

**SELF-PROPELLED FORAGE  
HARVESTERS  
HESSTON 7715-7720-7725**



**FIATAGRI**







## The self-propelled forage harvesters for all uses

Farmers and contractors have no problem finding the right machine for their particular requirements in the wide range of Hesston forage harvesters.

These rugged, versatile machines are right there on the job during the entire harvesting season, handling green or semiwilted crops in the Spring, to the ensilage of maize in the Autumn.

A wide choice of heads for a vast range of different uses, reduced conversion times, easy-to-use controls, exceptional driving comfort and constant productivity mean top flight performance during the entire harvesting season.

The powerful Fiat engine, the hydraulic transmissions of the heads, feedrolls and ground drive, the generously dimensioned tyres all play a decisive role in achieving maximum output, in reducing idle times and enhancing driver comfort.

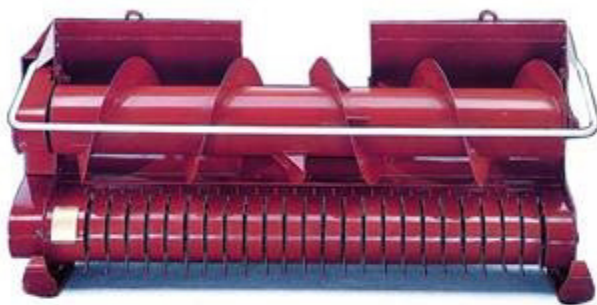
# Different heads for a wide range of uses

## 2.55-3.60 pick-ups

The 2.55 pick-up is ideal for gathering very thick windrows. The open side design facilitates even feeding of wide windrows.

The 3.60 pick-up is particularly useful for the gathering of two swaths left by a 2.40 m wide mower-conditioner.

The central articulation of both types of pick-up guarantees perfect harvesting even on difficult uneven ground. The hydraulic transmission allows adaptation of head speed to differing crop conditions.



## 3.60 cutting head

With their central suspension, Hesston cutting heads cope effectively with all types of crop, even on difficult irregular ground. Speed and position of the large-diameter, 5-bat reel are adjustable. The high speed knife ensures fast clean cutting of all types of crop.



## 4-row maize head

The raised side fairings and low profile of Hesston heads ensure complete gathering even of heavily lodged crops. Direct transport to the feed rollers, is a characteristic of the converging system, which guarantees flawless feeding and top quality shredding. The hydraulic transmission allows constant variation of head speed and provides for greater safety, lower fuel consumption and fast engagement of the transmission.





#### **5-row maize heads**

With its raised sides, direct crop flow and appropriately shaped profile, this head ensures efficient gathering of lodged crops and no cutting loss of standing maize.

**The conveyor chains**, set forward in relation to the discs, firmly grasp the stalks before cutting, thus guaranteeing excellent feed.

The conveyor chains and the rotary discs are fitted with automatic adjustment devices, for chain tension and disc precompression.

**The hydraulic transmission** allows constant variation of feed speed.

The 5-row head also lets the drive wheels pass between the rows of maize without passing over the cut stalks, thus avoiding damage to the tyres and enhancing driving comfort.

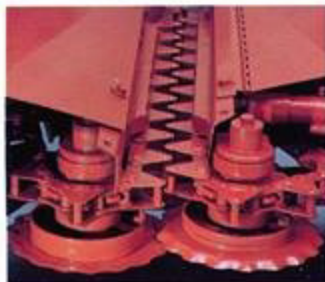
The 5-row head allows a 25% lower forward speed compared with the 4-row head without however reducing machine productivity or productivity can be increased by 25% at the same forward speed.

**Centralised lubrication** reduces lubrication times and makes for fast, easy maintenance.

#### **Control devices:**

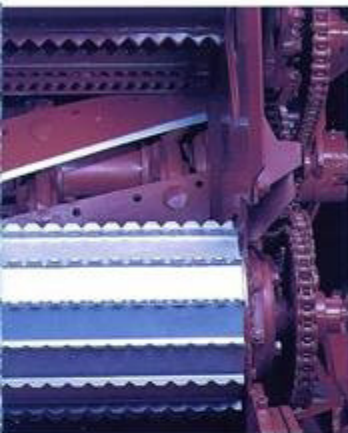
**Cutting height:** ideal for the maize head. Allows the operator to select the cutting height at which he wants to work.

**Ground load:** suitable for the pick-up and cutting head. This device allows selection of head ground pressure, which remains constant and can be controlled directly from the driving position.





# Reliable transmissions with easy maintenance



**The modular cast iron gear-box** of the cutting cylinder drive ensures stability and safety.

A universal joint with slip clutch transmits motion to the cutting cylinder and protects internal parts against overloads.

**The feedrolls** are driven by a hydraulic motor which allows variation of feed speed and therefore adjustment of cutting length from 0 to 24 mm. The hydraulic transmission also allows reversal of the direction of feed under load, whenever necessary.

An important feature for machine performance and safe, fast reversal.

**The feedrolls** determine production capacity and quality of the shredded crop. Hesston feedrolls have an unusually wide opening throat and the 13 tension springs guarantee high roll pressure on the crop for good packing and accurate shredding.

On the Hesston 7715-7720, a mechanical device (hydraulic on the 7725) allows opening of the top feedrolls for inspection and checking of the knives and shear bar.

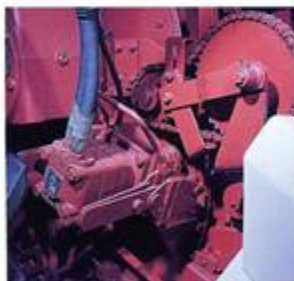
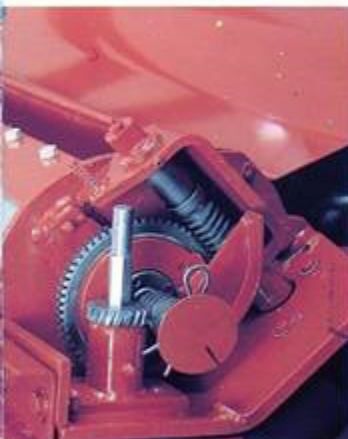
**The grinding wheel of the electric sharpener** acts across the full width of the knives, for fast even sharpening of the entire blade.

Frequent sharpening guarantees excellent shredding, reduction of power absorption and higher productivity.

**The Roll-on, Roll-off** device allows fast disassembly of the cutting cylinder from the machine. This allows easy access to the cutting cylinder and knives for maintenance or inspection.

This operation can be performed in the field.

**Fast, easy adjustment** of the shear bar. A single screw allows adjustment of both sides of the shear bar. The shear bar can be reversed to increase working life.



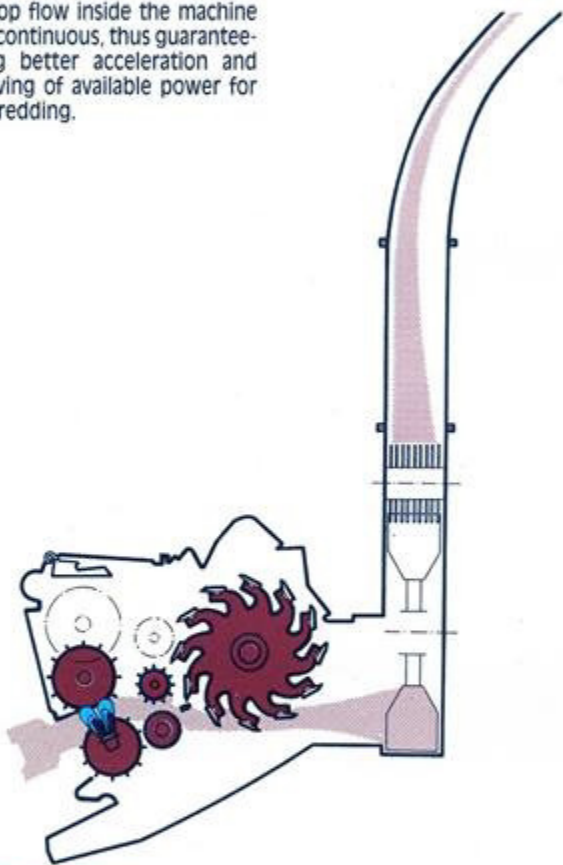
# High quality shredding

A rugged 66-cm wide, 61-cm diameter cutting cylinder with 12 knives rotating at a speed of 1200 rpm provides a cutting frequency of 14400 cuts per minute. This is the mainstay of the machine's top performance characteristics. The cutting cylinder is driven by oil-immersed bevel gears from a shaft containing a slip clutch which protects the transmission from overloads. The helical shape of the knives allows continuous cutting which reduces the power requirement.

Three types of shear bar are available: universal, forage, and maize, allowing selection of the right bar for the job on hand.

The metal detector located at the entrance to the throat protects all internal parts from possible damage by pieces of metal drawn into the machine.

Crop flow inside the machine is continuous, thus guaranteeing better acceleration and saving of available power for shredding.





## The engine: high on the list of priorities

The engine and the transmission are of decisive importance in forage harvesting.

All Hesston forage harvesters are driven by powerful, sturdy Fiat engines with a large power reserve. With a displacement of 14 litres and powers of 240 Hp (7715), 300 Hp Turbo (7720) and 345 Hp Turbo Intercooler (7725), Hesston forage harvesters are able to achieve top performance even under the most difficult conditions. The Fiat engines of Hesston forage harvesters embody the results of many years of research and testing for this specific use.

These engines, always ready to supply the power needed to cope with changes in load, have a power reserve able to guarantee maximum power even during difficult phases of the job.



## Transmissions and ease of access



**The ground drive transmission** is fully hydrostatic. Elimination of the gearbox makes it possible to reduce power take-off and transmission consumption.

The two hydrostatic motors are housed directly in the drive wheels and elimination of the final drives further enhances reliability.

Two work/transfer speed ranges are available by varying the displacement of the hydraulic motors; this can be done without stopping the machine.

**Large inspection covers** allow easy access to the radiator and air filters. The engine and hydraulic pumps can be accessed from both sides of the machine raising the inspection covers provided.

The rear grille traps even the most minute impurities therefore reducing radiator cleaning to a minimum.





# A functional cab with unmatched comfort



Driving comfort always has a direct effect on performance. The Hesston cab provides the right solutions to all the practical problems encountered when forage harvesting: full visibility also to the rear, tinted athermic windows, perfect soundproofing, air conditioning (on request), adjustable seat and steering columns with all the controls and instruments within easy reach.

Top comfort for top performance.

## **Multi-purpose levers**

On machines with hydrostatic ground drive, the driver has always been faced with the problem of having to perform several operations with his right hand.

Hesston overcame this problem some time ago by grouping all the main controls on the handle of the lever: lifting/lowering of the head, swivelling of the discharge spout, adjustment of the directional deflectors and reverse unit.

The operator can therefore perform the main operations involved without letting go of the handle.

## **Control panel**

Located to the right of the operator, this includes all the other control levers and engine engagement switch, as well as the multi-purpose joystick, all within easy reach of the operator.

## **Performance monitoring satellite unit**

Located on the righthand upright of the cab, in sight of the operator, this unit includes all the main monitoring devices. The various parts of the machine are clearly identified by symbols, while telltales alert the operator of any malfunctions and a buzzer attracts his attention if he is busy with other operations.

## **Cab windscreen**

The cab is set well forward and the rounded, sloping windscreen provides excellent visibility of the various heads and protects the driver against dazzling during day and night-time work.

A large single-blade windscreen wiper gives the driver a clear view of the work on hand unobstructed by dust or rain.

## **Air conditioner**

Increasingly wide use of forage harvesters, especially during the hot periods of the year, means that air conditioners are requested more and more frequently. With the air conditioning system, the driver no longer needs to open cab doors and windows with consequent invasion of noise and dust in the cab.

The air conditioning system now tends to play an increasingly important part in enhancing driver comfort.



# Accurate blowing for fast unloading

## Blower

The new 6-paddle blower with adjustable band provides sufficient acceleration of the crop to fill any trailer or truck even if located behind the machine, as happens when opening the field.

The Roll-on, Roll-off system allows easy access for adjustment or inspection.

## Grain cracking device

When harvesting very ripe maize, the grain cracking bars and friction pan are often not sufficient for complete breaking of the grain.

In these cases, it is advisable to use the grain cracking device (supplied on request). This is mounted on the unload spout, downstream of the blower and consists of 4 sets of blades that rotate at a speed of 4215 rpm.

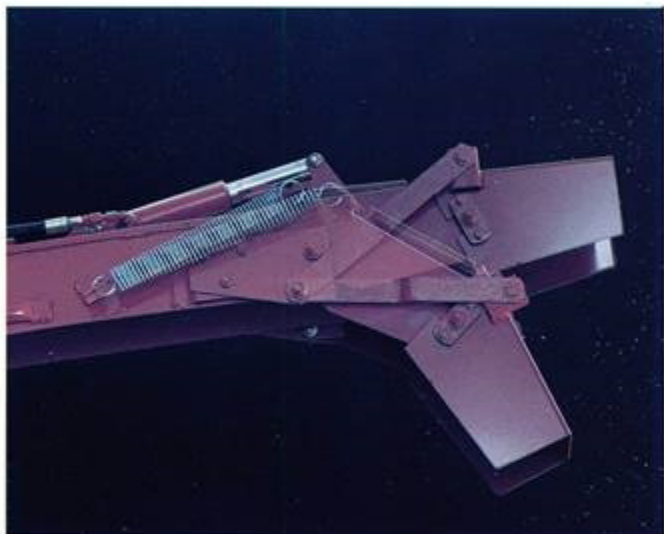
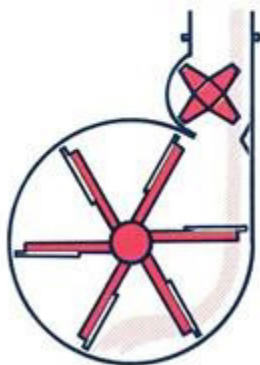
The crop, accelerated by the blower, is deviated by an adjustable deflector towards the grain cracking device, increasing or decreasing its efficiency.

The grain cracking device beats the grain, cracking it without crushing it. The green part of the plant remains intact while complete cracking of the grain is ensured.

## Unloading spout

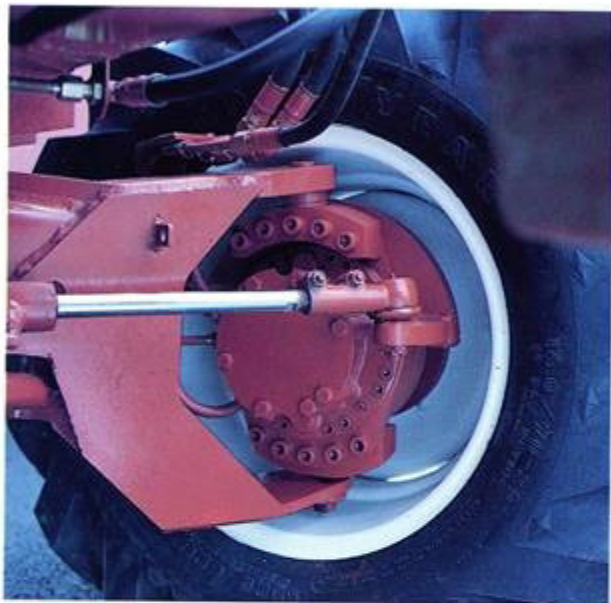
Sturdy and rugged, the unloading spout is shaped for efficient unloading in both trailers and trucks. The spout can be rotated hydraulically by 200° for unloading from either side of the machine; complete filling of the trailer is guaranteed by the hydraulically controlled double-hinged deflector which allows adjustment of discharge for optimal filling of the trailer.

A hydraulic device allows lowering of the spout, reducing its height, during road hauls and to avoid any risk of damage (standard on the 7725 model).





## Accessories that are really useful



### **Four-wheel drive** (on request)

When the going is really hard because of bad weather, soft or sloping ground, the Hesston 4WD is the right solution to avoid stopping the machine or reducing productivity.

With the 4WD, the rear wheels also become drive wheels. A valve controls the tractive force of the hydrostatic motors mounted directly on the hubs of the rear wheels. The 4WD can be bypassed during road hauls or when not required.

### **A complete range of accessories**

Hesston forage harvesters, renowned for their unmatched cutting quality, can be equipped with a wide range of really useful accessories to cope with even the harshest conditions.

The toothed bars mounted on the cutting cylinder ensure good cracking of the grain and consume very little power.

**The vertical bar cutting screen** available in various sizes can be used with maize to preserve all the food value of crops with uneven dampness.

**The new grain cracking bars**, fixed to the bottom of the cutting cylinder box further enhance versatility especially when handling very dry maize.





# Technical specifications

	7715	7720	7725
<b>Dimensions and weight</b>			
Tyres			
- front standard	23.1-26	23.1-26	23.1-26
- front optional	28.1-26	28.1-26	28.1-26
- rear	12.5-18	16.0/70-20	16.0/70-20
Weight	8200	8400	8500
Dimensions			
- width	2.87 m	2.87 m	2.87 m
- length	5.00 m	5.00 m	5.00 m
- height	3.75 m	3.75 m	3.75 m
<b>Engine</b>			
Fiat	8210 I	8210 Turbo	8210 Turbo
Displacement	13798 cc	13798 cc	13798 cc
Power	240 hp at 2200 rpm	300 hp at 1900 rpm	345 hp at 1900 rpm
Fuel tank	475 l	600 l	600 l
Hydraulic tank	70 l	70 l	70 l
<b>Transmission</b>			
Hydrostatic with Pociain motor in the wheels	Yes	Yes	Yes
<b>Steering</b>			
Hydrostatic steering	Yes	Yes	Yes
Steering radius	5.90 m	5.90 m	5.90 m
<b>Electrical system</b>	12/24 V	12/24 V	12/24 V
<b>Feedrolls</b>			
No. of rolls	4	4	4
Pressure: 13 independent springs	X	X	X
Hydraulic roll opening	Opt.	Opt.	Standard
Hydrostatic transmission	X	X	X
Constantly variable speed	X	X	X
Reversal of direction on the move	X	X	X
Feed opening	1400 cm <sup>2</sup>	1400 cm <sup>2</sup>	1400 cm <sup>2</sup>
Metal detector	Standard	Standard	Standard



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<b>Cutting cylinder</b>			
Width x diameter	66 x 61 cm	66 x 61 cm	66 x 61 cm
Number of knives	12	12	12
Knife holders: 4 splined on the cutting cyl. shaft	X	X	X
Helical tungsten carbon treated knives	X	X	X
Hydraulically adjusted cut width	X	X	X
Quickly adjusted reversible shear bar	X	X	X
Protection: shear bolt	X	X	X
Speed 1200 rpm	X	X	X
Flu-vanes	X	X	X
Remote controlled electrical sharpening	X	X	X
Fast roll-on, roll-off of shredding system	X	X	X
<b>Blower</b>			
Diameter 914 mm	X	X	X
Speed: 787 rpm	X	X	X
6 adjustable paddles	X	X	X
Vertical position	X	X	X
<b>Unloading spout</b>			
Stowable during road hauls	pneum.	pneum.	hydraulic
Hydraulic swiveling of unloading spout and deflectors	X	X	X
Rotation: 200°	X	X	X

	7715	7720	7725
<b>Cab</b>			
Laverda 3000 series type with air conditioning, heating	X	X	X
Centralized ground drive control lever			
Including:			
- unloading spout rotation	X	X	X
- angle of deflectors	X	X	X
- lifting of the equipment	X	X	X
- feed reverse unit	X	X	X
Draft and position control for lifting the group	X	X	X
Feedroll opening control	Opt.	Opt.	X
Unloading spout retraction control	X	X	X
<b>Standard equipment</b>			
Cab	X	X	X
Working lights	4	4	4
Parking lights	X	X	X
<b>Optionals</b>			
Corn craker	-	X	X
4WD	X	X	X
Air conditioner	X	X	X
<b>Accessories</b>			
Toothed bars for cutting box	X	X	X
Pan for shredding chamber	X	X	X
Recovery grille	X	X	X
Tow-bar	X	X	X
<b>Adaptable equipment</b>			
Pick-up	2.55 or 3.60 m	X	X
Shear bar	3.60 m	X	X
Maize heads:	5 row	X	X
	4 row	X	X



# **The Fiatagri service. Original spares and servicing system. An assurance for customers all over the world.**

The San Matteo, Modena, Spares Centre is the heart of the Fiatagri Service. It extends to 2 hectares under cover and can handle more than 3000 orders a day. Its warehouses hold 21 million items classed under 60,000 headings, all original spare parts designed, inspected and checked to guarantee reliability and operating efficiency.

The Spares Centre is linked to the Service School, where workshop foremen and service mechanics are trained to serve the distribution network and customers throughout the world.

Fiatagri's sales organisation is active in more than 100 countries through branches, dealers and importers, guaranteeing the same efficiency and the same operating continuity of its vehicles everywhere.

Product quality, efficient service and dynamic organisation are the key features of the Fiatagri image and the success of Fiat's tractors.

In Italy, one farmer out of two chooses Fiatagri.



Fiatagri is the Agricultural  
Tractor and Machinery  
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