Front attachments

JAGUAR front attachments

PICK UP    DIRECT DISC    ORBIS
RU    Adapter for maize picker
Efficient maize harvesting is an art.

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

Intelligent connection.

In conjunction with the new JAGUAR 900 series (Type 498) and the front attachment module, the following values are saved:

- Front attachment end stops
- Last chop height preselection values
- Last chop height adjustment values
- Last working position
- Last AUTO CONTOUR values
- Front attachment speed setting for chop length
- Front attachment operating hours
- Serial number

Quick, clean and convenient.

As machines of the JAGUAR 800 or 900 family 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 with the aid of the front attachment detection feature.
**On-road transport with excellent visibility.**

Straightforward and safe.

For on-road travel, the front attachment is carried on the JAGUAR and can be supported by an integrated transport system if required.

On the PICK UP, the support wheels are retracted to provide an appropriately narrow transport width. Wheel retraction can be performed mechanically, without the need for any tools, or hydraulically from the comfort of the cab.

<table>
<thead>
<tr>
<th>Transport width</th>
<th>PICK UP 380</th>
<th>mm</th>
<th>3976</th>
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<tbody>
<tr>
<td>PICK UP 300</td>
<td>mm</td>
<td>3000</td>
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In the case of maize front attachments with a working width of up to 6.0 m, the side sections are folded vertically; in the case of the ORBIS 750 and ORBIS 900, horizontally on top of each other. An integrated transport system available for the ORBIS 750 and the ORBIS 900 ensures compliance with the statutory axle-load regulations.

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<th>Transport width</th>
<th>RU 450</th>
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<tr>
<td>ORBIS 750 / 600 SD / 600 / 450</td>
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<tr>
<td>ORBIS 900</td>
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High standard of ride comfort: the JAGUAR runs on the road with the front attachment in place and vibration damping activated.

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.
NEW: PICK UP 380 / 300.

PICK UP family.

Ever-increasing yields and more powerful forage harvesters call for a very clean crop take-up and technology which is both robust and extremely user-friendly. The PICK UP 380 and 300 front attachments meet these requirements with a wealth of options.

The PICK UP for the JAGUAR stands out with its excellent ground-contour tracking and high throughput.

Crop flow.

The powerful, controlled rake with four or five tine rows enables a clean crop take-up. Furthermore, the guide wheels (which can be adjusted without 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 throughput when handling large swaths.

PICK UP family.

The auger speed is matched to the set chop length by means of the 3-speed transmission or by substituting the sprockets. The variable front attachment drive allows the machine performance to be matched optimally to the field conditions.

Robust roller crop press.

Thanks to its end-position damping and very close proximity to the intake auger, the roller crop press ensures an excellent crop flow.

PICK UP family.

Suspended frame for PICK UP 300 and 380.

The main frame supports the torsion-suspended rake and the floating intake auger. The suspended frame is attached to the main frame by means of a central pin, three arms and a spring to return the frame to the neutral position. This arrangement enables ideal freedom of movement for optimal ground-contour tracking and high-performance crop pick-up.

Suspended frame for PICK UP 300 and 380.
Loss-free harvesting – 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 – thereby making 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 CLAAS CAM PILOT detects the swaths in three dimensions and applies the appropriate steering correction automatically. As usual, it is activated via the control lever and deactivated by turning the steering wheel.

Optimal accessibility.

Excellent accessibility is one of the key characteristics of the PICK UP family. For example, during the reversing procedure after detection of a foreign body, the roller crop press is automatically raised hydraulically (optional raising of the intake is also possible). 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.

The proven CONTOUR system is available for clean crop pick-up. A new feature is active height control using potentiometers. The ACTIVE CONTOUR system enables fast operation while maintaining the rake at the correct distance from the ground.
**DIRECT DISC 600 P / 500 P and 600 / 500.**

Whole crop harvesting with the DIRECT DISC.

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.

**NEW: DIRECT DISC 600 P / 500 P.**

Plants cut with the MAX CUT mowing bar are fed to the intake auger by means of a height-adjustable paddle roller. This enables an extremely consistent crop flow, even when the crop is very short.

**DIRECT DISC 600 and 500.**

The crop is fed straight from the mowing bar to the intake auger. As a result of the extremely large intake auger with its 800 mm diameter, both DIRECT DISC model series have excellent throughput.

The DIRECT DISC 600 and 500 are notable in particular for their ability to handle very tall plants, such as sorghum, growing to heights of up to 4.0 m. CLAAS offers side knives for use in severely intertwined crops.

**DIRECT DISC application areas**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Grass</th>
<th>Whole plants (grain)</th>
<th>Whole plants and legumes</th>
<th>Energy grass</th>
<th>Wild crops</th>
<th>Alternative energy plants</th>
<th>Sorghum</th>
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</thead>
<tbody>
<tr>
<td>Crop height up to 50 cm / 20”</td>
<td>Average yield (small / short plants)</td>
<td>High yield (large / tall plants)</td>
<td>e.g. wheat / rye</td>
<td>e.g. Silachina</td>
<td>e.g. melon / melon</td>
<td>e.g. phragmites</td>
<td>Crop height up to 4.0 m</td>
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**DIRECT DISC 600 P / 500 P**

- Delayed activation of mowing units means that DIRECT DISC can be switched on under full load
- Three-speed transmission for optimal adjustment of crop flow to field conditions or different chop lengths
- Two externally driven mowing bars from the M-CUT model series with quick knife change system and SAFETY LINK modules for safe mowing
- Paddle roller and intake auger for perfect crop flow in low to medium-height crops
- Intake auger with very large diameter for high throughput and very high crops
- Ideal adaptation to ground contours through mechanical balance system and ground pressure control for excellent work quality

**Simply hitch up for flawless harvesting.**

**DIRECT DISC 600 / 500.**

- Powerful drive train with three-speed transmission
- Standard – Not available

**DIRECT DISC 600 P / 500 P.**

- Adjustment of paddle roller height, optional hydraulic adjustment also available

**DIRECT DISC 600 / 500 with MAX CUT mowing bar.**

- Powerful drive train with three-speed transmission
- Standard – Not available

**DIRECT DISC 600 P / 500 P with paddle roller.**

- Powerful drive train with three-speed transmission
- Standard – Not available
The ORBIS row-independent maize front attachment from CLAAS 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.

**Up to 9.0 m working width.**

A central locking system ensures that the ORBIS is securely connected to the JAGUAR. Power is transmitted smoothly via a quick coupler.

**Row-independent harvesting.**

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.

**ORBIS 900 / 750 / 600 SD / 600 / 450.**

**Optimal 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 maneuvering, 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. Thanks to the low starting torque, it is possible to engage and reverse under full load without any problems. The outstanding chopping quality is therefore maintained during forage transport vehicle changeovers.

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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 drive concept requires only a few transmission elements, and the low starting torque is a major asset.

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

<table>
<thead>
<tr>
<th>ORBIS (T drive)</th>
<th>Gear ORBIS speed</th>
<th>Clutchless reverser position</th>
<th>Intake drum position</th>
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<tbody>
<tr>
<td>short</td>
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<td>Chop length</td>
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<td>very long</td>
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The drive to the laid maize augers can be switched off or on, as required

Variable front attachment drive JAGUAR 900 (Type 498)

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

Two-stage speed adjustment of vertical intake augers on ORBIS with T drive

As an option, 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.

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 (typical of 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 or in the upper rated speed range at any time.

Three-tier structure.

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

- The synchronised rotation of the cutting and transport discs enables 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 catch falling cobs and so keep 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

Tubular bars

Knives with self-sharpening effect
Excels in all types of terrain.

Perfect adaptation to ground contours.

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
- Low maintenance and low wear characteristics

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

- Minimum bounce, even on slopes
- Optional PREMIUM LINE 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
ORBIS: great versatility.

From laid maize to diverse crops – the ORBIS harvests everything.

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

- Optional conveyor caps make for improved 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

Harvesting miscanthus
Harvesting siphium perfoliatum
Harvesting igniscum
Harvesting triticale
Harvesting sorghum
Harvesting sudan grass
Automatic guidance with the central sensor.

CLAAS AUTO PILOT.

As two sensor skids each gauge a row of maize, the sensor signals are translated into steering impulses. Twin-row sensing supports automatic guidance of the JAGUAR up to a speed of 12 km/h and with row widths of 37.5 cm to 80 cm.

Advantages:

- Maximum operator workload reduction
- Increased area output
- Reliable row guidance, even where there are gaps in the crop
- Maintenance-free and low-wear technology

PREMIUM LINE protection against wear.

1. PREMIUM LINE crop flow: a special wear coating gives field drums low wear characteristics. Welded interior guide strips made from HARDOX. Exterior guide strips made of steel. Additional wear elements to protect the large cutting discs and knives.

2. PREMIUM LINE skids: additional skids as protection against wear.

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 is 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 difference 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 done all they can to keep 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 and at the upper end of the rated speed range, thereby ensuring consistent 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: thanks to the combination of the aggressive transport disc and the scraper disc, the RU 450 enables active plant transport under all conditions.

This design is made all the more effective by the counterrotational knife discs. After cutting, the maize stems are transported on the knife disc to the intake auger. The friction created by transporting the standing maize stems has a self-sharpening effect on the knife disc.

High throughput.

An aggressive crop flow is ensured by the intake auger whose speed can be optimised in line with the set chopping length.
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
- MULTI CROP CRACKER with fine meshed rollers and 60 % speed difference
- Micro-rasp bars for the JAGUAR 800 series
- MULTI CROP CRACKER MAX

Adapter.

The adapter allows a six or eight-row combine harvester maize picker to be attached to the JAGUAR. The robust transfer gearbox transmits the drive from the JAGUAR. The adapter has a feed roller to optimise the crop flow from the front attachment to the JAGUAR intake.
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 switched on and reversed under full load and in the upper rated speed range.

- 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.

DIRECT DISC:

- Moving bar with quick knife change system.
- Various possibilities for adjustment to different crops and field conditions.
- Consistent and continuous crop flow.
- Designed for high throughput.
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- Consistent and continuous crop flow.
- Designed for high throughput.

Adapter for combine harvester maize picker:

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

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Ensuring a better harvest.