crop and damp conditions</i>
<b>Premium</b>	<b>118344</b>	<b>Top - 34359 Bottom - 118489</b>	<b>286315</b>	<b>286318</b>
<b>Value</b>	118484	Top - 135586 Bottom - 135575	-	-

*Use this summary as an overview of the Guards that MacDon recommends and their intended use.*

**Demand the best for your harvest...**  
 Ask for MacDon Performance Parts at your local MacDon Dealer

**MacDon.com**  
 [performanceparts@macdon.com](mailto:performanceparts@macdon.com)