

**MacDon**

PULL-TYPES  
FOR HAY

R SERIES  
ROTARY DISC

A SERIES MOWER  
CONDITIONER

Performance has a name. **MacDon**





Faster down the straight-away.



**GET READY TO PUSH RESET** on your expectations on what a pull-type hay machine can achieve. Whether you choose MacDon's award winning R85 Rotary Disc mower or our advanced design A30-D Auger, you'll experience faster cutting, faster dry-down and improved windrow formation under all crop conditions. You'll also find it easier than ever to get going and open a field thanks to MacDon's patented Articulated Power Turn (APT) hitch (standard equipment on both models), which has been designed for quicker attaching and tighter turns. It all adds up to a new standard of performance that rewrites everything you think you know about pull-types.



3 year cutterbar and cradle warranty valid on R85 products.

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A Series Mower Conditioner Pull-Types  
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Faster in the turns.







The vertical pivot has been moved back from the tractor to significantly reduce turning radius and make it easier to open fields.

## EXCLUSIVE ARTICULATED POWER TURN (APT) HITCH

Exclusive to MacDon, the APT hitch found on the R85 Rotary Disc and A30-D pull-types represents a complete rethinking of hitch design by MacDon engineers. First, they insisted that the hitch have a high capacity all-hydraulic drive system to provide overload protection for all components and reduce maintenance requirements when compared to mechanical hitch designs. Next, they repositioned the drive-shaft so that a straight line is maintained between the tractor's PTO and header pump. This further reduced vibration and wear on the unit. They also rethought the hitch assembly and moved the vertical pivot back from the tractor, and allowed the front end of the tongue to extend over it. This resulted in a much tighter turning radius compared to conventional designs and the ability to pull the machine on either side of the tractor. Finally, our engineers added a horizontal pivot to fully accommodate the rolling movement of the mower during normal operation and minimize side loads on the rear of the tractor. The end of their efforts was a completely new hitch, one that improved maneuverability, reduced maintenance and made opening a field easier than ever.

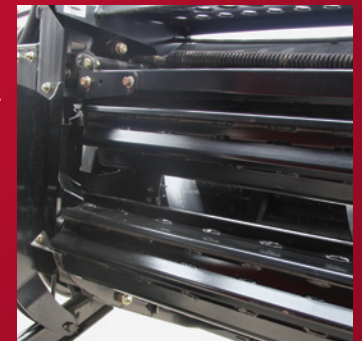


MacDon's APT hitch allows you to pull the machine on either side of the tractor for back and forth harvesting.



## WIDEST CONDITIONING ROLLS ON THE MARKET

To improve conditioning performance, the R85 Rotary Disc and A30-D pull-types have been equipped with the widest steel on steel rolls on the market (102"/2591 mm on the A30-D; 118"/3000 mm on the R85). Wider rolls result in a thinner mat of material passing through, which increases the amount of crop in contact with the rolls, improving crimping performance and ensuring thorough conditioning of the plant stem. These conditioning rolls also feature a design which more aggressively pulls crop away from the cutting discs and feeds it into the forming shield, for reduced power requirements and improved performance in both light crop conditions such as grass and heavier alfalfa type crops.



with a better hitch.



# R85

R SERIES ROTARY DISC PULL-TYPES



An impressive leap forward in



**SIGNIFICANTLY UPGRADED** in almost every important area, MacDon's R85 Rotary Disc Pull-Type reinvents what a rotary disc machine is capable of.

Operators will experience greatly improved durability, windrow formation and cutting speed, especially in tough, heavy or wet crop conditions.

### CUT LOWER, CUT CLEANER, CUT FASTER

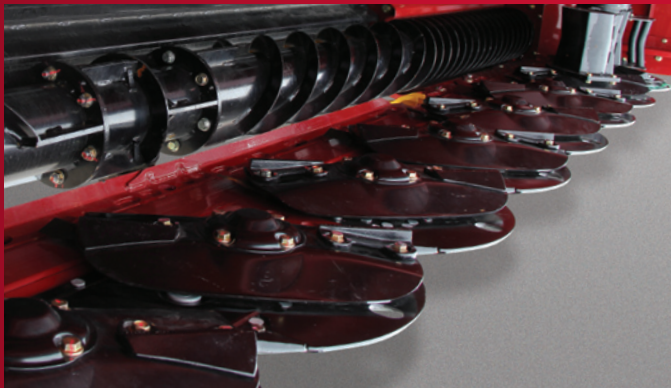
To help you cut lower and at a flatter angle we've both lowered the profile of the cutterbar and strengthened the design of the cutterbar cradle. These improvements combined with the R85's sturdy frame design and excellent spring flotation system allows the operator to run the machine faster over rough terrain and still maintain a consistently clean cut.



### STRONGER, LESS MAINTENANCE

MacDon's engineers have substantially strengthened the R85's header frame by making sure that the top link, lower lift arms and all header parts are anchored or bolted into sturdy frame members. Operators will also appreciate the R85's lower maintenance requirements thanks to its fewer moving parts than mechanical drive designs, and greasing intervals of 25 and 50 hours.

The replaceable inner skin on cutterbar access hoods helps to reduce possible damage to outer cover for improved resale value.



We've given the 16' (4.9 m) R85 an overshot auger to more efficiently transfer crop from the discs to the wide conditioner rolls and improve cutting performance in tougher conditions.

### IMPROVED CAPACITY AND CROP HANDLING

The R85 boasts a number of new features that improve capacity and crop handling. First, we've added an overshot auger (16'/4.9 m model) for more positive feeding and less back feeding of crop at the ends of the header when cutting heavier material. We've also reconfigured the disc rotation pattern to reduce the amount of debris thrown across the cutterbar into diverging paths. Finally, we've added accelerators on each disc to promote better crop flow rearwards and help power through thick and tangled crop. Together, these improvements add up to significantly increased cutting capacity, smoother – more positive – crop flow and reduced crop stripping, especially under wet and heavy crop conditions.

### NEW OVERLOAD PROTECTION

R85 cutterbars feature replaceable key shear protection in each hub assembly. The shafts are designed to break and seal off from the cutterbar if the disc comes into contact with a solid object. It also features a single replaceable key on the outside hubs that will shear if the disc comes in contact with an object that stops its movement. The hub can then be removed and the key replaced, allowing the operator to quickly get back to cutting.

# pull-type harvesting productivity.



# A30-D

A SERIES MOWER CONDITIONER PULL-TYPES



Be more productive with



**IN OUR NEVER-ENDING QUEST** to perfect the harvesting experience, MacDon offers the latest advance in hay and forage harvesting – the MacDon A30-D Pull-Type Mower Conditioner. Incorporating MacDon's extensive harvesting knowledge and experience, we've optimized this double knife drive machine's performance at every contact point with the crop. This has significantly improved overall cutting and conditioning performance and provided an increase in ground

speed over previous MacDon Mower Conditioners. The A30-D's design improvements are extensive and include adjustable conditioning, a new heavy-duty cutterbar design, a double knife drive system and a beefed up, easier to attach hitch. The result is a commercial quality machine that the high acreage producer can depend on to get the job done while maximizing the nutrient value of his crop.

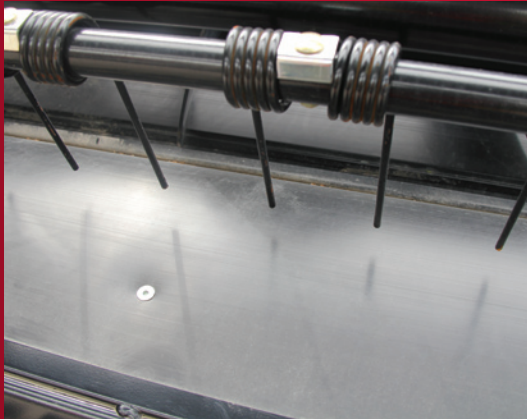
### Z-SHAPED CUTTERBAR

We've made the cutterbar super-strong by giving it a Z-shaped profile and incorporating a rectangular reinforcement. As a result the cutterbar is much stronger along both the horizontal and vertical planes, allowing it to better withstand impact from field obstacles.



### POWER-THROUGH UNPLUGGING

The A30-D's conditioner rolls can be easily unplugged from the comfort of the tractor seat. By simply raising the header, the conditioner rolls will separate, providing power-through unplugging of crop build-up.



### IMPROVED CROP FLOW AND HANDLING

Crop feeding is enhanced by MacDon's poly feed pan design (shown), progressive feed paddles and unique stripper bars which combine to allow for smooth feeding, even under adverse conditions.

### BUILT FOR THE TOUGH GOING

Like all MacDon harvesting machines, the A30-D is designed for the toughest conditions. Exceptional durability of the unit is assured by the heavy-duty cast housing of the dual wobble boxes and rugged internal components of the knife drive system. The A30-D's independent suspension system features heavy-duty flotation springs (shown) which allow the header to react quickly and smoothly to ground obstructions, reducing the likelihood of damage to the cutterbar and knife components.



our best mower conditioner yet.



## MORE GREAT STANDARD FEATURES



### GUARD ANGLE ADJUSTMENT OPTIONS

The A30-D comes with manual or optional hydraulic guard angle adjustment allowing you to easily switch between close cut and longer stubble cutting lengths.



### WIDE FLOTATION TIRES

The A30-D's wide 31 x 13.5 - 15 tires provide smooth flotation over uneven ground and a light footprint – an important advantage in soft soil conditions.

### SCULPTURED ROCK GUARDS

The R85 guards are designed to completely cover the underside of the cutterbar and cradle, these guards improve self-cleaning in sticky soil conditions.



### TRANSPORT LOCKS

Easy and quick to engage, the A30-D and R85 transport lock valves are activated by levers located on the hitch and on the header lift cylinders.



### FULL WIDTH FORMING SHIELD

This easy to adjust side forming shield makes it simple to set the width of the windrow. A rear fluffer shield is also standard and is used to adjust height and density of windrow for optimum dry down.



### SKID SHOES

MacDon skid shoes (16'/4.9 m model shown) operate in different positions to allow for cutting in rocky conditions (three positions on 16'/4.9 m, two positions 13'/4 m). This higher ground clearance allows for excellent rock protection.



The R85 is available in two pull-type sizes – 13' (4 m) and 16' (4.9 m) – and also in header versions for mounting on MacDon M Series SP windrowing tractors.



The A30-D is available in two pull-type sizes – 16' (4.9 m) and 18' (5.5 m) – and also in header versions for mounting on MacDon M Series SP windrowing tractors.



**R85 ROTARY DISC PULL-TYPE SPECIFICATIONS** (see page 6)

Size	13 ft. (4 m)	16 ft. (4.9 m)
Weight	5,760 lb. (2590 kg)	7,130 lb. (3240 kg)
Effective Cutting Width	12.78 ft. (3895 m)	15.83 ft. (4.8m)
Number of Cutting Discs/Blades	8/2	10/2
Disc Speed	2,530 RPM @ 1,000 PTO	
Gear Train Protection	Shearable key between spindle and hub	
Cutting Angle Range	0-7° below horizontal	
Knife Tip Speed	184 MPH (296 km/h)	
Transport Width/Length	156 in. (3952 mm)/286 in. (7260 mm)	192 in. (4546 mm)/344 in. (8760 mm)
Tractor Requirements <sup>1</sup>	110 HP (82 kW)	140 HP (104 kW)
Hay Conditioner Type	Intermeshing steel bars	
Hay Conditioner Length	118 in. (3000 mm)	
Hay Conditioner Diameter	9.0 in. (229 mm)	9.2 in. (233 mm)
Forming Shield	36 in. (915 mm) windrow to 102 in. (2540 mm) wide swath	
Hitch	Articulated Pivot Tongue (APT), controlled by double acting cylinder with transport lockout valve for swing cylinder and articulation joint, hydraulic header lift and swing	
Wheel/Tires	15 in. (381 mm)/11L - 15 SL 8 ply	15 in. (381 mm)/31 x 13.5 - 15 NHS 8 ply
PTO Options	1.375 in. (35 mm) dia. 21 T. PTO, 1.75 in. (44 mm) dia. 20 T. PTO	
Options	Tall crop divider, adjustable skid shoes, transport hitch for truck, hydraulic pressure gauge, drawbar or quick-hitch (3 point) compatible	

<sup>1</sup> HP requirements may vary based on crop conditions, terrain and cutting speed.

**A30-D MOWER CONDITIONER PULL-TYPE SPECIFICATIONS** (see page 8)

Size	16 ft. (4.9 m)	18 ft. (5.5 m)
Weight	7,750 lb. (3525 kg)	7,950 lb. (3615 kg)
Effective Cutting Width	16.25 ft. (4953 mm)	17.75 ft. (5410 mm)
PTO Drive	1,000 RPM	
Conveyor (Auger): Type/Drive/Speed	20 in. (508 mm) undershot, center-feed auger over replaceable high density polyethylene auger pans plus enhanced feeding with rubber feed fingers/Mechanical two "B" belts/275 RPM, 20T sprocket	
Sickle: Drive/Speed	Double knife MacDon design enclosed oil bath wobble box/1,912 SPM (loaded)	
Reel: Type/Drive/Speed	5 bat, oval closed bats with steel finger/Mechanical two "B" belts from auger/74 RPM with 20T sprocket (19T sprocket provided for 67 RPM reel)	
Adjustable Swath/Windrow Shields	36 in. to 100 in. (915 mm to 2540 mm)/Adjustable	
Conditioner: Type/Roll Length/Outside Dimension/Drive/Speed	Non-contact steel N-bar intermeshing crimping rolls, header mounted rolls and forming shields/102 in. (2590 mm)/9.17 in. (233 mm)/Hydraulic, motor to enclosed gearbox/736 RPM (loaded)	
Options	Tall crop divider, stub guards, additional skid shoes, gauge rollers, hydraulic angle header kit (check with dealer for tractor specifications required)	



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