

**Massey-Ferguson<sup>®</sup>**

**8570**

**Rotary Combines**





# Unique features plus trad make M-F Rotary Combi

## Why you should consider a rotary combine.

Massey-Ferguson revolutionized grain harvesting when they introduced the very first self-propelled combine.

Large-scale farming and higher-yielding crops developed an increasing demand for a sophisticated combine with the reliability and capacity to harvest large quantities of consistently clean grain.

M-F 8570 rotary combine technology gives farmers new options with traditional M-F quality and reliability.

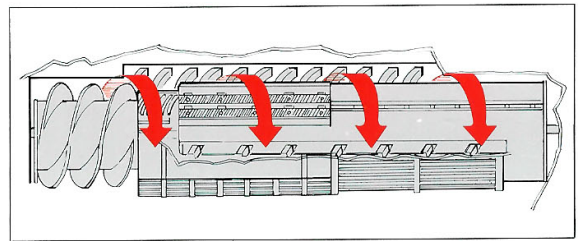
### Rotary design.

The radial acceleration and centrifugal force from the rotor increases

grain separating efficiency and effectively minimizes grain loss.

And with the prolonged, multiple-pass threshing, gentler forces are used to achieve clean samples with less grain stress and damage.

Another advantage of the rotary design is fewer moving parts for greater efficiency and reliability, and lower maintenance and operating costs.



**Rotary cylinder.** Multiple-passes, plus the effects of radial and centrifugal acceleration efficiency, harvests more grain with less crop damage.

The net result is that an M-F 8570 rotary combine can provide greater productivity and profit.





# ditional quality nes your best value.



## Why you should insist on an M-F Rotary Combine.

Over the years M-F combines have become the preferred choice of some of the world's most demanding customers.

It's a legacy of which we're extremely proud. And one we intend to continue. That's why Massey-Ferguson will continue to supply their valued customers with the finest conventional combines. And, at the same time, provide customers who prefer rotary technology with the most technologically advanced rotary combine available.

No other company is willing to make this commitment. Yet it's just one of many steps Massey-Ferguson is taking to remain a grain-harvesting leader.

### Unique rotor feed system.

The front feed beater evens-out and accelerates crops around the inlet section of the rotor for efficient, full-circle feeding.

Other rotaries rely on inefficient paddles on the rotor itself to drag the crop into the rotor.

### Wide feeder elevator.

The front feed beater permits the use of a wide, 44-in. (112-cm) feeder elevator for more even and effective feeding.

### Large rotor surface.

The large 27.5 in. by 140 in. (70 cm by 356 cm) rotor provides 2,205 in.<sup>2</sup> (14,226 cm<sup>2</sup>) of threshing area. This produces an even straw mat for more complete threshing.

### Unique direct-discharge rotor.

A patented direct-discharge design eliminates the need for a power consuming beater.

### Large chaffer and sieve.

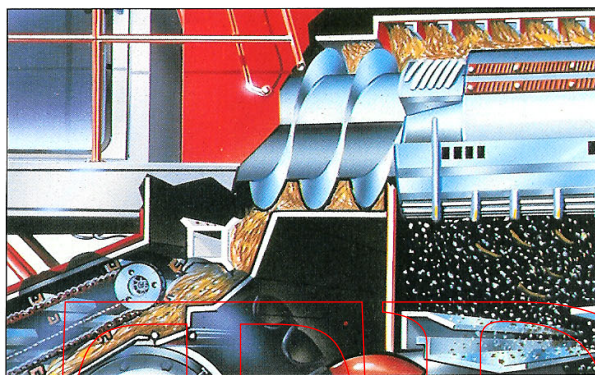
The 6,425 in.<sup>2</sup> (41,454 cm<sup>2</sup>) cleaning area on the M-F 8570 is larger than any competitive rotary for unequalled cleaning at maximum capacity levels. Plus opposed motion smoothes operation and prevents bridging to keep sieves clean and reduce maintenance time.

### Simplicity of design.

The M-F 8570 rotary combine design is simple, reliable and easy to service. For example, only 12 belts drive the entire threshing unit, including the hydrostatic ground-drive pump. This is typical of the design refinements of the M-F 8570.

### Balanced performance.

The capacity and performance levels of all components are matched to produce a combine that is perfectly balanced for productivity.



**Exclusive front beater and conical inlet.** The beater propels the crop up into a conical inlet where three auger flights transfer the crop to the rear and start it on its spiral path through the threshing process. The beater also provides an effective control to direct foreign objects into the stone trap located directly below the beater.

### Operator comfort and control.

The moment you enter the cab, you'll appreciate the years of combine experience that went into the design of the M-F 8570.

The large, wide-visibility cab with conveniently placed controls and monitors keeps you in complete control at all times. And the comfortable seat and ventilation system will help keep you alert and productive.

### Great looks.

Of course Massey-Ferguson doesn't stop at just great performance and great grain samples, they also made the M-F 8570 a great looking combine. And to keep it looking great, the combine is finished with a polyurethane paint that retains its gloss and color.

# Put yourself in complete and unmatched comfort.

**When we asked combine operators what they wanted, we got a lot of great ideas.**

From the moment you sit down in the deluxe, fabric seat, you'll know that a lot of thought and experience went into designing the cab.

## **Room with a view.**

To start with, the cab is large and positioned on the left side, providing visibility to the rear, along with an excellent view of the header operation. Unloading on-the-go is easily monitored by the operator.

## **Quiet comfort.**

The cab is rubber-mounted with foam coated floor mat and upholstered roof to cut noise and vibration. And the engine is in the rear which also provides a quiet environment for the operator.

## **Environmental control.**

A 17,000 BTU air conditioner and 13,000 BTU heater will keep you comfortable for all weather conditions. In addition, there is a fresh/recirculated-air control and completely adjustable airflow louvers.

## **7-adjustment seat.**

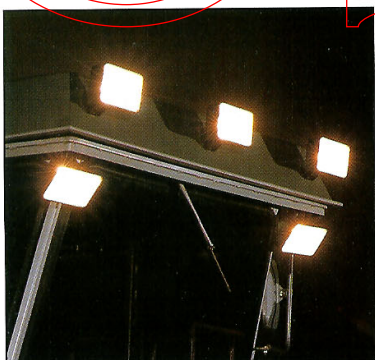
Long harvest hours seem shorter with adjustments for the operator's weight, height, fore-aft reach, seat tilt, backrest tilt, armrest height, and lumbar adjustment. Plus the steering column can be adjusted to match your reach.

## **Natural controls.**

You won't have to think twice about any of the M-F 8570 controls. They're all right where you'd expect them; right where they feel natural.

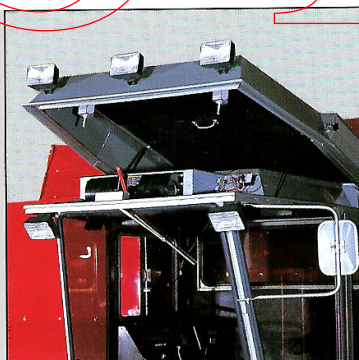
All operating controls are on the right, except for the unloading auger engage lever, naturally.

Environmental-control, light and wiper controls are all in the overhead console; as are any optional radios.



## **Powerful lighting.**

A total of 5 halogen field and road lights on the cab and 2 additional halogen operational lights give you plenty of light for nighttime harvesting. Plus there's a grain-tank light, an operator's platform/ladder light, an unloader light and an engine light to make servicing easier.



## **Cab roof access.**

A hinged roof with two gas struts lets you raise the cab roof for easy access to the air conditioner and heater cores, blower, electrical switches and cab fuses. You save maintenance and service time.



## **Deluxe fabric seat.**

Long harvest hours seem shorter with adjustments for the operator's weight, height, fore-aft reach, seat tilt, backrest tilt, armrest height, and lumbar adjustment. Plus the steering column is adjustable to match your reach.



# control...



## Right-side console.

Operational controls and monitors are grouped for easy viewing and quick access: 15-channel electronic warning monitor, 6-channel selectable digital-display monitor, header drive switch, threshing drive switch, oil pressure gauge, engine temperature gauge, cleaning fan speed control, ignition switch, engine start override, automatic header height control (standard on corn and soybean models), optional rear wheel assist and ether-start assist controls.

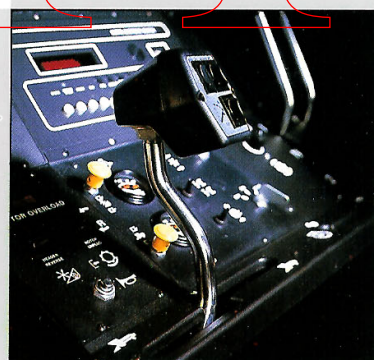


## 6-function digital display.

Press a button to display: engine RPM, ground speed, cleaning fan RPM, rotor RPM, fuel supply or battery voltage.

## 15-channel electronic monitor.

Lights plus an audio alarm keep track of: fuel, battery, coolant temperature and level, oil pressure, air filter, shoe speed, returns elevator speed, grain elevator speed, rotor speed, parking brake, chopper speed, hydraulic oil level and temperature and 95%-full grain tank level.



## Multi-function control.

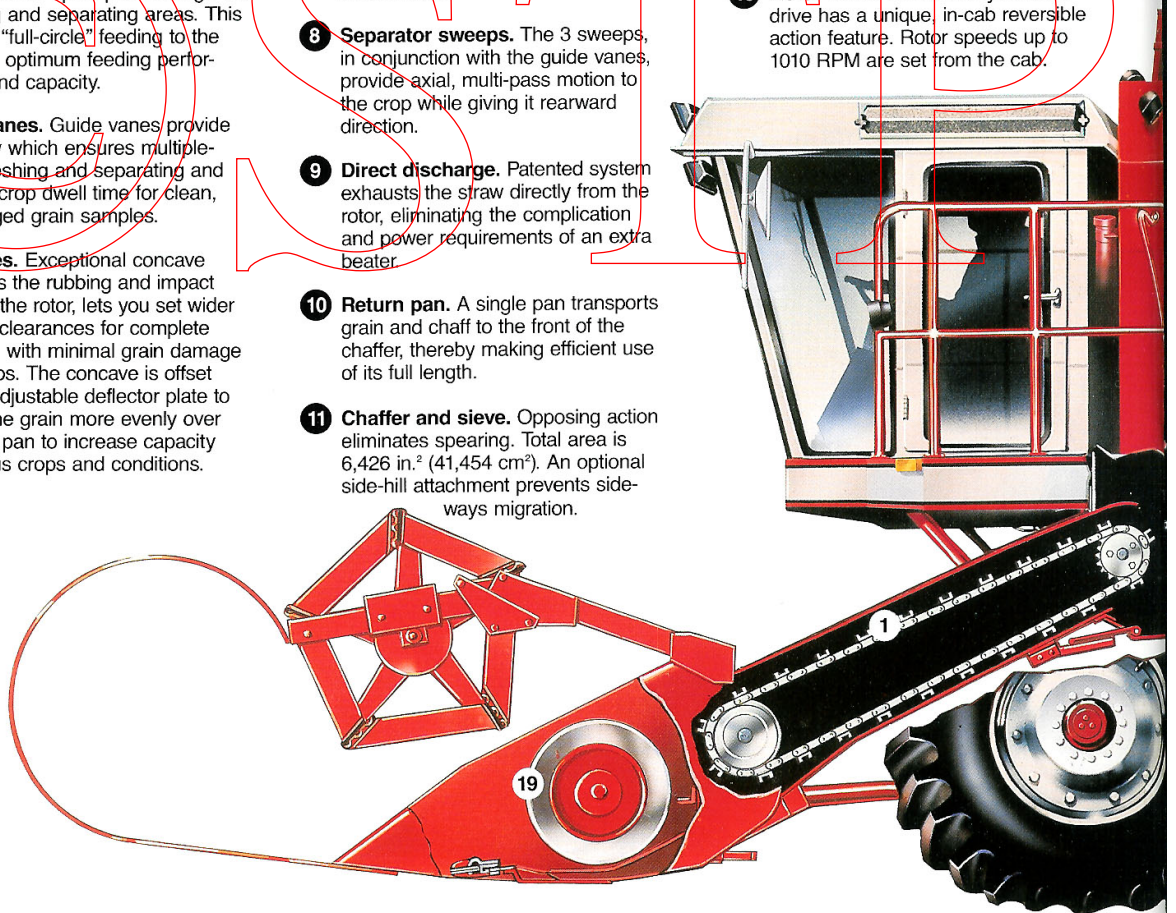
Your most frequently used controls are conveniently located on the multi-function ground-speed control lever: header height, reel height and unloader swing. Complete control is always at the operator's fingertips with the M-F 8570.



# From start to finish, M-F Rotaries are designed

A cutaway view reveals why you'll harvest more grain with

- 1 Feed elevator.** Wide, 44-inch width matches the exceptional rotor capacity. Offset, U-shaped slats are stronger, longer-lasting and bolted on for easy replacement. Front-drum floats for optimum performance. A hydraulic header reverser provides a convenient way for the operator to remove an overload of material from the header and feeder elevator.
- 2 Front feed beater.** Patented beater accelerates crops into the rotor for more efficient threshing.
- 3 Rotor intake.** Auger flighting starts the crop on its spiral path through the threshing and separating areas. This provides "full-circle" feeding to the auger for optimum feeding performance and capacity.
- 4 Guide vanes.** Guide vanes provide axial flow which ensures multiple-pass threshing and separating and the right crop dwell time for clean, undamaged grain samples.
- 5 Concaves.** Exceptional concave area, plus the rubbing and impact action of the rotor, lets you set wider concave clearances for complete threshing with minimal grain damage of all crops. The concave is offset with an adjustable deflector plate to spread the grain more evenly over the grain pan to increase capacity for various crops and conditions.
- 6 Threshing lobes.** The 3 unique threshing lobes, each consisting of a helical element and 3 sets of left-hand rasp bars smooth out and thresh the crop. Optional rotor knives can be added for weedy and green crops.
- 7 Separator.** Separator has 2,241 in.<sup>2</sup> (14,460 cm<sup>2</sup>) of separating area. Open, rod-and-bar-design grates let kernels easily fall through to the separator pan, while straw is discharged. Adjustable deflector plates spread the grain evenly over the return pan for superior cleaning and lower losses.
- 8 Separator sweeps.** The 3 sweeps, in conjunction with the guide vanes, provide axial, multi-pass motion to the crop while giving it rearward direction.
- 9 Direct discharge.** Patented system exhausts the straw directly from the rotor, eliminating the complication and power requirements of an extra beater.
- 10 Return pan.** A single pan transports grain and chaff to the front of the chaffer, thereby making efficient use of its full length.
- 11 Chaffer and sieve.** Opposing action eliminates spearing. Total area is 6,426 in.<sup>2</sup> (41,454 cm<sup>2</sup>). An optional side-hill attachment prevents sideways migration.
- 12 Cleaning fan.** The speed of this large-diameter fan can be set to 267-850 RPM from the cab. An optional low-speed pulley allows speeds from 200-271 RPM for harvesting light-seed crops.
- 13 Clean grain auger.** A large clean-grain auger, 10-in. (25-cm) grain elevator and large discharge auger can handle your heaviest yielding crops.
- 14 Returns auger.** A 6-in. (15-cm) tailings elevator delivers returns to the front of the rotor for complete rethreshing.
- 15 Rotor drive.** Exclusive hydrostatic drive has a unique in-cab reversible action feature. Rotor speeds up to 1010 RPM are set from the cab.







# d for performance.

## an M-F Rotary.

**16 Cummins engine.** Turbocharged, aftercooled engine is rear-mounted for easy serviceability and quietness in the cab.

**17 Turret unloader.** Electro-hydraulic swing and high clearance let you unload on-the-go in approximately 2 minutes.

**18 227 bu. grain tank.** A perforated tank extension can be folded down for transport and combine storage. A perforated panel behind the cab gives the operator a clear view into

the grain tank, plus a full-tank sensor with an in-cab display alerts the operator of a 95%-full tank.

**19 Grain header.** The large-capacity auger is placed low to the ground so that crops fall into it from the cutter-bar for gentle, sure feeding.

**20 Rear wheel drive.** Optional rear-wheel assist with powerful low-speed, high-torque cam-lobe hydraulic wheel motors provide up to 18% more pulling power.

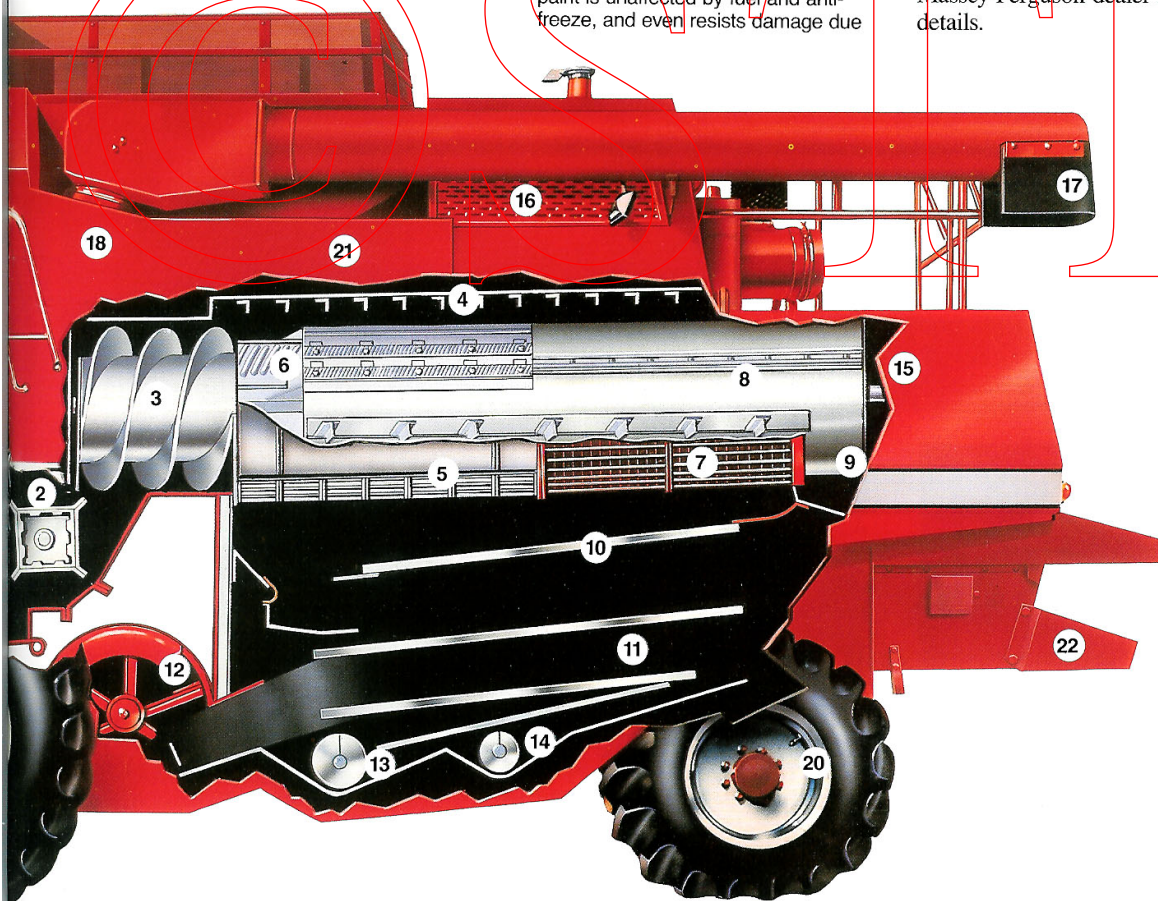
**21 Polyurethane paint.** This high-gloss paint is unaffected by fuel and anti-freeze, and even resists damage due

to dents, to keep your M-F 8570 rotary combine looking as great as it performs.

**22 Straw Chopper.** The optional 2-speed crop chopper slides back for easy access and for windrowing. An optional finecut kit is available.

### Accessories to meet your special needs.

For special needs, a complete line of accessories is available. Contact your Massey-Ferguson dealer for complete details.





# Get the power and drive- as long, hard and reliably

## The driving force behind the ultimate combine.

The M-F 8570 gets its power from a Cummins model 6 CTA 8.3, 505 cu. in. (8.3 liter), Series 3 diesel that has a reputation for efficiency and reliability.

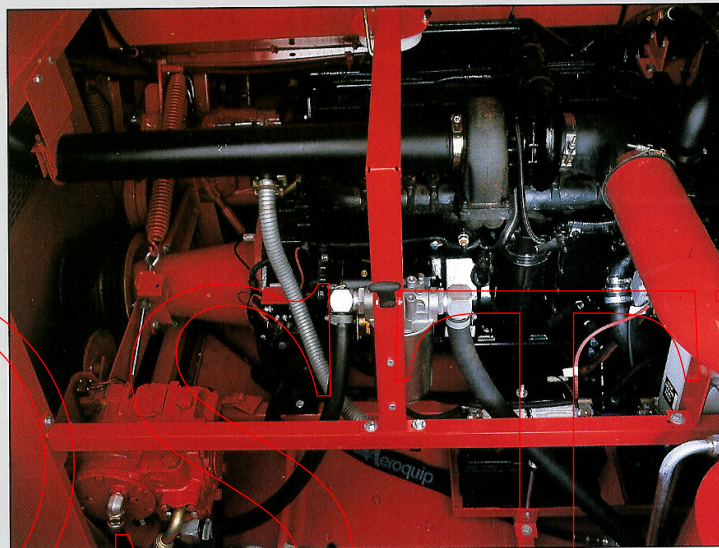
This turbocharged and aftercooled diesel engine develops 220 hp at 2500 RPM.

The aftercooler, a water-cooled heat exchanger, condenses and cools the turbocharged air before it enters the combustion chamber. More oxygen enters each cylinder for better combustion and higher efficiency.

### Special features include:

#### ■ Safety shutdown

An electrical fuel shutoff control automatically cuts off fuel if the coolant temperature rises above



220° F (104° C), or oil pressure drops below 30 psi (207 kpa) at full throttle or 10 psi (69 kpa) at idle.

#### ■ Engine access and cover

A hinged engine cover locks up for easy access from the engine service platform.

#### ■ Batteries

Twin 12-volt batteries each deliver 595 cold-cranking amps.

#### ■ Aspirated air pre-cleaner

An exhaust aspirator removes excess chaff and dust particles before they can enter the large air cleaner.

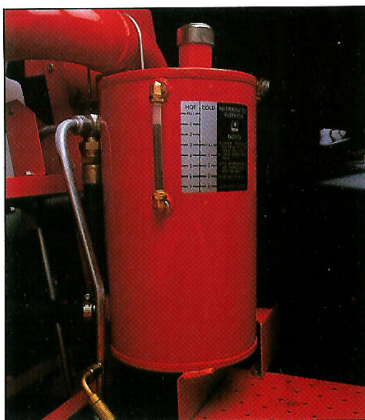
#### ■ Engine cooling

A belt-driven, rotating screen keeps radiator air intake clean. The screen, hydrostatic oil cooler and air

conditioner condenser hinge out for radiator access.

#### ■ Fuel tank

A seamless tank with water trap holds 100 gallons (378 liters). Remaining fuel and a low-level warning are monitored in the cab.



## Hydraulics that deliver the power.

A closed-center, load-sensing system supplies power for all hydraulic functions except the rotor drive and hydrostatic ground drive.

This system automatically monitors pressure and flow requirements and pumps only the amount required at any instant.

Unlike open-center systems that constantly pump at full capacity, the M-F system consumes less power and runs cooler.

One variable-displacement, piston pump supplies hydraulic power for steering, header lift, reel lift, reel drive, header reverser, and unloader swing.

A common, 8.4 gallon (32 liter) hydraulic reservoir supplies oil for all the hydraulic systems. A sight tube on the side of the tank makes it easy to check the hydraulic oil level.



# Train that work as you.



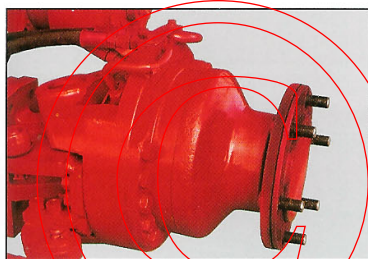
## An absolute minimum of belt drives.

The practical M-F 8570 design has only 12 belts to drive the entire threshing unit, including the ground drive hydrostatic pump.

Four additional belts at the front

of the engine drive the alternator, air conditioner compressor, rotary radiator screen countershaft and the rotary screen.

## Power-assist rear wheels for the really tough going.



Optional hydrostatic rear wheel drive motors feature a cam-lobe design

within the housing, rather than a motor-torque hub design. This drive uses hydraulic pressure to force pistons and their matching rollers against lobes to power the drive hub. It's a much simpler, more efficient and more reliable drive.

For roading in two-wheel drive, the hydrostatic rear wheel drive hubs completely disengage.

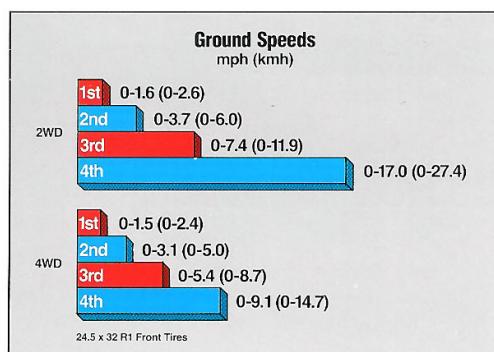
## A transmission and drive that matches operating requirements.

The hydrostatic drive combined with a constant-mesh 4-speed transmission provides an excellent overlap of travel speeds. This enables the operator to select a gear that matches operating requirements.

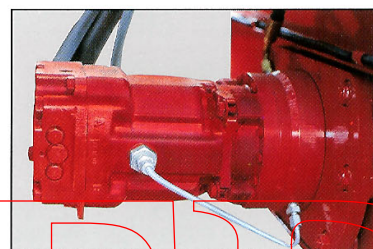
The heavy-duty final drive features a combination planetary and bull gear-pinion reduction for extra strength and long life.

The hydraulically operated double disc brakes are mounted on the input shaft side of each final drive provid-

ing safety and manual parking brake operation.



## A rotor drive that's clean and effective.



A hydraulic pump, driven by a 3B Powerband belt from the rear of the engine, powers a hydrostatic drive motor through a planetary gearbox connected in line with the rotor for optimum performance.

A pressure limiter system with a warning light on the instrument panel signals when the combine approaches full capacity. This maximizes operating capacity without overloading the system.

The rotor pump is reversible to quickly, yet gently, power-clear the rotor should it ever plug.



# M-F headers – a fast cut and uniform feed.

## M-F 9700 Series direct cut headers for grain.

These headers are built rugged for years of dependable use.

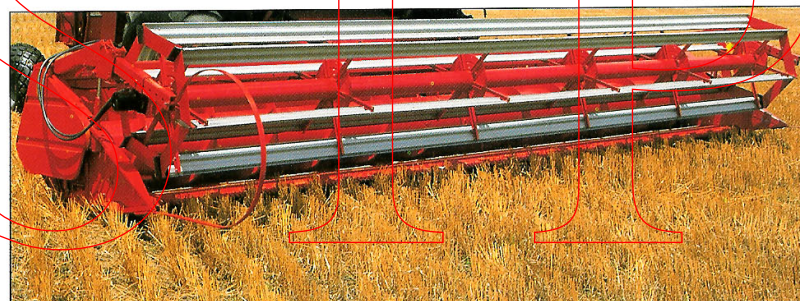
It starts with double-beam box frames for outstanding strength and rigidity.

Augers are large, 24-in. (61-cm) diameter with retractable fingers for positive feeding of heavy or light crops.

### Unique Power-Cut cutterbar.

The 1.5-in. (4-cm) pitch sickle sections and guards operate through a 3-in. (8-cm) stroke to provide 4-times more cuts per stroke than conventional cutterbars. This permits a slow knife speed to reduce wear and vibration while providing greater cutting speed and capacity.

Live-action sickles let you breeze through tangled crops, weeds and trash with ease.



And rigid cutterbar assemblies are completely adjustable: front-back and angle.

The reel is hydraulic driven with a hydraulic lift that includes a fold-down safety stop.

## M-F 9700 Series pickup header.

Quick-attach header lets you quickly convert from direct-cut to swathed grain. One person can change headers in just minutes.







## M-F 1100 Series corn heads.

These quick-attach, low-profile heads are designed and built to maximize harvest performance.

### Live spiral points.

Live points, combined with vine knives, keep snapping rolls clean, even in wet, weedy conditions.

The deep-fluted rolls are tapered to prevent shelling of ears. And the flutes are bolted on for easy replacement.

### Easy adjustment.

Heavy snapping plates are quickly and easily adjusted to match crop conditions.

### Large cross auger.

A unique design feeds stalks under the cross auger without the momentary hesitation that can cause ears to be lost.

The 16-in. (41-cm) diameter auger has 5-in. (12-cm) flighting to keep heavy yields flowing smoothly and evenly into the feeder elevator.

### Rugged design.

Massey-Ferguson corn heads are built for reliability.

Gearbox bearings are protected by washer plates. Cast-iron, spring-tensioned gathering chain sprockets provide long service life.

And the ball-bearing equipped gear boxes are reinforced for

extra strength and durability.

Even the dividers are reinforced with double plate edges for additional strength and reliability.

### Wide-open access.

Of course Massey-Ferguson designers haven't forgotten servicing.

All dividers hinge at the front of the snapping units to give you plenty of room for servicing and adjusting to save valuable harvest time.

## M-F 9750 Series soybean headers.

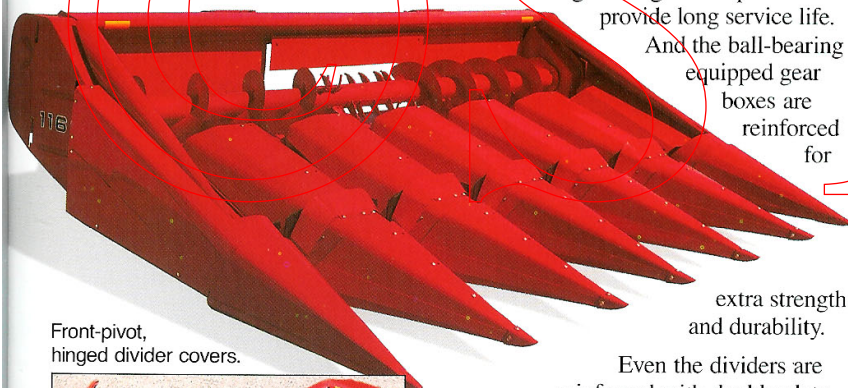


The 1.5-in. (4-cm) pitch sickle sections and guards operate through a 3-in. (8-cm) stroke to provide 4-times more cuts per stroke than conventional cutterbars. This permits a slow knife speed to reduce wear and vibration while providing greater cutting speed and capacity.

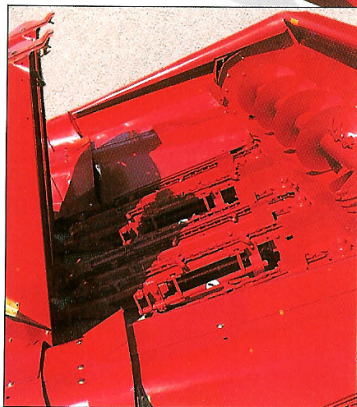
Live-action sickles let you breeze through tangled crops, weeds and trash with ease.

The flexible cutterbar lets you shave the ground and maximize crop yields harvested.

And the automatic header height control and automatic reel speed control enables optimum setting for fast efficient harvesting.

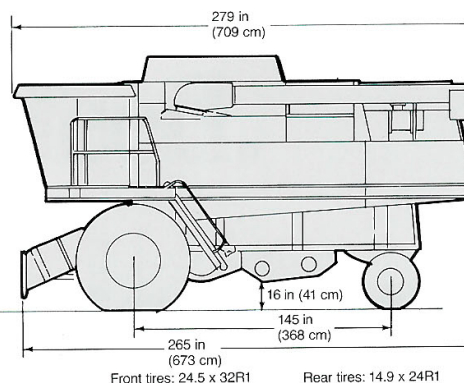
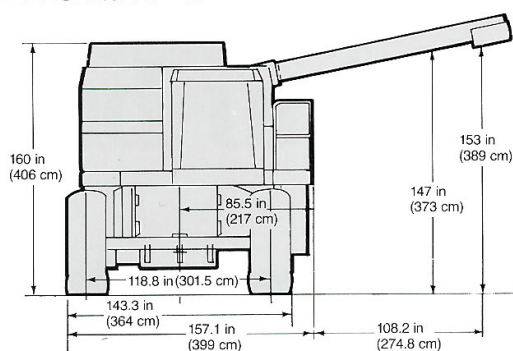


Front-pivot, hinged divider covers.





## Dimensions



## Specifications

### ENGINE

Model	Cummins 6CTA 8.3
Type	Turbocharged after-cooled
Cylinders	6
Displacement	505 in <sup>3</sup> (8.3 L)
Horsepower	220 mfr. est. engine hp
Speed	
No load-Hi idle	2,660 rpm
Rated-Full load	2,500 rpm

### ELECTRICS

Alternator	90 amps
Batteries (2)	595 CCA each
Lighting	7 halogen headlights, 2 tail lights, 2 warning flashers, 4 signal lights, 1 operator's platform and ladder area, grain bin, unloading auger, engine

### FEEDING

Engagement	Electro-magnetic clutch
Speed	380 rpm
Width	44.3 in (112 cm)
Front beater	
Diameter	17 in (43 cm)
Speed	650 rpm

### THRESHING

Type	Single axial rotor
Rotor diameter	27.5 in (70 cm)
Rotor length	140 in (350 cm)
Max Rotor speed	1,010 rpm
Concave area	2,205 in <sup>2</sup> (14,227 cm <sup>2</sup> )

### SEPARATING

Grate area	2,241 in <sup>2</sup> (14,460 cm <sup>2</sup> )
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### CLEANING

Chaffer sieve area	3,636 in <sup>2</sup> (23,458 cm <sup>2</sup> )
Cleaning sieve area	2,664 in <sup>2</sup> (17,187 cm <sup>2</sup> )
Total cleaning area	6,425 in <sup>2</sup> (41,454 cm <sup>2</sup> )
Fan speed	
High range	556-850 rpm
Mid range	379-580 rpm
Low range	267-409 rpm

### GRAIN HANDLING

Grain tank capacity	227 bu (8,000 L)
Unloading rate	Approx. 2 bu/sec

### TREAD

SETTINGS	24.5 X 32	30.5 X 32
Drive axle	118.8 in (302 cm)	120 in (305 cm)
Rear axle	118 in (300 cm)	118 in (300 cm)
Opt. powered rear axle	N/A	118 in (300 cm)

### TRANSMISSION

Type	Hydrostatic, 4-speed
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### HEADERS

9700 Series Rigid	9700 Series Pickup	9750 Series Flexible Bottom	1100 Series Corn Heads
20 ft (6.1 m)	13 ft (4.0 m)	18 ft (5.5 m)	6-row 8-row
24 ft (7.3 m)		20 ft (6.1 m)	28 in (71 cm) 30 in (76 cm)
30 ft (9.0 m)		24 ft (7.3 m)	30 in (76 cm)
		25 ft (7.5 m)	

### STEERING

Type	Hydrostatic
Turning radius	253 in (643 cm)

### BRAKES

Service	Individual hydraulic, foot-actuated, 3.5 X 6 in (8.9 X 15.24 cm) double disc
Parking	Cable to left-hand wheel brake

### WEIGHTS

Base combine with straw chopper, less header, no fuel.	
With 24.5-32 front and 14.9-24 rear tires	
Front	13,386 lb (6,072 kg)
Rear	8,924 lb (4,048 kg)
Total	22,310 lb (10,120 kg)

### CAPACITIES

Fuel tank	100 U.S. gal (378.5 L)
Crankcase	
W/filter	21 U.S. qts (20 L)
W/O filter	20 U.S. qts (18.9 L)
Cooling system	10.6 U.S. gal (40 L)



Note: Measurements are according to ASAE standards. Massey-Ferguson has a company policy of continuous improvement and development, therefore specifications are subject to change without notice. The Company accepts no responsibility for discrepancies in specifications or illustrations contained in its publications.