

Front attachments

JAGUAR front attachments PICK UP DIRECT DISC ORBIS RU CONSPEED



# Harvesting maize isn't an art. But doing it efficiently is.

Built to meet the challenge.

With their versatile range of front attachments, CLAAS JAGUAR machines harvest an extremely diverse array of crops around the world. The effort put into the continuous development of the powerful front attachments is reflected in their high operating reliability. The development activity focuses in particular on the work quality, wear resistance and performance of the front attachments.







# JAGUAR front attachments.





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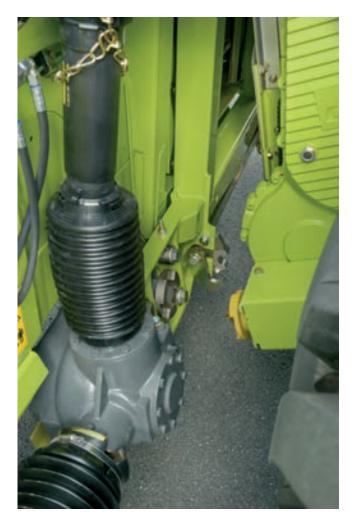
# Straightforward and convenient – coupling of all JAGUAR front attachments.





#### Quick, clean and convenient.

As the machines of the JAGUAR 800 or 900 family approach and couple with the front attachments, the drive train is automatically connected by means of the quick coupler. The easily accessible central locking system secures the front attachment to the forage harvester. Two flat-seal hydraulic couplings and a control cable enable clean connection of the front attachment functions.







## Intelligent connection.

Once the front attachment is connected electrically to the JAGUAR, various basic settings are configured automatically by means of the front attachment detection feature.

#### ORBIS 750

- Folding of front attachment in accordance with a preset front attachment height
- Traction pre-configuration for POWER TRAC in JAGUAR 900

#### ORBIS 900

- Folding of front attachment in accordance with a preset front attachment height
- Traction pre-configuration for POWER TRAC in JAGUAR 900
- 40 km/h enabled for travel with transport equipment, without transport equipment only 20 km/h

# On-road transport with excellent visibility.



## Straightforward and safe.

The front attachment can remain attached for on-road travel with the support of an optional integrated transport system or can be towed behind the machine.

Transport width

•			
PICK UP 380	mm	3976	
PICK UP 300	mm	3000	

On the PICK UP, the support wheels are folded up to provide the appropriate transport width. This can be performed mechanically, without the need for any tools, or hydraulically from the comfort of the cab.









In the case of maize front attachments with a working width of up to 6 m, the side sections are folded vertically. The ORBIS 750 and ORBIS 900 are folded sandwich-style. To ensure compliance with statutory axle-load regulations, an integrated transport system is available; this is an option for the ORBIS 750 and standard for the ORBIS 900.

#### Transport width

•			
RU 450	mm	3000	
ORBIS 750 / 600 SD / 600 / 450	mm	3000	
ORBIS 900	mm	3290	



High standard of ride comfort: the vibration damping system is activated when the JAGUAR is running on the road with a front attachment in place.



The DIRECT DISC is placed on the trailer and secured without the need for tools. In this way, it is possible to travel safely at up to 40 km/h.





# PICK UP 380 / 300.



### PICK UP family.

Ever-increasing yields and more powerful forage harvesters make sense only if the crop can be taken up cleanly and the design is both robust and easy to operate. The PICK UP 380 and 300 front attachments meet these requirements with a wealth of features.

#### Crop flow.

A clean crop take-up is ensured by the powerful, controlled rake with four or five tine rows. Furthermore, the guide wheels (which are attached without the need for tools) are fitted at the same height as the rake.

The double roller crop press and the large auger diameter ensure an excellent crop flow.

The optional spring-loaded intake auger increases the throughput when working in large swaths. The powerful drive train with variable speed adjustment via a two-speed transmission is protected by clutches.





Robust rake for clean crop intake





#### Robust construction.

The main frame supports the torsion-suspended rake and the floating intake auger. This arrangement allows optimal freedom of movement for excellent ground-contour following and high-performance crop intake.





Large auger for high-performance crop flow

### Crop intake.

The main frame of the wide PICK UP 380 is linked to a suspended frame by three arms. The additional steel rollers of the PICK UP 380 ensure optimal ground-contour following for loss-free crop intake.

# Loss-free harvesting and easy access.





## Loss-free harvesting with the CLAAS CAM PILOT.

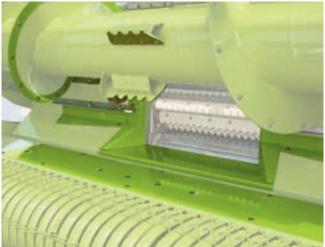
The CLAAS CAM PILOT takes control of the task of steering during the swath pick-up process. This makes it possible to attain working speeds of up to 15 km/h without fatiguing the operator. Furthermore, the operator is able to concentrate much better on filling the transport vehicle for a loss-free harvest.

The swaths are detected in three dimensions and the appropriate steering correction is applied automatically. As usual, the CLAAS CAM PILOT is activated via the control lever and deactivated by turning the steering wheel.









## Optimal accessibility.

One of the outstanding characteristics of the PICK UP family is its excellent accessibility. For example, when reversing after detection of a foreign body; the roller crop press (and, optionally, the intake auger) are automatically raised hydraulically. As well as making it easier to search for foreign bodies after the presence of metal or a stone has been detected, this arrangement allows wear parts to be replaced easily.

# DIRECT DISC 610 / 520.





Easy access



The standard-fit quick knife change dramatically reduces maintenance times.



Adjustable skids for the required cutting height



# Whole crop harvesting with DIRECT DISC 610 and 520.

Whether you're intending to use milk ripe plants for high-grade animal feed or as biomass for energy production, this front attachment means you can mow and chop in a single pass. The crop is first cut by the disc mower, after which it is fed directly to the intake auger via a paddle roller. From there, it is fed to the chopper intake.

DIRECT DISC 610 and 520 are approved for the JAGUAR 900 series, while the DIRECT DISC 520 is approved for the 800 series.



Simply hitch up for flawless harvesting.

- Direct drive of conveying elements with delayed activation of mower units via hydraulic coupling for reliable power transfer
- Cutting is handled by two proven P-CUT mower heads with SAFETY LINK modules for safe mowing
- The paddle roller is adjustable in three stages (continuous hydraulic adjustment available as an option); perfect adaptation to the harvesting conditions
- Three speeds for conveying elements to ensure a smooth crop flow
- Ideal ground-contour following with CONTOUR groundpressure control and suspended frame for excellent work quality
- Reversible conveying elements



Gentle start-up action of DIRECT DISC

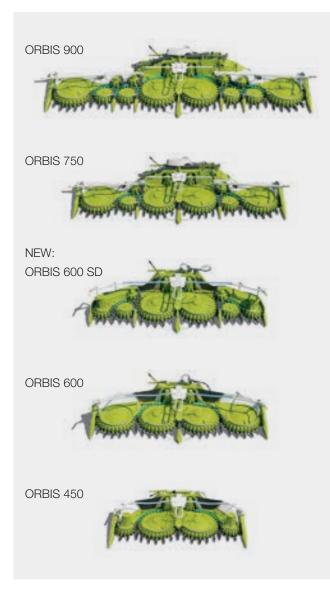


Paddle roller is raised hydraulically



Speed adjustment for optimal crop flow

# ORBIS 900 / 750 / 600 SD / 600 / 450. Row-independent harvesting.





Up to 9.0 m working width.

The ORBIS row-independent maize front attachment from CLAAS with working widths from 4.5 m to 9.0 m combines completely new design and drive ideas with the experience we have gained around the globe. Its outstanding features and excellent reliability ensure success during the maize harvest. A central locking system ensures that the ORBIS is securely connected to the JAGUAR. Power is transmitted smoothly via a quick coupler.



#### Smooth crop flow.

After cutting, the crop is picked up by the transport discs and fed loss-free to the JAGUAR through crop flow channels in the rear section of the ORBIS.

### Compact dimensions.

The ORBIS is characterised by excellent, unrestricted visibility and low axle loads. The extremely short structure facilitates simple manoeuvring, even in tight turns.

## Free-running drive.

The extremely low power requirement significantly reduces diesel consumption and enhances the overall performance of the forage harvester. The low starting torque enables you to engage and reverse under full load without any problems. The outstanding chopping quality is therefore maintained during forage transport vehicle changeovers.

NEW: The ORBIS 600 SD is offered parallel to the ORBIS 600.

The SD is particularly suited to normal and low-growing crops. The outer sections with the small discs and the additional vertical feed drums enable an extremely free-flowing crop flow. The ORBIS 600 with the large discs comes into its own in normal and very high yield maize stands.



# Save power and fuel.



#### Drive requires less power.

The JAGUAR transmits its power to the ORBIS maize front attachment mechanically. However, ORBIS does not require a huge amount of power. The new drive concept has fewer transmission elements, and the low starting torque is a major asset.

- Reduced diesel consumption, thanks to low power requirement
- Engage or reverse under full load
- The drive elements are individually protected
- Input transmission as clutchless reverser with two possible speed ranges
- 3-speed manual transmission for optimal speed adjustment for different cutting lengths and harvesting conditions
- The laid maize augers can be switched on or off individually to ensure an optimum crop flow
- Easy access to all drive modules



The drive to the laid maize augers can be switched off or on, as required.





The input transmission is fitted in a position which allows it to provide a slow or a fast speed for the entire ORBIS front attachment.



Three different input speeds can be set for the entire ORBIS front attachment without the use of tools.



Easy access to the drive elements

# A sharp cut and a reliable transfer.





Tubular bars



Knives with self-sharpening effect







#### Reliability.

The ORBIS concept featuring a combination of small and large discs is characterised by an extremely high crop flow. The ORBIS handles maize stands of up to 100 t/ha (US or Italian harvesting conditions) perfectly. When the machine is reversed, the plants which have already been cut remain on the large discs and are then drawn in. The low starting torque of the ORBIS means that it can be restarted at full load and at the upper rated speed at any time.

#### Three-tier structure.

However difficult the harvesting conditions may be, the threetier structure of the ORBIS transport discs ensures a clean and even crop flow every time.

- The synchronised rotation of the large cutting and transport discs guarantees a consistent and gentle crop transfer
- Thanks to the small distance between the cutting edge and the discs, ORBIS always leaves behind a uniform stubble height
- Sturdy tubular bars prevent the cobs from falling out, keeping losses to a minimum
- The blades are always sharp, thanks to the self-sharpening effect



Stubble is cut short and clean with frayed ends for fast rotting

# Excels in all types of terrain.



## Perfect ground-contour following.

The front attachment suspension maintains an ideal lateral balance so that the ORBIS adjusts itself optimally to the ground contours. This leads to an appreciable reduction in wear and increases reliability.

The suspended frame is linked to the main frame by three arms. It is controlled mechanically by means of a central damper or electrohydraulically via sensor skids (AUTO CONTOUR).

## The advantages:

- Low friction
- Light-footed
- Hugs the ground contours





The adjustable central damper has a defined central position to ensure safety and stability in all applications.

- Minimum bounce, even on slopes
- Optional wear skids are available
- Mechanical lateral balance when CONTOUR comes into contact with the ground
- Automatic lateral balance with AUTO CONTOUR by means of outer sensor skids
- No need to lock the suspended frame when driving on the road



Suspended frame arm geometry

Mechanical central damper



Wear skids



AUTO CONTOUR touch sensor

# ORBIS: great versatility.



The range of crops that ORBIS can harvest is growing.

Various attachments and add-ons are available to allow you to optimise your ORBIS for any application.

- Optional conveyor caps improve crop flow in laid crops or other difficult harvesting conditions
- The bolt-on guide fingers optimise crop uptake in a variety of harvesting conditions
- Guide finger extensions improve crop uptake in laid crops
- A narrow centre finger optimises the cutting performance in thin-stalked crops

- Optional long fingers, fitted ahead of the large discs, make for more precise crop uptake in laid crops
- Wide, bolt-on scrapers for the vertical feed drums make crop transfer to the precompression rollers easier



Narrow centre finger



Bolt-on scrapers



Harvesting miscanthus



Harvesting silphium perfoliatum



Harvesting igniscum



Harvesting triticale



Harvesting sorghum



Harvesting sudan grass

# Automatic guidance with the central sensor.



## CLAAS AUTO PILOT.

Two sensor skids each gauge a row of maize. The signals generated by these sensors are translated into appropriate steering impulses. The steering of the JAGUAR is automatic up to a speed of 12 km/h. Twin-row sensing supports this function in row widths of 37.5 cm up to 80 cm.



#### Advantages:

- Maximum driver stress relief
- Increased area output
- Reliable row guidance, even where there are gaps in the crop
- Maintenance-free and low-wear technology





# Hardly any wear. Low maintenance. High operational reliability.



## PREMIUM LINE for ORBIS.

Highly wear-resistant parts are recommended for extreme operating conditions, where there is a high proportion of sand, for example, or extended periods of operation.

#### High operational reliability.

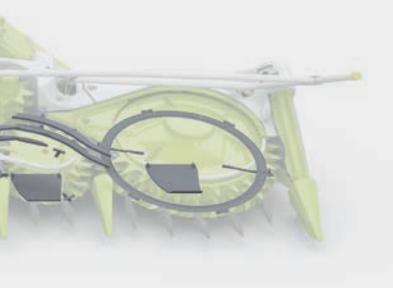
It's often the case that every minute counts during the forage harvesting period. Time-consuming maintenance work is a nuisance and also a cost factor, since it reduces the number of productive hours – and also your profit margin. With ORBIS, wear-resistant parts ensure high long-term reliability:

- The knives have a tungsten carbide coating to increase their service life
- The speed differential between the knife disc and the transport disc creates a self-sharpening action
- The knife discs and transport discs have a modular structure comprising six segments and are easily accessible; as a result, in the event of damage, only the segment concerned needs to be replaced, rather than the entire unit













Extremely maintenance-friendly design.

CLAAS engineers have made every effort to keep your maintenance requirements to a minimum.



- Lubrication is only required every 250 operating hours
- All lubrication points are easily accessible
- A transmission oil change is only required after 1000 operating hours
- All wear parts can be replaced quickly and easily

# Row-independent harvesting with the RU 450.





#### The RU 450 is still in demand.

The crop flow concept is based on three large cutting and transport discs and benefits in particular from the straightforward design. The drive of the RU 450 requires only little power. As a result, it is possible to switch the unit on and reverse it under full load while enjoying consistently high chopping quality.

The versatile RU is suitable for a wide range of applications and is therefore available not only for the JAGUAR 800 series, but also for the JAGUAR 900 series.





#### Reliable harvesting.

High quality work through reliable plant transport and even stubble: the combination of the aggressive transport disc and the scraper disc enables active plant transport under all conditions. This design is made all the more effective by the counterrotational knife disc. After cutting, the maize stems are transported to the intake auger while standing on the knife disc. The friction created by transporting the standing maize stems on the knife disc produces a self-sharpening effect.



## High throughput.

An aggressive crop flow is ensured by the intake auger whose speed can be optimised in line with the set chopping length.



# CONSPEED. Maize cob silage (MCS) harvesting.



#### CLAAS adapter.

The adapter allows the six-row CONSPEED maize picker to be attached to the JAGUAR. The robust transfer gearbox transmits the drive from the JAGUAR. The adapter has a feed roller designed to produce a perfect crop flow from the front attachment to the JAGUAR intake.

## Maize cob silage (MCS) harvesting with the combine picker on the JAGUAR.

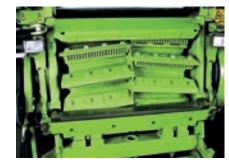
MCS is forage with a high energy concentration and is primarily used in cattle farming for milk and meat production.

The following additional equipment is recommended for high-quality WCS or MCS silage harvesting:

- Friction bar wedge installed behind the mounting block
- Friction concave plates
- Corncracker with fine meshed rollers and 60 % speed difference
- Micro-rasp bars for the JAGUAR 800 series







Rasp bar

Micro-rasp bars for 800 series





Corncracker



Maize cob silage (MCS)

## Advantages at a glance.



## Common features:

- The availability of appropriate front attachments for different crops opens up flexible opportunities for machine use
- Convenient fitting and removal
- Drive via quick-coupler
- Can be engaged and reversed at full load and at upper rated engine speed
- Outstanding ground-contour following through CONTOUR and AUTO CONTOUR ground pressure control
- Safe and comfortable on-road travel with vibration damping
- Compliance with statutory axle-load regulations thanks to integrated transport system

## PICK UP:

- Ideal ground-contour following as pick up is free to swivel as required and guide wheels are optimally positioned
- Wear components can be replaced quickly
- Twin roller crop press for optimal crop flow
- Hydraulic auger elevation for optimal accessibility when searching for foreign bodies

## DIRECT DISC:

- Proven P-CUT mower head with quick knife change system
- Hydraulic height adjustment of paddle roller for optimal configuration for different crop types
- Consistent and continuous crop flow

#### ORBIS:

- Extremely free-running drive with low starting torque and low power requirement
- Designed for high throughput
- Universally suitable for harvesting stalked crops
- High work quality
- Very low maintenance requirement

## CONSPEED:

- The adapter allows the maize picker to be attached for harvesting maize cob silage (MCS)
- Powerful yet gentle picking

PREMIUM LINE for ORBIS		
Part number	Description	Remarks
00 0383 148 0	Scraper, large knife disc, anti-clockwise	For ORBIS 900 / 750 / 600 / 450
00 0383 147 0	Scraper, large knife disc, anti-clockwise	For ORBIS 900 / 750 / 600 / 450
00 0498 380 0	Wear plate, sliding skid, large	For ORBIS 900 / 750 / 600 / 450
00 0499 006 0	Wear plate under knife disc	For ORBIS 900 / 750 / 600
00 0383 288 0	Intake drum, upper right	For ORBIS 900 / 750 / 600
00 0383 286 0	Intake drum, lower right	For ORBIS 900 / 750 / 600
00 0383 287 0	Intake drum, upper left	For ORBIS 900 / 750 / 600
00 0383 285 0	Intake drum, lower left	For ORBIS 900 / 750 / 600
00 0498 382 0	Wear plate, sliding skid, small	For ORBIS 900 / 750 / 600
00 0383 145 0	Scraper, small knife disc	For ORBIS 900 / 750 / 600
00 1319 479 0	Steel guide strip, centre left lower	For ORBIS 900 / 750
00 1319 480 0	Steel guide strip, centre left upper	For ORBIS 900 / 750
00 1319 835 0	Steel guide strip, small disc	For ORBIS 900 / 750
00 1319 481 0	Steel guide strip, centre right upper	For ORBIS 900 / 750
00 1319 487 0	Steel guide strip, centre left upper	For ORBIS 600 / 450
00 1319 485 0	Steel guide strip, centre left lower	For ORBIS 600 / 450
00 1319 825 0	Protection under ORBIS for drive, centre	For ORBIS 600 / 450
00 1319 486 0	Steel guide strip, centre right upper	For ORBIS 600 / 450
00 1319 669 0	Steel guide strip, outer	For ORBIS 750

PICK UP front attachments					
PICK UP		380			
Working width	mm	3800			
Transport width	mm	3970			
Length	mm	1500			
Height	mm	1400			
Weight	kg	1500			

Direct cutterbars		
DIRECT DISC		610
Working width	mm	5950
Transport length on trailer	mm	10900
Length	mm	2350
Height	mm	1730
Weight	kg	2700

Maize front attachments							
ORBIS		900	750	600 SD	600	450	RU 450
Working width	mm	9170	7600	6110	6150	4750	4500
Transport width	mm	3290	3000	2950	3000	3000	3000
Length	mm	2450	2450	2700	2350	2400	2900
Height	mm	1425	1425	2330	1350	1500	2100
Weight	kg	4000	3300	2830	2700	2255	2300

ORBIS 900 / 750 with transport system: wheelbase to JAGUAR					
JAGUAR		Distance from cent			
900	mm	1300			
800	mm	1480			

Compatibility of front attachments with JAGUAR								
	PICK UP 380 / 300	DIRECT DISC 610 / 520	ORBIS 900	ORBIS 750	ORBIS 600 SD / 600	ORBIS 450	RU 450	Six-row CONSPEED maize picker with adapter
JAGUAR								
900 series	0/0	0/0	0	0	0/0	0	0	0
800 series	0/0	-/0	_	0	0/0	0	0	0

Remarks

For DIRECT DISC 520

For DIRECT DISC 610 / 520

CLAAS continually develops its products to meet customer requirements. This means that all products are subject to change without notice. All descriptions and specifications in this brochure should be considered approximate and may include optional equipment that is not part of the standard specifications. This brochure is designed for worldwide use. Please refer to your nearest CLAAS dealer and their price list for local specification details. Some protective panels may have been removed for photographic purposes in order to present the function clearly. To avoid any risk of danger, never remove these protective panels yourself. In this respect, please refer to the relevant instructions in the operator's manual. All technical specifications relating to engines are based on the European emission regulation standards: Stage. Any reference to the Tier standards in this document is intended solely for information purposes and ease of understanding. It does not imply approval for regions in which emissions are regulated by Tier.

PREMIUM LINE for DIRECT DISC

Description

Mowing disc for bolt-on knives

Mowing disc for quick knife change system

Part number

00 0905 014 0

00 0137 448 0

30	0	300 HD
30	00	3000
30	00	3000
15	00	1450
14	.00	1300
12	00	970

520
5125
10000
2350
1730
2600

ntre of axle of ORBIS transport system to centre of JAGUAR drive axle





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