



MASSEY FERGUSON

# MF Global Series

## Product Information Guide



FROM MASSEY FERGUSON



- ✓ **This product guide has detailed information on the MF Global Series range (MF 4700, MF5700 & MF6700)**
  
- ✓ **It can be used either as a sales tool during customer visits or as a reference guide**
  
- ✓ **This guide includes :**
  - Overview of the MF Global Series range**
  - The key features of the MF Global Series**
  - Identification of options and specifications of the range**



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**Disclaimer:**

Every effort has been made to ensure that the information contained in this publication is as accurate and current as possible. However, inaccuracies, errors or omissions may occur and details of the specifications may be changed at any time without notice. Therefore, all specifications should be confirmed with your Massey Ferguson Distributor prior to any purchase.

## Massey Ferguson Global Series

The Massey Ferguson Global Series is a complete new range of Massey Ferguson tractors. They have been developed to replace the many diverse and different heritage tractor models, meeting the requirements of all markets throughout the world.

The Massey Ferguson Global Series is the largest product development project ever undertaken by AGCO with an investment of over \$350 million in new engine, transmission and transaxle designs as well as a groundbreaking, brand new, state of the art manufacturing facilities with a fully modular design approach. It is the only large agricultural tractor plant in China that exports to foreign markets, giving a big indication of the quality and fabrication that comes out of the plant.

The project is led by a dedicated engineering team at the Massey Ferguson worldwide engineering centre in Beauvais, France with additional support from Massey Ferguson and AGCO Power teams globally.

The new tractors are built using the very latest manufacturing and assembly techniques at a number of global manufacturing sites including a brand new 188,000 m<sup>2</sup> state of the art facility in Changzhou, China, built and owned by AGCO. This facility has an annual target of over 15,000 tractors, 30,000 engines and 40,000 rear axles and transmissions.



## Massey Ferguson Global Series

The MF Global series is a truly global operation – global products, global quality standards, global markets, global purchasing and a global team.

The design, engineering and manufacturing process coupled with Massey Ferguson's years of experience in the agricultural machinery market has led to the production of a machine that is both straightforward and dependable, the way a Massey Ferguson product should be!



## Massey Ferguson Global Series

The Massey Ferguson Global Series offers models from 74 to 132hp for agricultural, horticultural and small acreage markets (focusing on the growing of livestock & niche crops) which require a machine that is rugged and reliable, simple to operate and able to cope with the a range of different tasks.

These markets cover a large geographical region and encompass small farms, dairy and livestock farms through to large agri-businesses and plantations.

Our customers in these regions grow a wide variety of crops from fruit and vegetables to sugar and vines for wine production, as well as livestock and poultry for meat production.

These machines are also often put to work in municipal applications or industrial applications including airports, seaports, mines and in the growing small acreage segment, focusing on the growing of livestock and niche crops.

The Massey Ferguson Global Series tractors feature an entirely new design using the latest engineering techniques to give new levels of performance and economy never seen before on a machine in this sector of the market.

### Why Massey Ferguson Global Series?

The image displays six distinct components and features of the Massey Ferguson Global Series tractor, arranged in a 2x3 grid. Each feature is accompanied by a photograph and a descriptive caption in red text. The features are: Premium Engine Technology (top left), Unique MF Shuttle Control (top right), Market Leading Transmissions (bottom left), High Flow Hydraulics (bottom middle), and Premium Cabin Comfort (bottom right). The sixth feature, Premium Cabin Comfort, is represented by a photograph of the tractor's interior. The entire grid is enclosed within a thin red border.

- Premium Engine Technology**
- Unique MF Shuttle Control**
- Market Leading Transmissions**
- High Flow Hydraulics**
- Premium Cabin Comfort**

## Massey Ferguson Global Series

Forming the Global Series are three different ranges, the MF4700, MF5700 & MF6700.

Within these ranges are different horsepower models spanning from 74-132hp and offering complete range of tractor options in both ROPS and CAB models.



	<b>MF 4707</b>	<b>MF 4708</b>	<b>MF 4709</b>
<b>Engine Type</b>	3.3L AGCO Power	3.3L AGCO Power	3.3L AGCO Power
<b>Engine Size</b>	AP33 engine	AP33 engine	AP33 engine (Tier3)
<b>Power</b>	74hp   55kW	82hp   61kW	95hp   70kW
<b>Max Torque</b>	296	342	355



	<b>MF 5709</b>	<b>MF 5710</b>	<b>MF 6711</b>	<b>MF 6712</b>	<b>MF 6713</b>
<b>AGCO Power</b>	AGCO Power				
<b>AP44 engine</b>	AP44 engine				
<b>92hp   68kW</b>	102hp   76kW	112hp   83kW	122hp   91kW	132hp   98kW	
<b>380</b>	410	467	490	540	

## Massey Ferguson Global Series

Within the models above, to meet the competitive market demands there are two specification variants in the Massey Ferguson 4700 range, whilst the MF 5700 & MF6700 is available with the higher specification throughout the range.

### Standard Variant (MF4700 only)



- Footstep operators station with side mounted gear selectors
- Through the floor pedals
- Mechanical Clutch
- Mechanical Synchronised forward reverse shuttle located to the left of the operator
- Mechanical brakes

### Essential Variant



- Semi-platform & flat floor operators station with side mounted gear selectors
- Pendant pedals
- Hydraulic Clutch
- Power Control lever with Comfort Control.
- Hydraulic brakes

These two variants offer a simple, cost effective base option for customers wanting the minimum options for low-hour operation and a more advanced option for customers wanting improved comfort, functionality and ease of operation for longer operating hours.



## Massey Ferguson Global Series

AGCO Power three and four cylinder engines provide power for Massey Ferguson Global Series tractors. These engines are renowned for their reliability, ruggedness, excellent fuel economy and power some of the largest Fendt and Challenger machines. Offering power ranges from 70hp to 600+hp, these engine designs are truly remarkable.

The all new Massey Ferguson synchromesh transmissions offer 12 forward and reverse speeds over two ranges, complete with a forward / reverse shuttle. The base level MF4700 models are available with a mechanical shuttle, whilst each Essential specification is provided with a state of the art, premium adjustable power shuttle. The right speed for each job is easily selected using the side shift gear levers when changes are required.

All tractors are specified with a 540 rpm PTO with 35 mm / 6 spline output shaft and independent PTO clutch (IPTO) as a minimum. Additional variable PTO options are also available, depending on the range & variant selected.

A simple open centre hydraulic system for rear linkage and auxiliary spool valves, offering a large 65L/min on all MF 4700 models and a huge 98L/min combined flow on MF 5700 & MF 6700, providing class leading hydraulic flow on every model.

A lift capacity of 3000 kg allows the MF4700 Series tractors to wide handle a range of implements with ease, whilst 4300kg (MF5700 Series) and 5200kg (MF6700 Series) ensure the rest of the series has more than enough lifting capacity to get the job done.

Footstep, semi-platform or flat floor configurations are used for the operator platform with all the main controls grouped to the left and right of the operator. A large dashboard provides clear and concise information on tractor operation and performance.

Whatever the application or customer requirement, the straightforward and dependable Global Series will consistently meet and exceed expectations.



## Product Features

12x12 Synchronesh Transmission with Mechanical Shuttle or Massey Ferguson's Unique Power Shuttle

Premium 3 & 4 cyl. AGCO Power Tier 2 Engines (Tier 3 MF4709 only)



Electro-hydraulically engaged differential lock on all variants

4WD Front Axles

Footstep or Semi-Platform or Flat floor Operator Station

## Product Features

Class leading cabin comfort, offering one of the largest cabin on the market in the horsepower segments

Premium 3 & 4 cyl. AGCO Power Tier 2 Engines (Tier 3 MF4709 only)



Front weight options

Multiple Wheel & Tyre Options

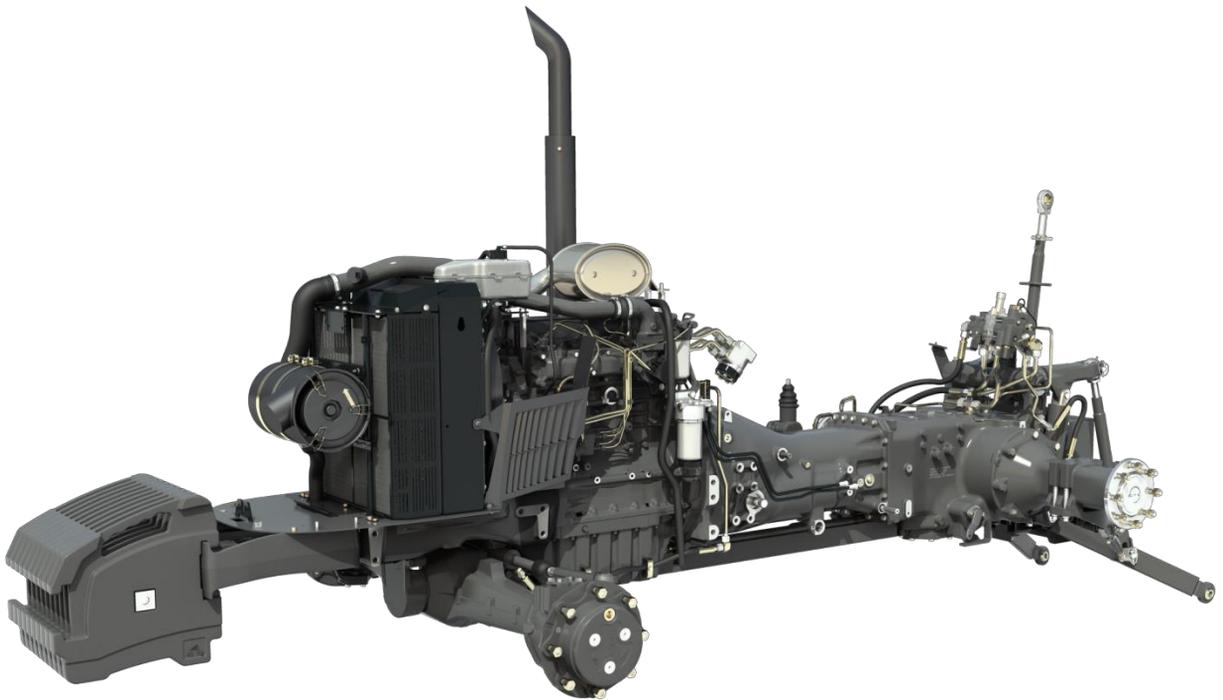
Low mounted cab (MF4700)  
Flat floor cab (MF5700 & MF6700)

## Product Features



## Models

MODEL	POWER
<b>MF 4707</b>	72hp (54kW)
<b>MF 4708</b>	82hp (61kW)
<b>MF 4709</b>	95hp (70kW)
<b>MF5709</b>	92hp (68kW)
<b>MF5710</b>	102hp (76kW)
<b>MF 6711</b>	112hp (83kW)
<b>MF 6712</b>	122hp (90kW)
<b>MF 6713</b>	132hp (98kW)

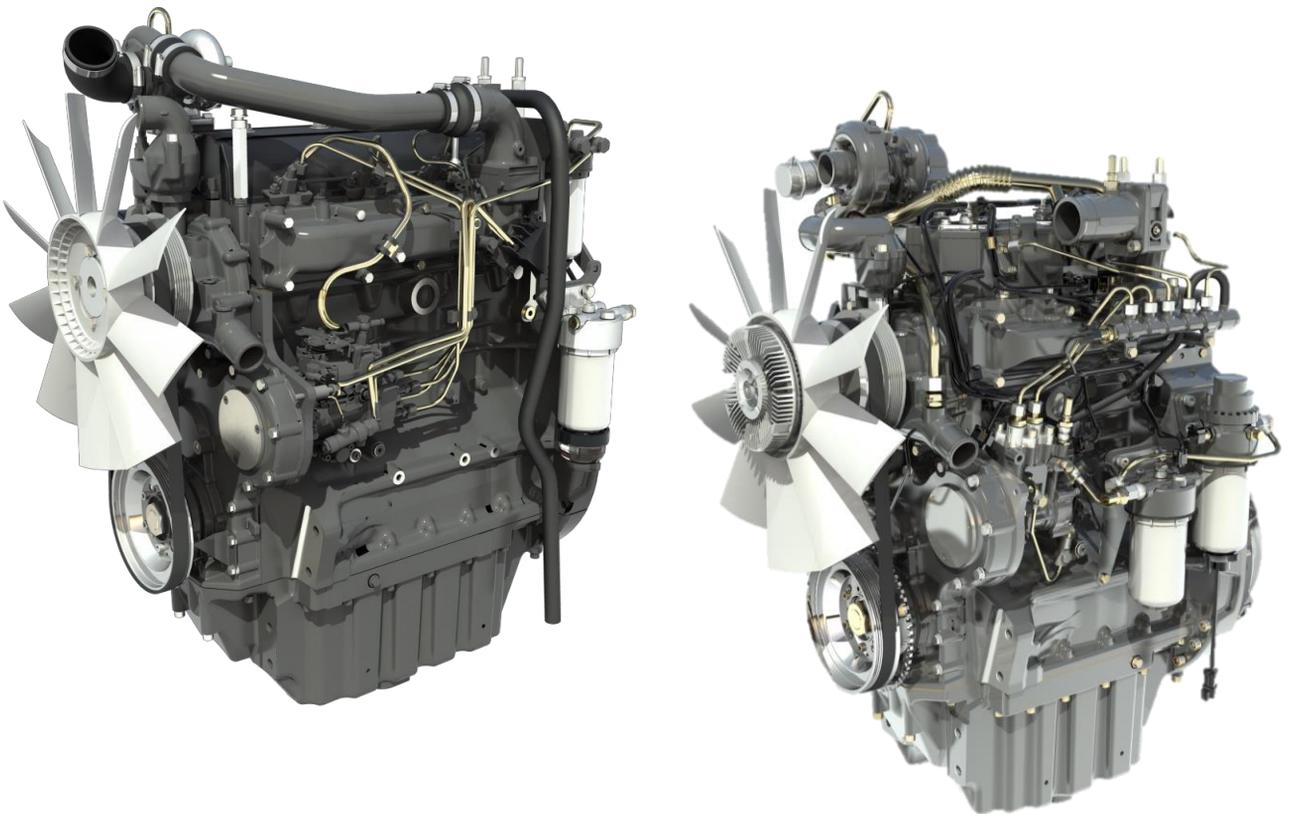


## AGCO Power Engines

All new three and four cylinder turbocharged engines from AGCO Power are used for Massey Ferguson Global Series tractors. The same engines power a large segment of AGCO products, including our larger MF tractors, as well as some of the larger Fendt and Challenger tractors.

All engines are configured to meet either Tier II or Tier III emissions standards and are specifically designed to suit the requirements of agricultural applications where high levels of power and torque are essential. The rugged construction of these engines provides enhanced reliability for an array of farming needs.

A low rated engine speed of only 2200 revs/min enhances fuel efficiency whilst also minimising noise and wear. The long stroke design provides high levels of torque across a broad speed range with maximum torque being achieved at only 1450 revs/min.

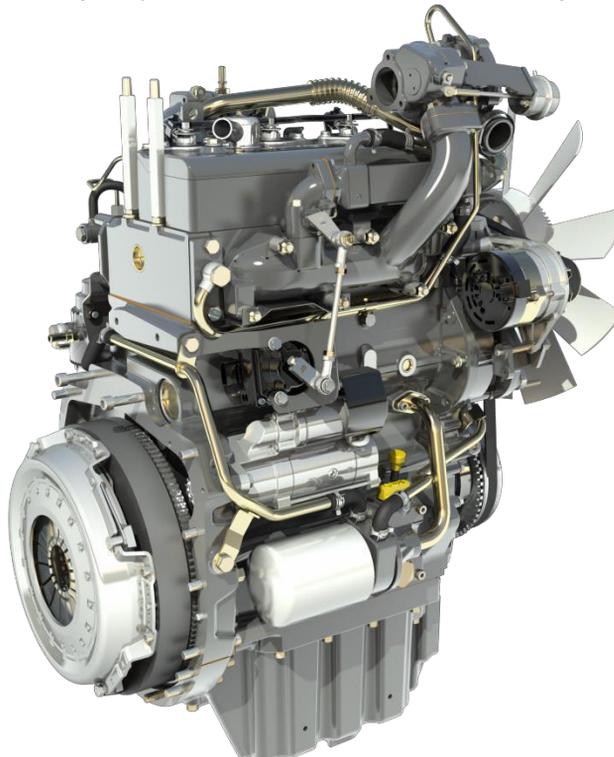


## AGCO Power Engines

Designed and built using the same techniques used at AGCO Power in Finland, all Global Series engines are produced with state of the art technology inside the AGCO manufacturing facility in Changzhou. AGCO Power engines have been installed in Massey Ferguson tractors for many years and are renowned for high levels of torque, good fuel efficiency and low running costs.

<b>MF4700 SERIES</b>	<b>MF5700 SERIES</b>	<b>M6700 SERIES</b>
AGCO Power AP33 engine	AGCO Power AP44 engine	AGCO Power AP44 engine
3 cylinder	4 cylinder	4 cylinder
3.3L	4.4L	4.4L
Turbocharged (+ Intercooled - MF4709 only)	Turbocharged	Turbocharged & Intercooled

All engines features dual fuel filters, whilst the tier 2 engines feature a mechanical rotary injection pump and the tier 3 engine on the MF4709 features common rail injection. One of the fuel filters is also fitted with an additional water separator. Both of these features improve the engine’s ability to provide excellent fuel economy and power output.



## AGCO Power Engines

### Key features include:

- Premium injection pumps for straightforward reliable performance
- Dual fuel filters on AGCO Power Engines – for maximum filtration before the fuel reaches the engine
- Spin-on oil filter for maximum contaminant removal and simple maintenance
- Dual element air filter with aspirated air pre-filter for enhanced engine protection and clean running in the most arduous of conditions

### Key benefits include:

- Rated horsepower at low engine speed gives durability, economy and operator comfort
- Good power to weight ratio for greater productivity
- Easy access encourages regular servicing and maintenance avoiding expensive breakdowns
- Parts are readily available which ensure minimum down time and prolong engine life



High power to weight delivered at low engine speed provides improved durability, economy and operator comfort.

## Engine Maintenance

Easy to access engine oil dipstick on right hand side of engine

Pivoting front bonnet offers easy access for servicing and maintenance



Easy to clean cooling package including fuel cooler and engine radiator

Venturi pipe for pre-cleaning of engine air filter

Excellent battery accessibility for battery maintenance

## Engine Maintenance

Sensor to detect blocked air filter

Transparent expansion tank for simple and convenient reading of the coolant level



Dry element air filter is fitted for simple and effective filtration

Easily removable guards provide space for cleaning of radiators

Side mounted fuel filters for easy access during servicing



	<b>MF 4707</b>	<b>MF 4708</b>	<b>MF 4709</b>
<b>Engine Type</b>	AGCO Power	AGCO Power	AGCO Power
<b>Engine Model</b>	AP33 engine	AP33 engine	AP33 engine
<b>Tier Level</b>	II	II	III
<b>Power @ Rated Engine Speed</b>	74hp 55kW	82hp 61kW	95hp 70kW
<b>Rated Engine Speed</b>	2200	2200	2200
<b>Max Torque</b>	296	342	355
<b>Engine Speed for Maximum Torque</b>	1500	1500	1500
<b>Displacement</b>	3300	3300	3300
<b>Number of Cylinders</b>	3	3	3
<b>Engine Aspiration</b>	Turbocharged	Turbocharged	Turbocharged & Intercooled
<b>Air Filter</b>	Dry Dual Element	Dry Dual Element	Dry Dual Element
<b>Bore / Stroke</b>	108 / 120	108 / 120	108 / 120
<b>Cooling</b>	Liquid	Liquid	Liquid
<b>Injection Type</b>	Mechanical Rotary Injection	Mechanical Rotary Injection	Common Rail Injection



	<b>MF 5709</b>	<b>MF 5710</b>
<b>Engine Type</b>	AGCO Power	AGCO Power
<b>Engine Model</b>	AP44 engine	AP44 engine
<b>Tier Level</b>	II	II
<b>Power @ Rated Engine Speed</b>	92hp 68kW	102hp 76kW
<b>Rated Engine Speed</b>	2200	2200
<b>Max Torque</b>	380	410
<b>Engine Speed for Maximum Torque</b>	1500	1500
<b>Displacement</b>	4400	4400
<b>Number of Cylinders</b>	4	4
<b>Engine Aspiration</b>	Turbocharged	Turbocharged
<b>Air Filter</b>	Dry Dual Element	Dry Dual Element
<b>Bore / Stroke</b>	108 / 120	108 / 120
<b>Cooling</b>	Liquid	Liquid
<b>Injection Type</b>	Mechanical Rotary Injection	Mechanical Rotary Injection



	<b>MF 6711</b>	<b>MF 6712</b>	<b>MF 6713</b>
<b>Engine Type</b>	AGCO Power	AGCO Power	AGCO Power
<b>Engine Model</b>	AP44 engine	AP44 engine	AP44 engine
<b>Tier Level</b>	II	II	II
<b>Power @ Rated Engine Speed</b>	112hp 83kW	122hp 91kW	132hp 98kW
<b>Rated Engine Speed</b>	2200	2200	2200
<b>Max Torque</b>	467	490	540
<b>Engine Speed for Maximum Torque</b>	1500	1500	1500
<b>Displacement</b>	4400	4400	4400
<b>Number of Cylinders</b>	4	4	4
<b>Engine Aspiration</b>	Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled
<b>Air Filter</b>	Dry Dual Element	Dry Dual Element	Dry Dual Element
<b>Bore / Stroke</b>	108 / 120	108 / 120	108 / 120
<b>Cooling</b>	Liquid	Liquid	Liquid
<b>Injection Type</b>	Mechanical Rotary Injection	Mechanical Rotary Injection	Mechanical Rotary Injection

## Fuel System

To ensure the availability of clean, moisture free fuel all Massey Ferguson Global Series tractors are fitted with two fuel filters. One of the filters is also fitted with a water separator to enable water and other contaminants to be captured from the fuel and regularly drained off.

On all configurations the fuel tank, which is of plastic construction, is mounted on the left hand side of the tractor under the operator platform. A steel plate is fitted underneath the tank to provide protection to the tank from objects beneath the tractor.

The fuel filters are conveniently mounted on the left hand side of the engine. This allows easy access for maintenance and servicing.



### FUEL TANK CAPACITIES

	<b>ROPS</b>	<b>CAB</b>
<b>MF4700 ST</b>	82L	-
<b>MF4700 ES</b>	105L	125L
<b>MF5700 ES</b>	170L	153L
<b>MF6700 ES</b>	197L	190L

## Transmission Overview

The Massey Ferguson Global Series tractors feature an all new transmission with a forward and reverse shuttle. There are a number of key features of the Massey Ferguson Global Series transmission:

### Shuttle Control

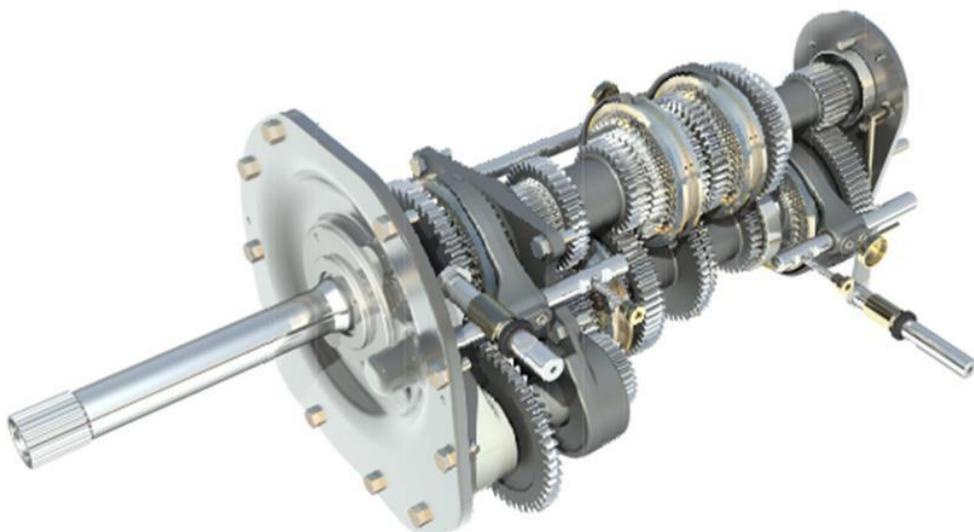
- Smooth, streamlined synchronised forward and reverse shuttle – for easier changes between forward and reverse (STANDARD variants only)
- Left hand, fingertip touch Power Control lever with Comfort Control for the pinnacle in tractor shuttle control (ESSENTIAL variants only)

### Clutch

- Straightforward mechanical clutch (MF 4700 Standard Specification) – for simple operation and adjustment for improved reliability and longevity
- High spec hydraulic clutch (Essential) – for ease of operation and no adjustment for stress-free reliability

### Gears

- Synchronised gear selection to enable easy changing on-the-go
- Logical gear sequence – to allow easy speed selection
- Good gear spread – to provide slow speeds for land preparation and planting, intermediate speeds for fertiliser applications and harvesting and high speeds for haulage and transport
- Heavy duty components and housings – for structural rigidity and reliability





## Clutch

The clutch unit is one of the most important components of the tractor. It needs to provide long hours of easy and trouble free operation whilst being strong enough to transfer power from the engine to the transmission and ultimately the ground.

The Global Series is available with two types of clutches.

The MF4700 Standard variant tractors utilise a single plate dry type clutch. The PTO is independently controlled by a separate electro-hydraulic clutch.

This configuration has been used for many years in high horsepower tractors and has a proven track record, providing a long reliable service life whilst being easy to operate and maintain.

Clutch operation is fully mechanical with adjustments made via the operating linkage. The through the floor pedal has been ergonomically designed to require low operator effort for maximum comfort and minimum fatigue during tasks requiring frequent clutch operation.



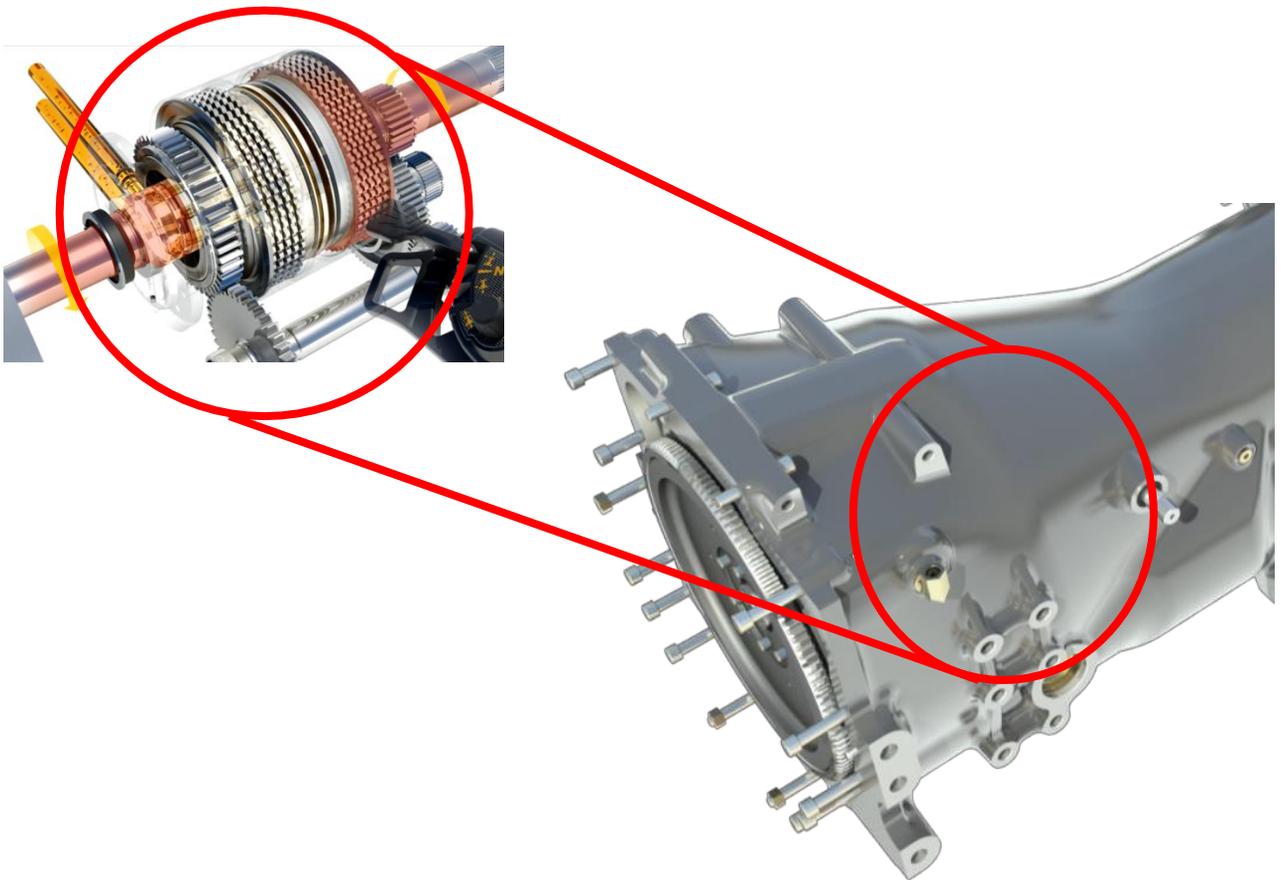
Heavy duty clutch with mechanical control for easy operation and durability.



## Clutch

For the optimum comfort and simplicity of operation, the Massey Ferguson Global Series Essential Variant tractors can be optioned with a Power Control Lever. This shuttle utilises a multi-plate wet clutch with an independent electro-hydraulic clutch for PTO engagement.

On these Essential Variant tractors the clutch release mechanism is electro-hydraulic. As with the mechanical shuttle, the pedals extend from the centre binnacle. This allows un-obstructed space under the pedals and improved operator comfort when operating for longer periods.

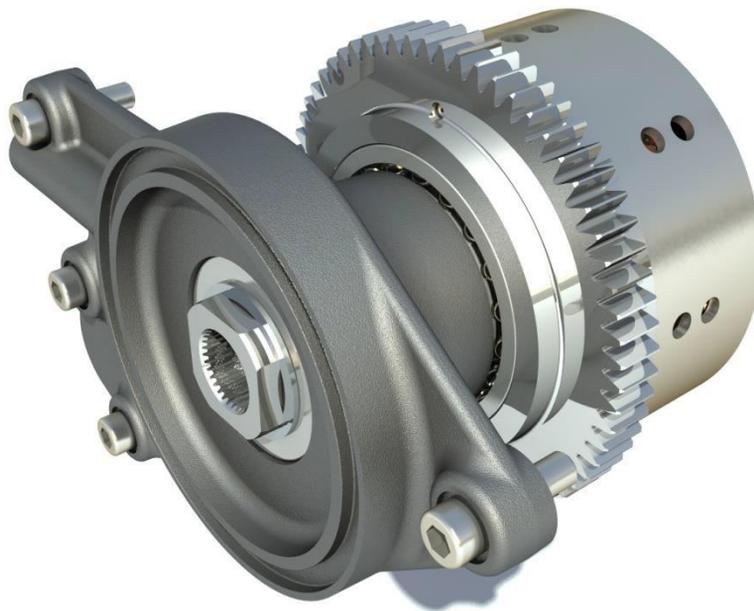


The Electro-hydraulic multi-plate wet clutch is the perfect combination with the Power Control Lever and Synchromesh transmission.

## Single Clutch & iPTO

All Massey Ferguson Global Series tractors are specified with a heavy duty spring centre mechanical clutch and independent PTO.

PTO drive is provided by an electro-hydraulically actuated multi-plate clutch which provides modulated engagement to protect the PTO driveline and provide a smooth and gradual take up of the drive.



Independent PTO provides modulated engagement to protect the PTO driveline and provide gradual take up of the drive.

## 12 Forward x 12 Reverse Gearbox

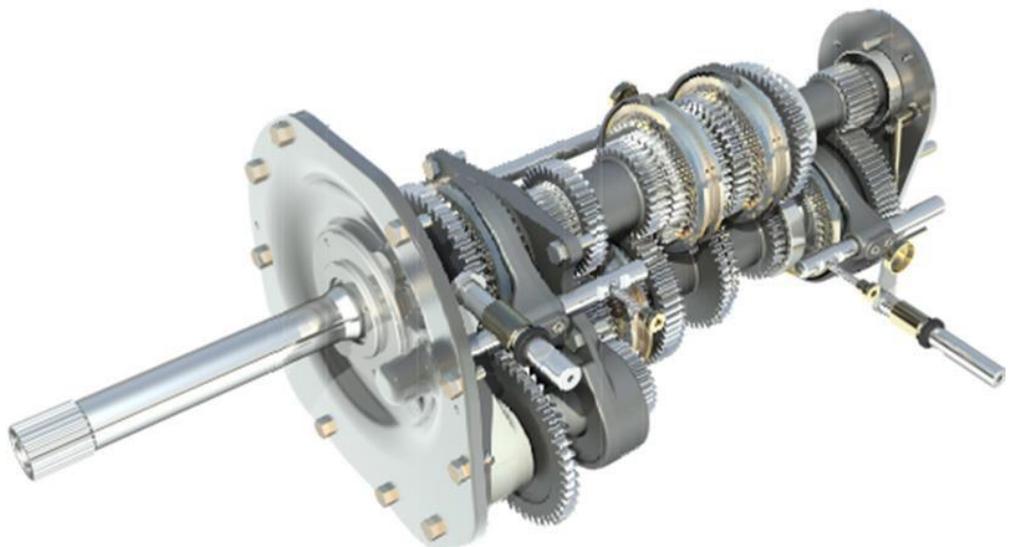


All Massey Ferguson Global Series tractors feature a 12 forward and 12 reverse synchronomesh gearbox and a max speed of 30km/h (ST Variants) or 40km/h (ES Variants). Creep is also available from factory in all ES Global variants and offers a 14:1 reduction, achieving a minimum speed of 0.15km/h.

The 12 forward and 12 reverse gearbox is an all new design. Featuring a straightforward three lever operation, with six synchronised drive gears on the main gear lever and high and low on the range change gear lever. A mechanical synchronised forward and reverse shuttle lever is available in ST variants and a Power Control Lever with Comfort Control is optional on ES Variants.

The new synchronised forward and reverse shuttle lever is located to the left of the operators seat on Standard Variants, or on the console to the left of the steering wheel on the Essential Variants. This enables the operator to change from forward to reverse without operating the main gear lever and provides a truly smooth driving experience regardless of the variant.

The gear layout and selection sequence has been designed to enhance the ability to select the required gear easily, improving fuel economy and productivity.



A larger spread of gears available in the synchronised six-speed transmission gives operators greater flexibility.

## Synchromesh Gearbox



The synchromesh, sliding collar configuration ensures a smooth gear change whilst the newly designed gears feature a high contact ratio increasing gear durability and enhancing transmission reliability.

The gear levers are mounted on either side of the operator's seat and act directly on to the selector rails, providing a very precise, simple and reliable layout.

This configuration also provides straightforward operation whilst the well matched speed ratios ensure that the required speed is available for all applications.



Smooth automotive-style gear changes with heavy duty reliability. The best manual transmission available on the market.



## Mechanical Shuttle

Massey Ferguson 4700 Series Standard variants feature a synchronised forward and reverse mechanical shuttle lever for easy direction changes on the synchromesh transmission.

Easily accessible on the left side of the operator's seat, the mechanical shuttle allows rapid shifting from forward to reverse in any gear. The 12 x 12 synchromesh transmission gives the operator a simple and durable transmission solution ideal for all applications.



Simple and reliable mechanical shuttle ideal for all basic tractor applications.



## Power Shuttle with Comfort Control

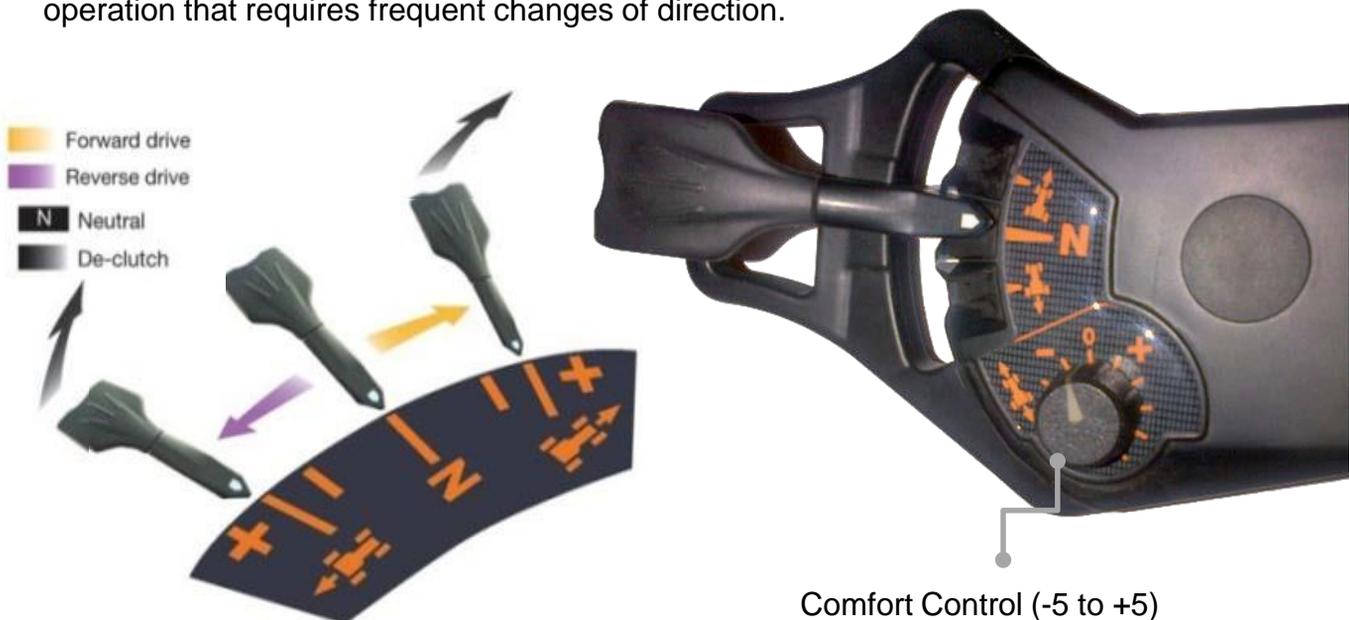
All Massey Ferguson Global Series Essential tractors are available with a unique forward and reverse Power Control Lever to enhance the operation of the 12 x 12 synchromesh transmission. Offering three declutch options (pedal, button or control lever), a truly impressive driving experience is on offer and sets these tractors apart from the market.

Similar in design and operation to the Power Control Lever featured on Massey Ferguson premium S series tractors (5700S/6700S/7700S/8700S), the new Power Control Lever is located to the left of the steering column and also features Comfort Control to fine tune the aggressiveness of the direction change.

Functions include;

- Clutchless forward and reverse shifting
- Speed of direction change can be altered through the Comfort Control dial
- Declutch by lifting the handle to enable gear changes without the clutch pedal
- Multi-plate wet clutch

Coupled with the 12 x 12 synchromesh transmission and offering three de-clutching options, the Global series Essential transmission gives the operators a highly flexible and easy to operate system ideal for operations such as loader work, headland turns and any operation that requires frequent changes of direction.



The most advanced and easy to use Power Shuttle on the market – unique to Massey Ferguson.



## Engine Speed Memory Button (MF4709 only)

To add further flexibility, all Massey Ferguson 4709 Global Series Essential tractors are factory fitted with an engine memory speed button on the right hand side console.

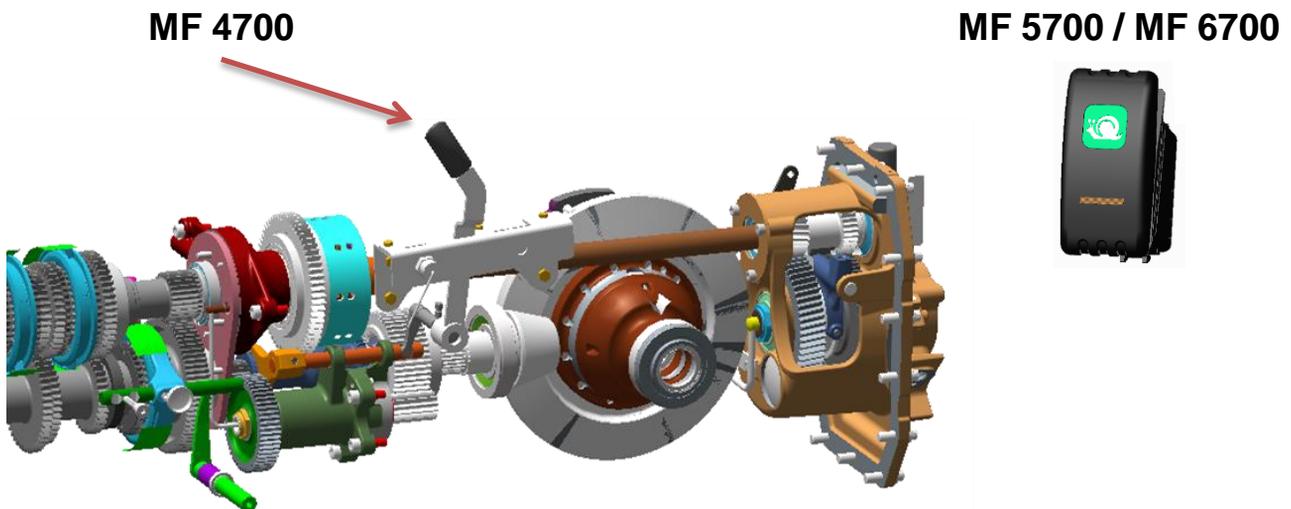
With the engine running, briefly pressing the memory button will accelerate the engine to the stored speed. Pressing the switch again will bring the engine to idling speed or to the speed preset by the hand throttle if this is lower than the stored speed.

## Creeper gears

Massey Ferguson Global Series Essential tractors are also available with a factory fitted creeper gear, activated by either a lever (MF4700 series) or a rocker switch (MF5700/MF6700), providing an additional two ranges to the transmission when fitted.

The creeper gear is engaged using either a mechanical lever (MF4700ES) or electrohydraulically (MF5700ES/MF6700ES). Activation of the creeper gear engages a gear reduction ratio of 14:1 and achieves a slowest speed of 0.15km/h.

This option is available out of the factory only and cannot be fitted afterwards.



Creeper gear is available on all essential variants and has a gear reduction ratio of 14:1 (0.15km/h min)

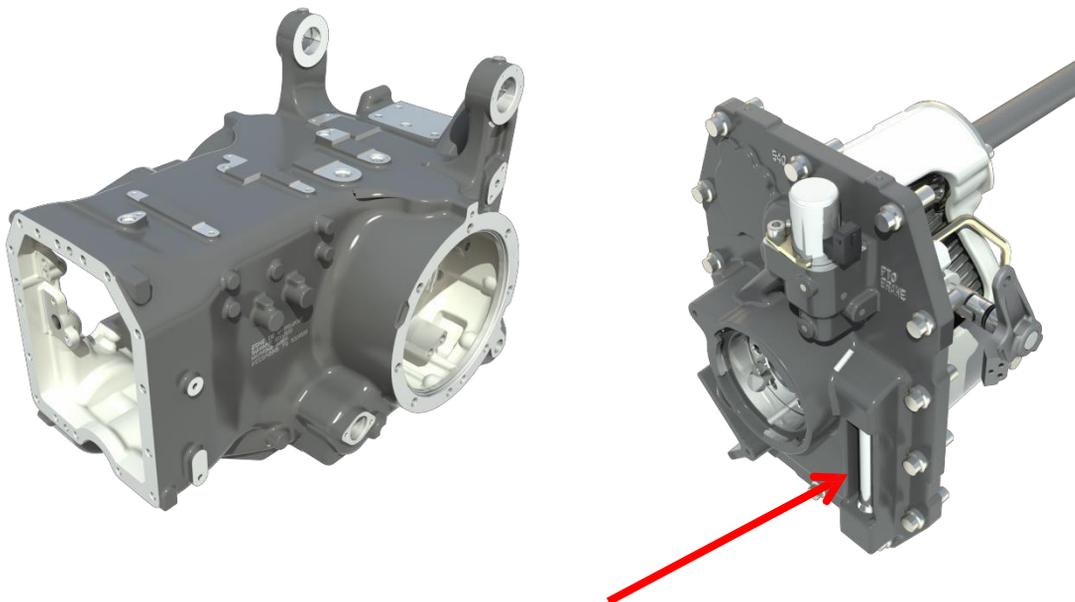
## Rear Axle

The rear axle centre housing is an integral part of the tractor chassis providing the structural link from the front axle, through the engine and operator station, on to the rear axle trumpet housings and rear linkage.

Featuring the same basic configuration and proven design across all models, a range of heavy duty rear axle assemblies are used in the Global Series tractors. Each housing contains a range of internal components that are engineered to suit the varying power, performance and specification requirements of the different models.

The heavy duty rear axle trumpet housings attached to the centre housing support the lower link arms and contain the brakes and epicyclic reduction units.

To make it easy, the rear axle and transmission oil level is easily checked via a sight glass mounted to the right of the PTO output shaft at the back of the tractor.



Rear Axle and Transmission sight glass

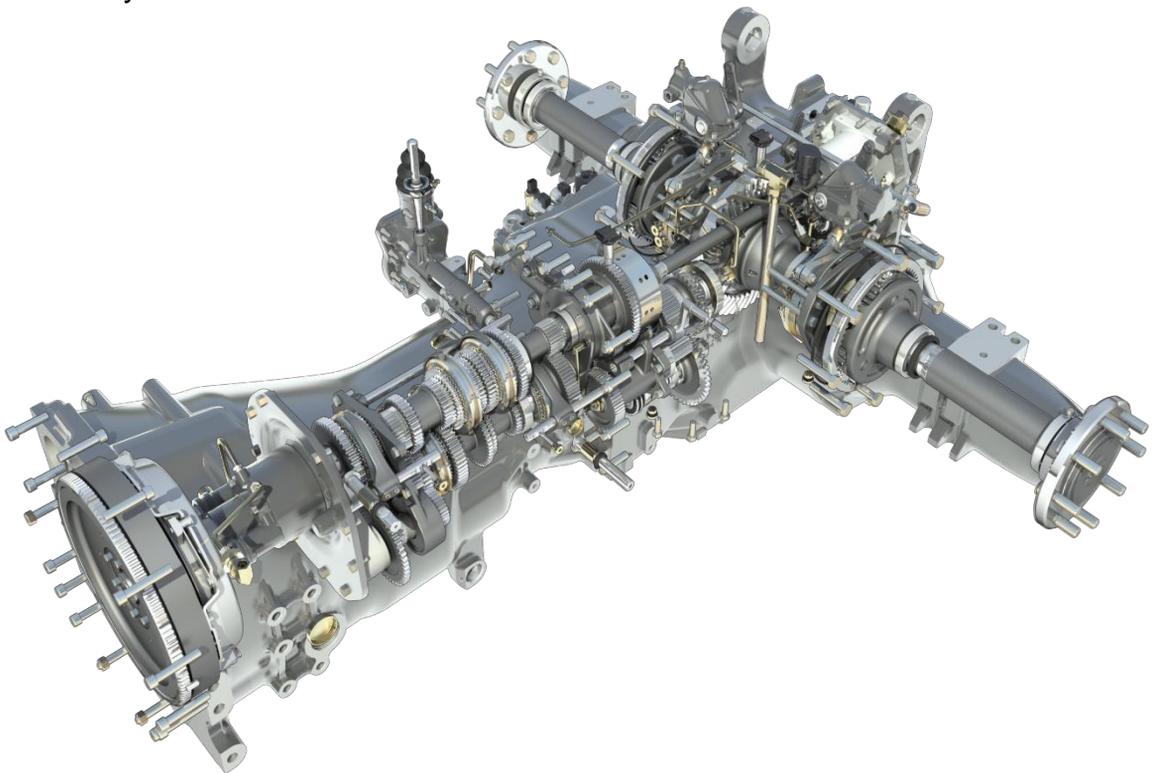
Rear axles have a common design with components engineered to match horsepower and specification.

## Rear Axle

The rear axle assembly, along with the gearbox housing, serves as the reservoir for the hydraulic / transmission oil providing oil for all hydraulic functions whilst ensuring that all internal components are lubricated and cooled.

The centre housing contains the following components:

- Crownwheel, pinion and differential
- Expanding ramp braking system
- iPTO clutch
- PTO gears
- 4WD gears and clutch
- Parking brake
- Hydraulic pumps
- Hydraulic strainers and filters
- Hydraulic valves



Heavy duty rear axles provide a strong and rigid location for brakes, differential lock, 4WD clutch and PTO drive line.

## Crown Wheel & Pinion & Differential

All Massey Ferguson Global Series tractors feature a heavy duty differential unit and crown wheel and pinion mounted in the rear axle housing.

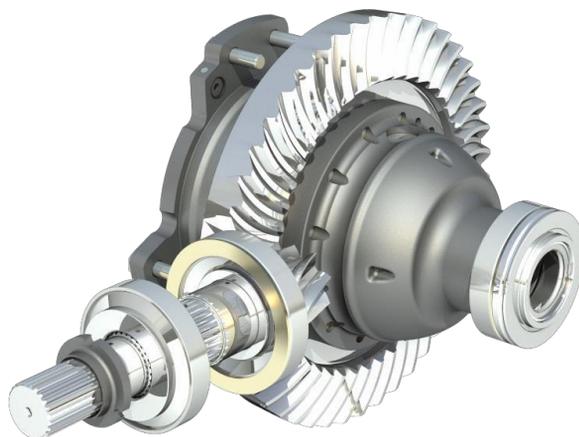
The crown wheel and pinion assembly provides the initial transmission speed reduction whilst the differential unit distributes the drive to the rear wheels and allows differential speeds between the wheels when turning.

The complete assembly is mounted on heavy duty bearings to ensure reliability and longevity in arduous field conditions and haulage applications.

To maximise traction in field applications a differential lock is specified for all tractors. This lock prevents the rear wheels turning independently (as they would during cornering) ensuring an even distribution of drive, and therefore power, to both rear wheels.

The differential lock is engaged electro-hydraulically and disengaged by spring pressure. A rocker switch on the operator station engages and disengages the lock with a light on the instrument panel to advise when it is engaged.

Once engaged using the switch, the lock will remain engaged until it is disengaged by the operator. For added safety the differential lock is also disengaged when the brakes are applied. Due to the electro-hydraulic engagement the diff-lock can be engaged when the machine is stationary or whilst it is moving.



Simple engagement at the touch of a switch for straightforward operation, consistent performance and improved traction in the field.



## Brakes

In order to provide reliable and effective braking all Massey Ferguson Global Series tractors feature inboard oil immersed multi-disc brakes.

The brake discs are mounted at the inboard end of the rear axle trumpet housing, braking the output shafts from the rear differential.

The main brake system consists of :

- Dual mechanical expander units
- Four discs and three intermediate plates per side

Brakes on the Standard Variants are operated by a mechanical linkage providing effective and straightforward operation with minimum pedal force.

Independent right hand or left hand braking is available via separate brake pedals if required. Care should be taken when adjusting the brakes to ensure equal braking force is applied on both sides when the brakes are latched together and pressed simultaneously.



Oil immersed brakes for dependable and reliable braking in all applications and conditions.



## Brakes

With the Essential variants the brakes are controlled by two hydraulic brake units, located on the upper right-hand and left-hand parts of the centre housing.

The brakes are operated by two master cylinders, directly connected to the brake pedals. While each brake can be operated independently, when both brakes are applied together the hydraulic circuits are inter-connected. This ensures the brakes are balanced for maximum control and stopping force.

This hydraulic brake design features self-adjusting brakes and require little maintenance. On both variants the hand brake operates a manual cable linked to the expander units, overriding the foot brake mechanisms.



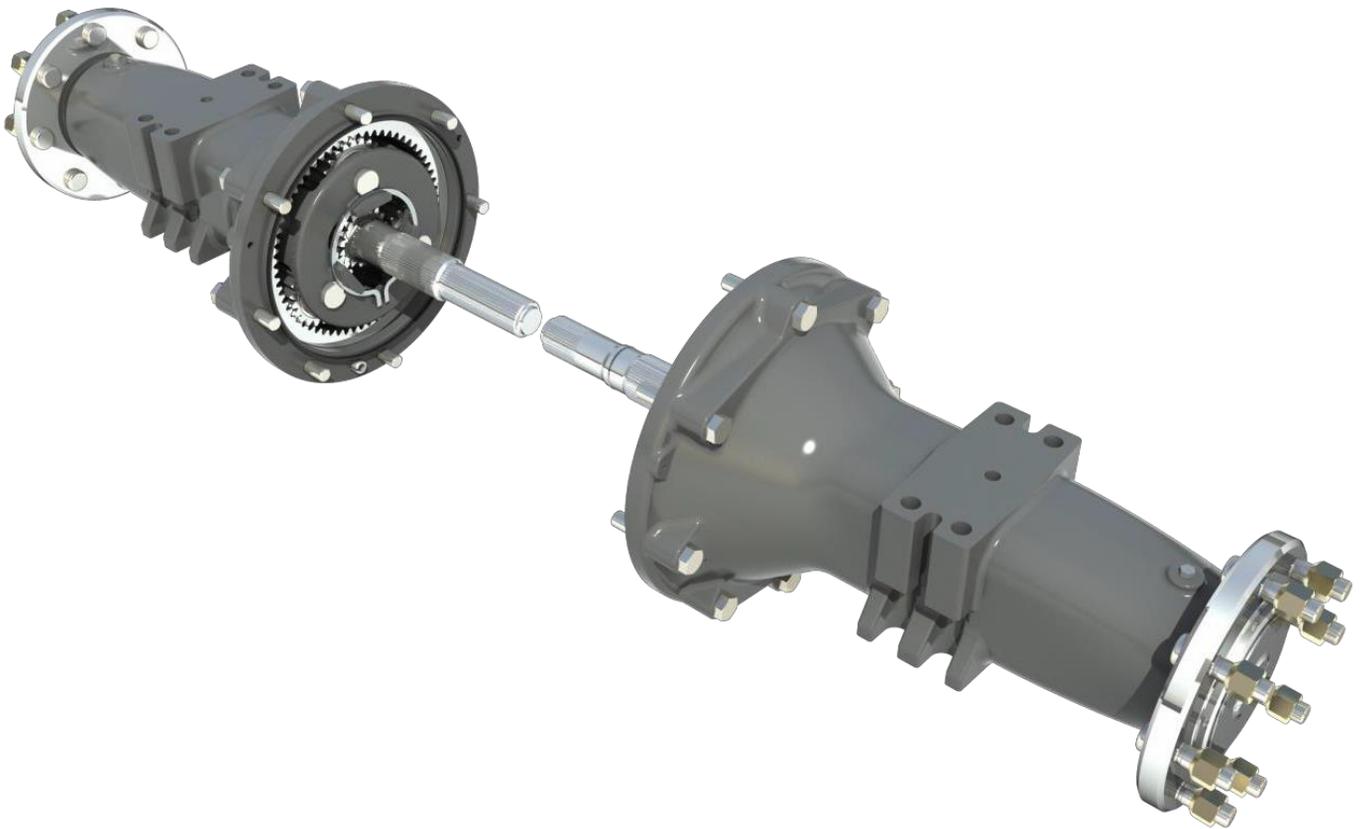
Hydraulic brake operation is self adjusting and linked for maintenance free, reliable braking.

## Inboard Epicyclic Reduction Units

From the differential unit, drive passes through the oil immersed brakes and on through the inboard epicyclic reduction units, directly to the rear wheels.

The epicyclic reduction units are mounted at the inboard end of the rear axle. They provide the final speed reduction / torque multiplication.

Each epicyclic reduction unit uses three pinion gears with heavy duty carrier and bearings. Component sizes vary to provide three different levels of speed reduction/torque multiplication to match the 74 to 132hp power spread of the Massey Ferguson Global Series tractors.



Heavy duty final drive units ensure that full engine power is available at the wheels to maximise traction and performance.

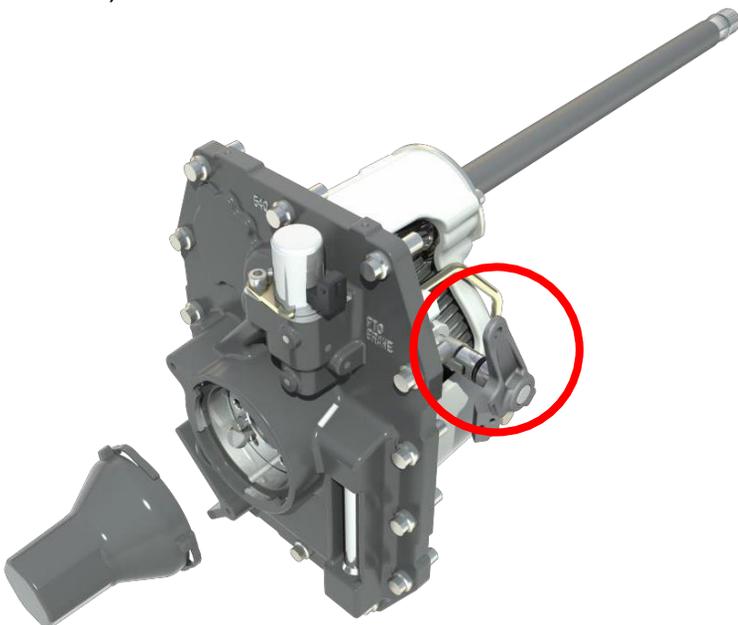
## Power Take Off (PTO)

All tractors are specified with a 540 rpm PTO with 35 mm / 6 spline output shaft. iPTO is particularly useful when frequent engagement and disengagement is required. Depending on the variant & model, multiple PTO speed options are available.

The PTO is engaged by a three-position rocker switch on the operator station. The iPTO clutch provides modulation during engagement to protect the PTO driveline and provide a gradual up take of the drive. When engaged a light is illuminated in the instrument panel and the PTO speed is shown on the display.

When the clutch is disengaged and the switch is placed in the neutral position the PTO shaft can rotate freely to allow for machine run down. This also allows for shaft alignment when attaching an implement. When the switch is moved to the brake position the PTO shaft is hydraulically braked to prevent rotation. High pressure oil for engagement of the iPTO clutch is supplied through the auxiliary hydraulic system.

Where fitted, the PTO speed is selected either at the rear of the tractor using the shiftable PTO lever (MF4700), to the right hand side of the operator (MF5700/MF6700 ROPS) or inside the cabin with a yellow rocker switch on the B-pillar (MF5700/MF6700 CAB).



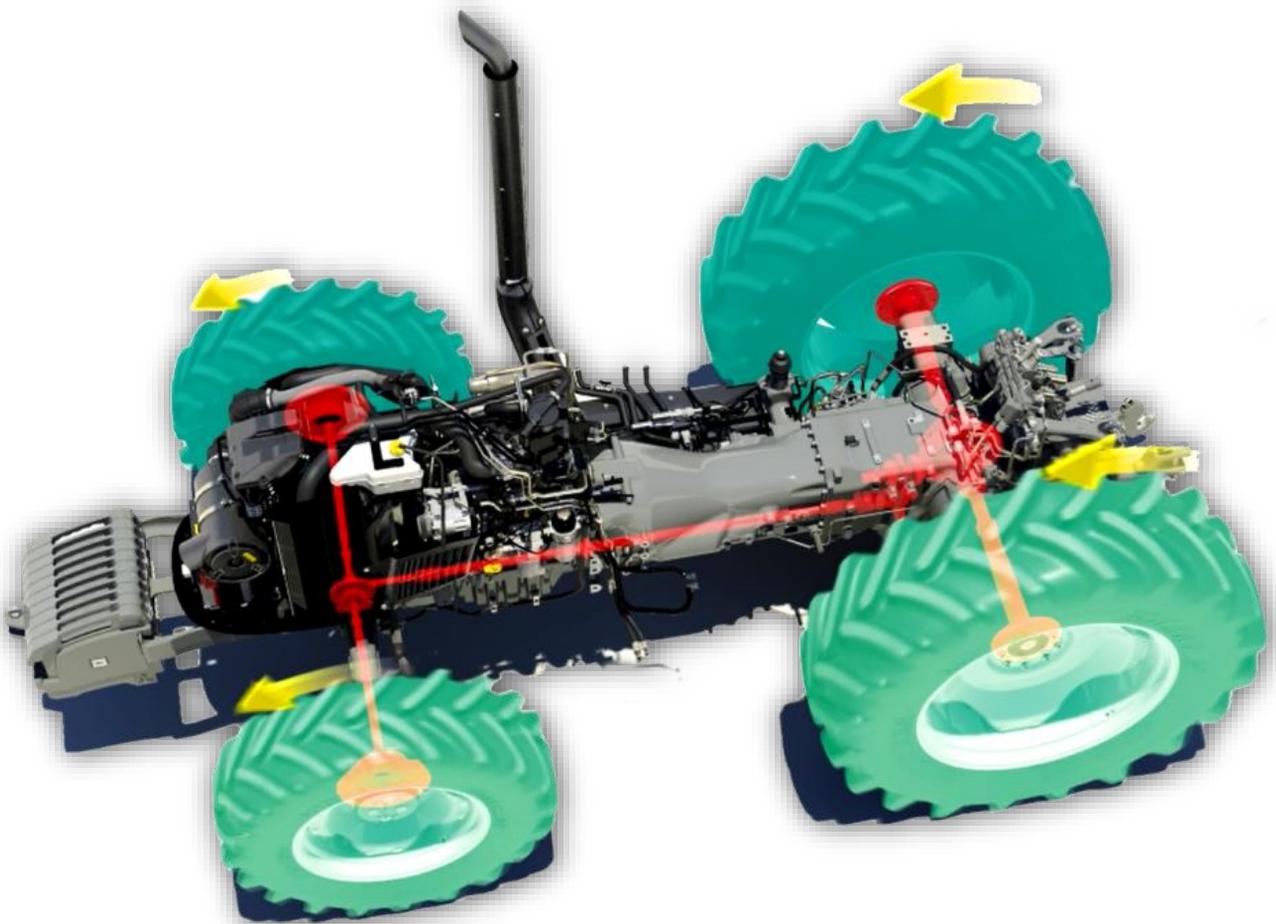
Electronic control for easy operation and reduced wear on the PTO clutch.

## Four Wheel Drive

Four wheel drive provides enhanced traction, greater stability and improved steering accuracy on loose surfaces and is available on all Massey Ferguson Global Series tractors.

Four wheel drive may be considered where there is a lack of traction. Four wheel drive helps reduce soil compaction whilst improving traction and stability as well as turning accuracy on loose ground.

Four wheel drive tractors require an additional output shaft to provide drive for the front axle. On Massey Ferguson Global Series tractors, this drive is provided by a centre drive fitted inside the rear axle housing.



Choice of drive configurations to precisely match application and customer requirements.

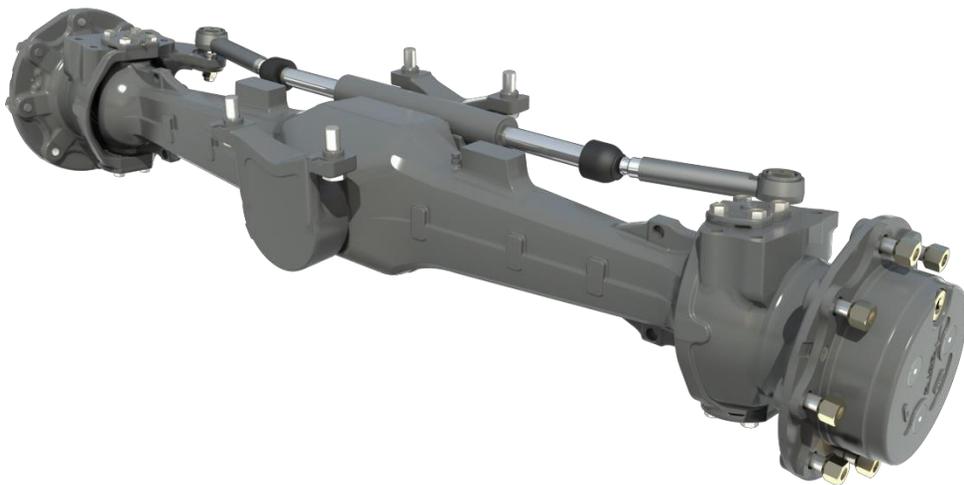
## Hydralock Axle

All 4WD versions of the Massey Ferguson Global Series tractors are specified with a centre drive configuration where the input shaft for the front axle is aligned with the front axle central pivot point. As there is no relative movement between the output shaft and the input shaft, a fixed drive shaft with an intermediate support bearing is specified enhancing driveline reliability. A guard prevents crop debris wrapping around the drive shaft.

All Standard & Essential Variant 4WD axles are fitted with a hydrolock front axle - an electro-hydraulic differential lock which is engaged in tandem with the rear axle differential lock. This gives the optimum traction when required by the operator, provides true 4WD operation and sets the Global Series apart from the competition.

The 4WD axles feature a 55° maximum steering angle making the machines very manoeuvrable and easy to use in confined spaces.

This configuration has a low maintenance requirement and allows enhanced turning angles independent of front tyre size.



Heavy duty 4WD front axles for enhanced traction, greater stability and improved steering accuracy on loose surfaces.

## 4WD Driveline

Drive to the 4WD system is taken from a gear on the rear axle pinion input shaft which engages with a gear on the 4WD drop casing. The drive shaft runs underneath the gearbox and engine to the centre of the front axle. The centre drive shaft is fully guarded to prevent damage by rocks, stumps and crop or debris wrapping around the shaft.

This configuration is used on all 4WD variants of the Massey Ferguson Global Series.

The 4WD coupler design allows efficient and straight forward engagement and disengagement on the move with no break in the power delivery.

The 4WD is permanently engaged by spring pressure and released by hydraulic pressure. For added safety should an electrical or hydraulic fault arise or when the engine is switched off the spring automatically engages 4WD.

The operation is electro-hydraulic with the solenoid valve controlled by a rocker-switch conveniently located on the right hand side of the drive. A light illuminates the rocker-switch when 4WD is engaged.

Four wheel drive should only be used in field environments where additional traction is required, it should not be used on the highway. Drive should not be engaged when there is differential speeds between the front and rear wheels.

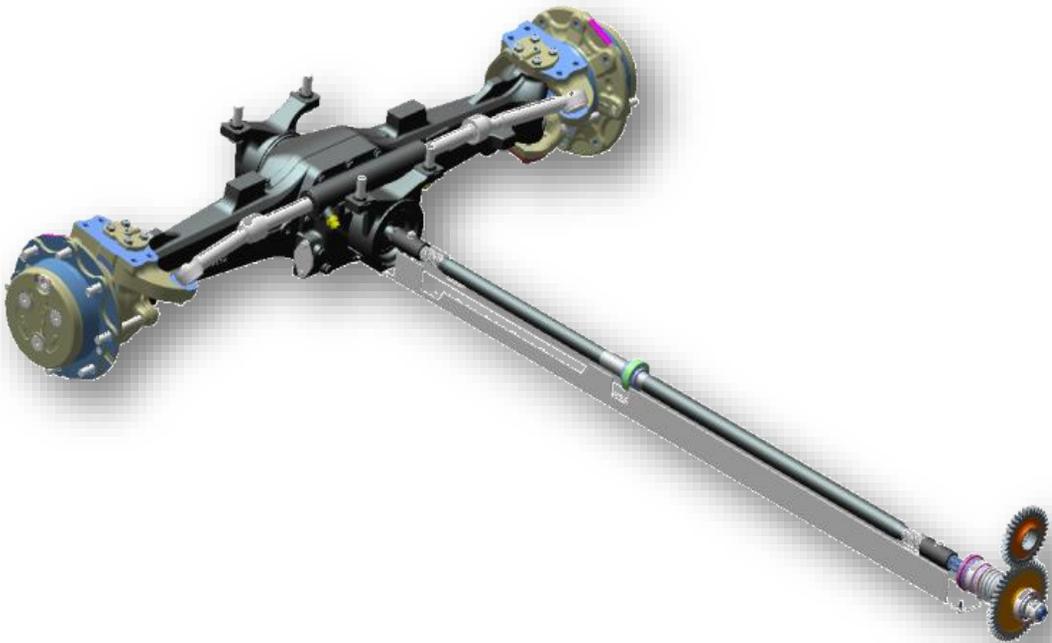


Centre drive 4WD configuration provides better drive shaft protection, reduced drive shaft complexity and minimises drive shaft maintenance.

## Steering

In order to enhance ease of operation, reduce fatigue and protect the operator from shock loads through the steering wheel all Massey Ferguson Global Series tractors are specified with a hydrostatic steering system.

Oil is provided by the auxiliary hydraulic system. An orbitrol valve mounted on the steering column below the steering wheel distributes oil to the steering cylinder on the front axle.



## Hydraulics

All Massey Ferguson Global Series tractors have open centre hydraulic systems for straightforward reliable operation. The demands of the various hydraulic systems are met by two individual hydraulic pumps, one drives the high pressure system and the other drives the low pressure auxiliary system.

The hydraulic gear pumps are driven from the top PTO shaft which in turn is driven by the engine providing a constant oil flow when the engine is running.

The Massey Ferguson 4700 Range is fitted with a single open centre, transmission mounted hydraulic pump that provides 65 litres/min at rated engine speed.

The Massey Ferguson 5700 & 6700 Range is fitted with a single open centre, transmission mounted hydraulic pump that provide 57 litres/min at rated engine speed, with a blue combined flow switch offering 98 litres/min pump, providing class leading hydraulic flow for exceptional hydraulic control & performance.

On each model the pump unit is fitted to the right hand side of centre-housing. The hydraulic system is built into the cover plate which also supports the pump. This means the oil flow paths are kept as short as possible to minimise parasitic losses.

All Massey Ferguson Global Series tractors are fitted with an oil cooler to ensure that the transmission and rear axle oil is kept at the optimum temperature for improved performance and reduced wear.



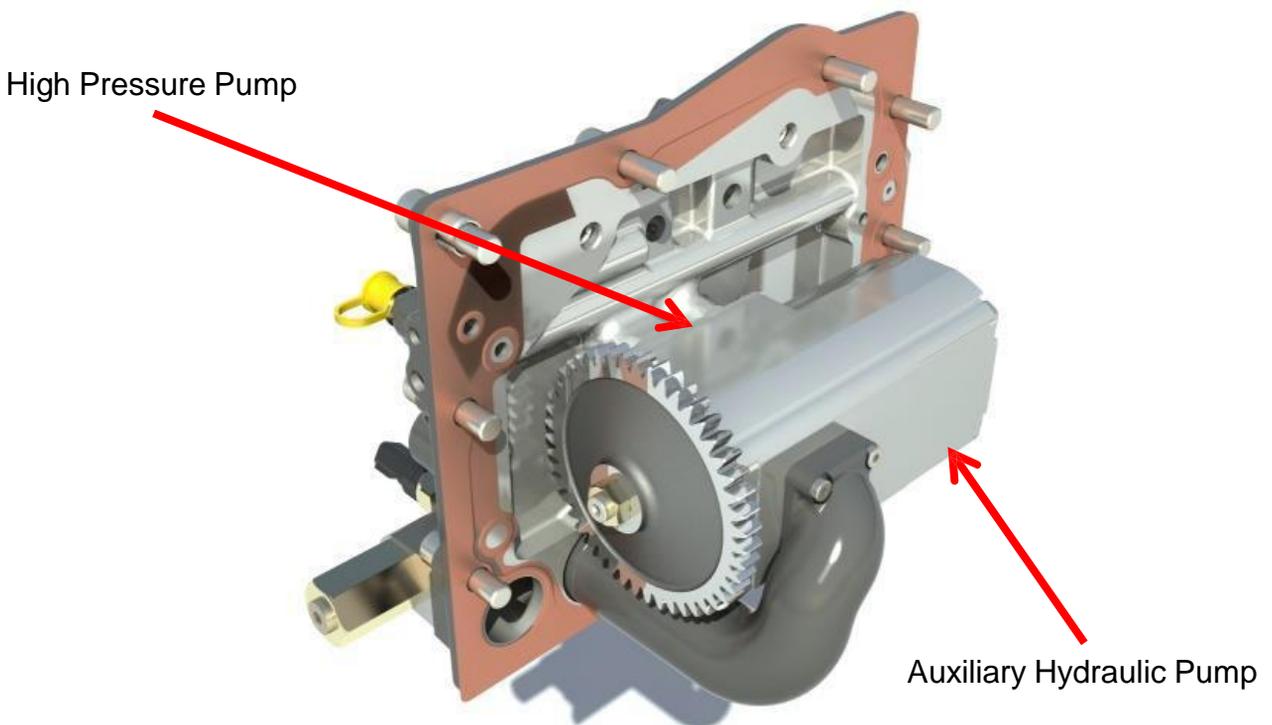
## Main High Pressure Hydraulic Pump

One main gear driven hydraulic pump is used for the high pressure hydraulic system. This system controls the rear linkage and auxiliary spool valves.

The pump for the high pressure hydraulic system draws oil from the bottom of the centre-housing via a 20 Micron filter. This filter is an externally mounted cartridge type filter for ease of replacement. A warning light advises the driver if replacement is necessary between service intervals.

The pump is driven from the PTO driveline, which is constantly powered making hydraulic oil for the rear linkage and spool valves available at all times.

Diagnostic quick connectors are fitted to the hydraulic system cover plate. These can be used for diagnostic testing of the system pressures.



A simple auxiliary hydraulic system provides ample clean hydraulic flow at all times.

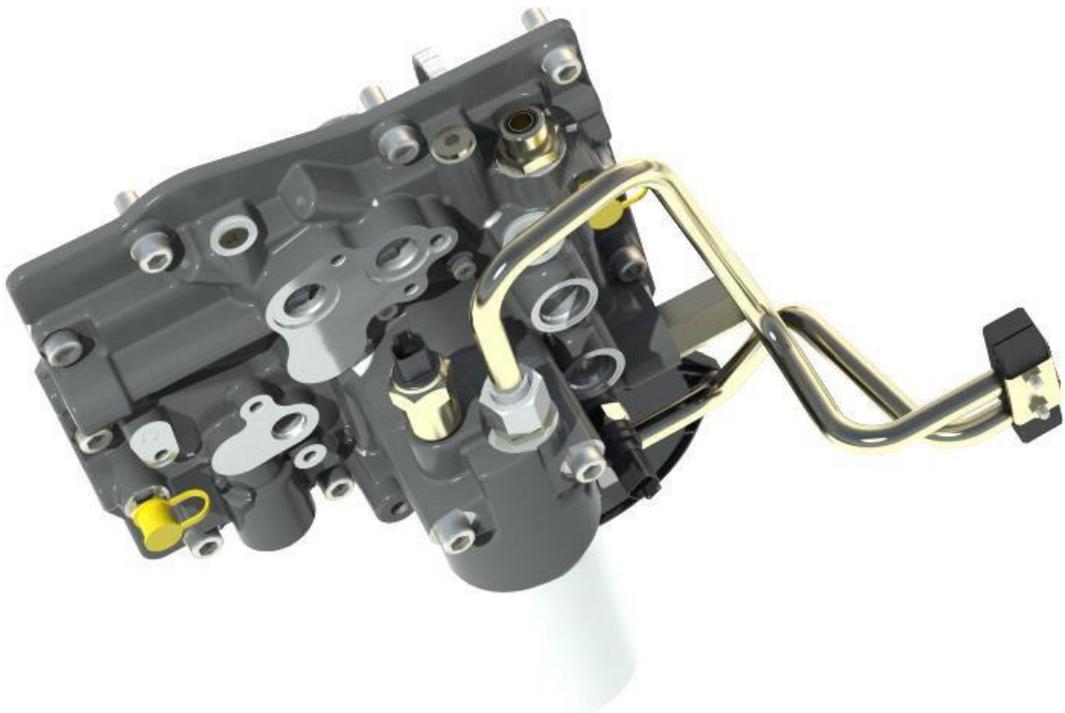
## Auxiliary Low Pressure Hydraulic Pump

The auxiliary hydraulic system supplies all tractor functions through internal channels to minimise external piping. This regulated pump supplies these functions in parallel so that no one function has priority, and they may all be activated simultaneously.

The functions supplied by the low pressure hydraulic system are as follows:

- Hydrostatic steering control
- Gearbox lubrication
- 4WD engagement
- Differential lock
- Power take-off systems

Sufficient oil flow to all the gearbox components is ensured by a lubrication system. The returning oil flow from the tractor hydraulic system is circulated through the shafts of the gearbox to feed individual gears, synchromesh units, bearings etc. The oil level in the gearbox is optimised to minimise power absorption during use.



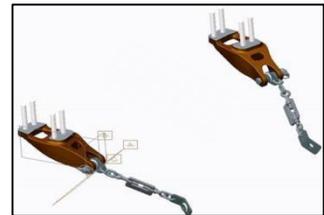
Auxiliary hydraulics are supplied in parallel. All internal functions can be used simultaneously.

## Rear Linkage

Massey Ferguson Global Series tractors are specified with two external lift cylinders. The use of two external lift cylinders increases the maximum lift capacity on each tractor whilst reducing the complexity of the rear axle centre housing.

All Massey Ferguson Global Series tractors are fitted with category II (MF6700 Cat II/III) rear linkage with fixed ball end links on the ST variants and hook end links on all ES variants. All models have fully adjustable lift rods with float position. An adjustable top link with ball ends is also supplied.

**Standard** Specification is fitted with Chain stabilisers.



**Essential** Specification is fitted with Telescopic stabilisers.

(4700/5700 ES Tractors come fitted with CAT 2/2 hook ends standard & 6700 Tractors are fitted with CAT 3/2 hook ends)



## Rear Linkage Control

Massey Ferguson Global Series ROPS tractors are specified with a simple Electronic Linkage Control (ELC) system. Draft sensing is via the top link with the sensing pin also acting as the top link pin. The Massey Ferguson invented draft concept is explained in the next few pages for more help.

ELC is the most advanced and reliable control system for the operation of tractor rear linkage and was pioneered by Massey Ferguson over 35 years ago. ELC provides precise and accurate linkage control in both position and draft applications whilst overcoming many of the deficiencies of a mechanical control system. As the link between the various components of the control system is electronic rather than mechanical, the ELC system is able to react more quickly and more accurately to changing draft forces. System reliability is also increased by the absence of any mechanical control linkage that would wear and require adjustment.

The system features two levers which control implement height and the draft control settings for the linkage. Both levers are located to the right of the operator and fall easily to hand. The lever furthest from the operator controls the height or depth of the implement. The rate of drop is directly proportional to the speed at which the lever is operated. The faster the lever is moved the faster the implement will lower. The lever closest to the operator controls the draft control settings for the linkage. This lever is known as the Intermix lever. It allows the draft sensitivity to be set according to the ground conditions and type of operation being carried out.



ELC with position / intermix / draft control for enhanced productivity with linkage mounted implements.

## Electronic Lift Control

ELC is available as standard with all Global Series cabin tractors. In addition to the lift/lower lever in the “mouse” and the intermix control in the B pillar, there are additional controls for rate of drop, maximum height and the Active Transport Control. There is also an Up/down rocker switch with neutral position for the linkage as well as a quick soil engagement (green button). Both are handily placed below the depth control lever on the side of the “mouse”.



**Up/Down rocker switch with quick soil engagement**

**Linkage Suspension(ATC)**

**Intermix Control: Position/Draft**

**Rate of drop**

**Top height**



## Draft Control

### Draft Principle

An implement cutting through the soil at a certain depth requires a certain force (or draft) to pull it. That draft will increase if the implement runs deeper and decrease if it runs shallower. Draft control automatically calculates to changes in draft loading and the draft sensor checks if the physical draft value is in accordance with the request of the draft control lever.

### Ferguson System

This system was patented by Harry Ferguson in 1926. Draft forces are sensed through set attachment points and a hydraulic pump automatically reacts to changes in draft loading.

### Hill Application

If the front end of a tractor rises upwards over a small hill, the immediate increase in draft would be noticed by the draft sensors and give a lift signal to the hydraulic pump. The implement would be raised to such a point that the implement remains at the same depth prior to the front end lifting

### Hole Application

If the front end of a tractor drops into a hole, the immediate increase in draft would be noticed by the draft sensors and give a drop signal to the hydraulic pump. The implement would be lowered to such a point that the implement remains at the same depth prior to the front end dropping.



Platform



Cab

## Introduction

In order to meet the hydraulic requirements of a wide range of implements and attachments Massey Ferguson Global Series tractors are fitted with two auxiliary valves as standard. A 3<sup>rd</sup> valve can be fitted as an local option.

The auxiliary hydraulic valve is powered using the high pressure hydraulic circuit as previously described.

The auxiliary hydraulic valve configuration is as follows:

### **4700 ST Only -**

- Double Acting – DA + FL
- Double Acting – DA + FL

### **ES 4700/5700/6700**

- Double Acting with kick-out – DA + KO + FL
- Double Acting with kick-out – DA + KO + FL



Straightforward auxiliary spool valves to meet customer and application requirements.

## Operator Environments

All Global Series tractors are available as both a ROPS and CAB variant, giving customers ultimate versatility in the range and providing stunning flexibility in application suitability.

### Standard Variants (MF4700 only)

Standard Variants have a low exposed transmission tunnel without restricting access and providing a comfortable foot rest position. This variant is available only in ROPS.

### Essential Variants (MF4700)

All MF4700 Essential Variants have a rubber mat covered ultra-low transmission tunnel (4700 ES) and an ultra-quiet and boast the largest cabin in the market.

### Essential Variants (MF5700/MF6700)

All MF5700/MF6700 Essential Variants have a rubber mat covered flat floor and the same ultra-quiet, comfortable cabin in the market as the MF4700.

The silencer is mounted under the bonnet with a narrow exhaust pipe on the right side of the engine bonnet. The air pre-cleaner and the air filter are also located under the bonnet. With the bonnet clear of these components the operator is rewarded with unobstructed front visibility improving ease of operation and safety.

The bonnet has modern Massey Ferguson family styling similar to higher horsepower

The instrument console, sheet-metal bonnet, rear fender and rear road light installation have been designed for maximum driver visibility.



Easy to access, comfortable operator station gives customers the ideal work environment.



## Overview – ROPS

Massey Ferguson Global Series Standard tractors are specified with a footstep operator environment, while the Essential machines are specified with a semi-platform design (4700) or flat floor platform (5700/6700).

All ROPS variants come fitted with a mechanical suspension seat, roll over protection (ROPS) certified and seatbelt to improve operator safety. Where fitted, the sun canopy is mounted to the ROPS to provide protection to the operator from the sun - helping to improve operator comfort.

Even in the worst conditions, visibility and operator comfort is maintained due to the long rear fenders which help to prevent mud and water being splashed up onto the operator. This helps to keep the tractor clear of mud, maintaining a tidy and professional appearance.

**4700 ST**  
(Footstep Platform)



**4700 ES**  
(Semi-Platform)



## Overview – Cabins



Massey Ferguson Global Series Essential tractors are specified with either a low-mounted or standard cabin. All 4700 cabins are low-mounted, whilst the 5700/6700 ES variants have a standard, flat floor cabin.

The Global Series provides the same cabin design across the range, taking their lead from the premium Beauvais cabin provided with the Massey Ferguson heavy horsepower equivalents. The design and finishing results in a premium cabin with premium finishes for a fraction of the price of a Beauvais tractor.

All models ROPS & FOPS certified and available with a visor roof for improved visibility and operation with loader work.

Even in the worst conditions, visibility and operator comfort is maintained due to the long rear fenders which help to prevent mud and water being splashed up onto the windscreen. This helps to keep the tractor clear of mud, maintaining a tidy and professional appearance.

**4700 ES**  
(Low mounted cabin)



**5700/6700 ES**  
(Standard mounted cabin)



## Operator Environment - ROPS

All the controls are manually operated (hand-throttle, handbrake, gear levers, shuttle etc.) and mounted in the most ergonomic position. The gear levers beside the driver seat are directly connected to the shifting mechanism. The spool valve control levers are located on the right hand side of the seat and are directly connected to the spool valves.

The hand throttle is conventionally located on the instrument binnacle. The hand brake is located to the left of the operator's seat.

Grab rails are mounted outside the operator station for easy access to the footsteps, which are mounted directly to the machine.

The side lights and direction indicator lights are mounted on the front of the rear fenders. The rear road lights are integrated into the rear fender extensions and a single rear working light is provided at the rear of the operator station. A number plate support and light is also specified.



The operator station configuration has an ergonomic layout with straightforward controls for easy operation to maximise performance.

## Operator Environment - ROPS



The operator station configuration has an ergonomic layout with straightforward controls for easy operation to maximise performance.

## Operator Environment - CAB

All Cab controls are mounted in the most ergonomic position. The gear levers beside the driver seat are directly connected to the shifting mechanism, spool valve control levers are located on the right hand side of the seat and are directly connected to the spool valves. The hand throttle is conventionally located on the right control console, the hand brake is located to the left of the operator's seat and the controls are located on the B-pillar.

All cabins in the essential range feature an air suspended swivel seat with armrests, dual adjustment (tilt and reach) steering column, retractable sun visor and an amber light for night driving operation. An optional visorroof ensures optimal loader visibility and operation where fitted.

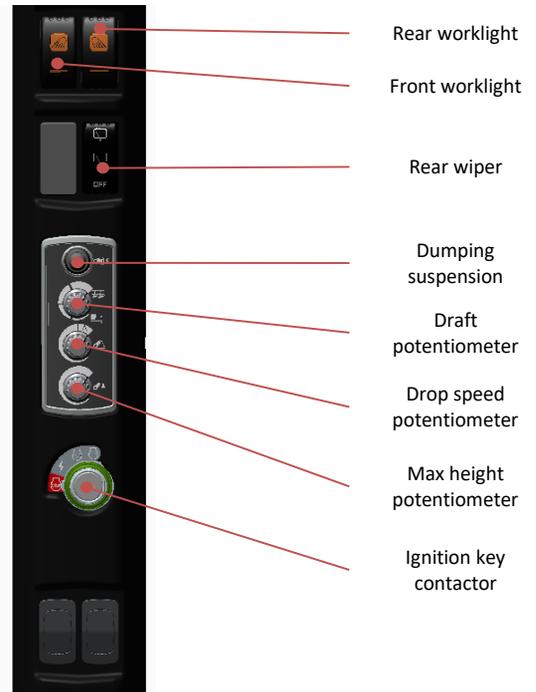


**5700 ES**  
(Standard Mount Cabin)

The operator station configuration has an ergonomic layout with straightforward controls for easy operation to maximise performance.

## Operator Environment - CAB

- 1 Power Shuttle
- 2 Flat Floor
- 3 Differential Lock/4WD engagement
- 4 PTO rocker switch
- 5 Hand throttle
- 6 Dashboard rocker switch
- 7 Linkage/Draft Control
- 8 Integrated Loader Joystick (Optional)
- 9 Rear Remotes



## Cabin Specifications

The 6 post cabin structure provides excellent space and visibility and protection. The low, narrow hood design creates optimal forward viewing and clear rear linkage allows for unobstructed viewing.

The premium trim within the cabin reflects the quality of manufacturing and falls in line with both the quality and design offered in the larger MF Beauvais machines. The plastic trim is easy to maintain for dairy and market garden farmers and ample storage and air vents ensure long days are comfortably handled with ease.

Access to the air filter is done from to back of the cab for easy maintenance.



**Cab air filter location**

**Easy to maintain**

## Cab storage



## Toolbox



## Cab Ventilation & radio

Cab versions feature opening rear and side windows, with an optional visorroof available from factory. A pressurised heater / blower system with 4 speed fan, recirculation control and external filtration is part of the standard specification.



Front



Air conditioning

Ventilator

Air filter



## Dashboard

All Global Series models boast an easy to read, modern dash with clear and informative information readily available. Two types of dashboards are available, all ST variants come with basic information readout, whilst all ES variants come with a performance dashboard – offering more information and operation control.

### ST Specification: Basic Dashboard

The modern dashboard comprises both analogue and digital displays to provide the operator with immediate and instantaneously understood warnings and tractor data information. This includes;

#### Analogue Displays

- Tachometer, Engine temperature gauge, Fuel gauge with low level warning light

#### Warning Lights

- PTO, 4WD, Diff Lock, Pre Heater, Creeper plus other system warning lights



Clear and informative instrumentation provides operational and functional information to the operator

## Dashboard: ES Specification

In addition to the standard information, the performance dash specification includes a digital screen in the centre of the dash, giving straightforward information at the touch of a few buttons.

This on-board computer is intuitive and uses 2 rocker switches, which are located under the steering column and used to move between screens. The guide in the operator manual will provide updated on specific operations which can be used for navigating between operations and setting implement widths, resetting fuel usage and counting/activation triggers.

### Setup screens :

- Calibration
- Maintenance intervention

### Information screens :

- Home menu
- Working / travelling distance
- Working area & tractor performance
- Engine and transmission temperatures
- Engine memory speeds (MF4709 only)
- Error code (if one is activated)



Digital screen



Control Panel

## Electrics

Massey Ferguson Global Series tractors are fitted with a 12 volt electrical system and 66 amp hour wet battery.

The battery is located in front of the radiators and is easily accessible for checking and servicing. The batteries are virtually maintenance-free.

Electrical power is supplied by a 36 amp alternator.

A 2.7 kW starter motor is fitted to all models.

A fuse box is located under the bonnet on all models.



A full range of electrical services allow operation in all environments and at all times of the day or night.

## Lighting

Full highway lighting with a horn is part of the base specification. Dipping headlights, indicators and brake light operation have been localised to ensure compliance with local requirements.

A single rear work light is in base for the ROPS variants, whilst 2 front and rear worklights are provided as standard on all cabin models. An optional front facing worklight kit is available on specific cabin models, both as a factory or local kit.

A seven pin socket is also fitted to allow operation of lighting on a trailer or towed implement.



## Three Point Hitch

Massey Ferguson 4700 Global Series tractors are fitted with a swinging drawbar as standard, whilst the MF5700 & MF6700 tractors are fitted with a heavy duty swinging drawbar for heavier applications.



A functional heavy duty swinging drawbar to fulfil customers requirement.

## Factory Options

As a further enhancement to versatility and performance the **Massey Ferguson Global Series** tractors are available with limited factory optional accessories. Whilst there are local options also available, the limited factory options are provided to ensure costs associated with customization are kept to a minimum and subsequent cost savings are passed on to the customer.

The following options are available ex-factory:

### 4700 ST VARIANT

#### ROPS

<b>AI038</b>	2 post folding safety frame with canopy
<b>LL001</b>	Loader ready
<b>YA078</b>	10x40kg front weights with tow hitch
<b>W</b>	Wheel and Tyres (see W&T options)

### 4700 ES VARIANT

#### ROPS

<b>AI038</b>	2 post folding safety frame with canopy
<b>EN002</b>	Super creep gears
<b>LL001</b>	Loader ready
<b>RD092</b>	2x50kg wheel weights both sides
<b>WD380</b>	100mm side fender extensions
<b>YA078</b>	10x40kg front weights with tow hitch
<b>W</b>	Wheel and Tyres (see W&T options)

#### CABIN

<b>AG003</b>	Auxiliary seat with seatbelt
<b>AI021</b>	Visioroof with FOPS
<b>EN002</b>	Super creep gears
<b>LL001</b>	Loader ready
<b>RD092</b>	2x50kg wheel weights both sides
<b>VK001</b>	Mid-mount front work light
<b>WE000</b>	Less pivoting front fenders
<b>YA078</b>	10x40kg front weights with tow hitch
<b>W</b>	Wheel and Tyres (see W&T options)

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## 5700 ES VARIANT

ROPS		CABIN	
<b>AI038</b>	2 post folding safety frame with canopy	<b>AG003</b>	Auxiliary seat with seatbelt
<b>EN002</b>	Super creep gears	<b>AI021</b>	Visioroof with FOPS
<b>LA112</b>	540/540E/1000 PTO	<b>EN002</b>	Super creep gears
<b>LL001</b>	Loader ready	<b>LA112</b>	540/540E/1000 PTO
<b>RD093</b>	3x50kg wheel weights both sides	<b>LL001</b>	Loader ready
<b>WD380</b>	100mm side fender extensions	<b>RD093</b>	3x50kg wheel weights both sides
<b>WE110</b>	Pivoting front fenders	<b>VK001</b>	Mid-mounted front work light
<b>YA111</b>	10x55kg front weights with tow hitch	<b>WD381</b>	250mm side fender extensions
<b>W</b>	Wheel and Tyres (see W&T options)	<b>YA111</b>	10x55kg front weights with tow hitch
		<b>W</b>	Wheel and Tyres (see W&T options)

## 6700 ES VARIANT

ROPS		CABIN	
<b>AI038</b>	2 post folding safety frame with canopy	<b>AG003</b>	Auxiliary seat with seatbelt
<b>EN002</b>	Super creep gears	<b>AI021</b>	Visioroof with FOPS
<b>LA109</b>	540/540E PTO	<b>EN002</b>	Super creep gears
<b>LL001</b>	Loader ready	<b>LA109</b>	540/540E PTO
<b>RD093</b>	3x50kg wheel weights both sides	<b>LL001</b>	Loader ready
<b>WD380</b>	100mm side fender extensions	<b>RD093</b>	3x50kg wheel weights both sides
<b>WE110</b>	Pivoting front fenders	<b>VK001</b>	Mid-mounted front work light
<b>YA115</b>	14x55kg front weights with tow hitch	<b>WD381</b>	250mm side fender extensions
<b>W</b>	Wheel and Tyres (see W&T options)	<b>YA115</b>	14x55kg front weights with tow hitch
		<b>W</b>	Wheel and Tyres (see W&T options)

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## Local Options

As a further enhancement to versatility and performance the Massey Ferguson Global Series tractors are available with locally supplied kits. The below is an indication of kits available, more are available through parts:

<b>LOCAL KITS AVAILABLE</b>	
<b>HYDRAULICS</b>	
<b>4392850M14</b>	3 <sup>rd</sup> remote control mechanism kit (4700 ROPS)
<b>4393117M11</b>	3 <sup>rd</sup> remote valve kit DA FL
<b>4393120M13</b>	3 <sup>rd</sup> remote valve kit DA FD KO FL
<b>4392905M11</b>	Detent locking kit for spool valve
<b>WEIGHTS</b>	
<b>4380458M1</b>	40kg Front end weight
<b>4349427M2</b>	55kg Front end weight
<b>ACW0026370</b>	Weight frame & tow pin
<b>ACW0128080</b>	Rear wheel weight – 50kg
<b>3497359M91</b>	10x40kg front weight kit (MF4700)
<b>3497360M91</b>	10x55kg front weight kit (MF5700)
<b>3497381M91</b>	14x55kg front weight kit (MF6700)
<b>3497119M91</b>	Interface weight kit (2x50kg)
<b>OPERATOR STATION</b>	
<b>ACW002869B</b>	Sun canopy
<b>4385513M1</b>	Lockable fuel cap
<b>ACW014178A</b>	Work light kit (ROPS)
<b>ACW1454000</b>	Work light kit (CAB)
<b>ACW078776C</b>	Auxiliary seat kit
<b>ACW0038210</b>	Arm rest set
<b>ACW002806C</b>	Beacon kit (with harness)
<b>ACW0492200</b>	Trailer brake kit
<b>EXWMF</b>	Extended warranty

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## Wheel and Tyres

As a further enhancement to versatility and performance the Massey Ferguson 4700 Global Series tractors, a select range of wheels and tires are available from both factory and locally. The below is a layout of the options available on each model in the range:

### MF4700

OPTION	CODE	REAR	FRONT	TYPE
FACTORY	W5D54	420/85R30	320/85R24	AG
FACTORY	<b>STANDARD</b>	460/85R30	340/85R24	AG
FACTORY	W5D30	420/85R34	320/70R28	AG
FACTORY	W5E29	540/65R34	440/65R24	AG
LOCAL	MF4700NWH	LESS WHEELS & TYRES	LESS WHEELS & TYRES	NIL
LOCAL	MF4700AG1	420/85R30	320/85R24	AG
LOCAL	MF4700AG2	380/85R30	280/85R24	AG
LOCAL	MF4700AG3	18.4X30	12.4X24	AG – BIAS PLY
LOCAL	MF4700IN3	16.9X30M	14.5X20M	IND – BIAS PLY
LOCAL	MF4700RC2	230/95R48	230/95R32	ROW CROP
LOCAL	MF4700RC8	340/85R38	280/85R28	ROW CROP
LOCAL	MF4700RC10	380/85R38	320/85R28	ROW CROP
LOCAL	MF4700TF4	650/65R30.5	560/60R22.5	TURF
LOCAL	MF4700TF5	16.9X30B	11.2X24G	TURF – BIAS PLY

Please note, **ALL LOCAL** wheel and tyre options above are sourced from Australia and subject to a **3 week lead time**.

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## Wheel and Tyres

As a further enhancement to versatility and performance the **Massey Ferguson 5700 Global Series** tractors, a select range of wheels and tires are available from both factory and locally. The below is a layout of the options available on each model in the range:

### MF5700

OPTION	CODE	REAR	FRONT	TYPE
FACTORY	STANDARD	460/85R34	380/85R24	AG
FACTORY	W5E47	540/65R38	440/65R28	AG
LOCAL	MF5700NWH	LESS WHEELS & TYRES	LESS WHEELS & TYRES	NIL
LOCAL	MF5700AG1	420/85R34	380/85R24	AG
LOCAL	MF5700AG2	520/70R34	420/70R24	AG
LOCAL	MF5700AG3	18.4X34	14.9X24	AG – BIAS PLY
LOCAL	MF5700AG4	480/70R38	380/70R28	AG
LOCAL	MF5700AG5	420/85R38	340/85R28	AG
LOCAL	MF5700AG6	18.4X38	14.9R28	AG – BIAS PLY
LOCAL	MF5700AG7	540/65R38	440/65R28	AG
LOCAL	MF5700AG8	600/65R38	440/65R28	AG
LOCAL	MF5700RC1	320/95R50M	270/95R38	ROW CROP
LOCAL	MF5700RC2	340/90R48M	320/85R34M	ROW CROP
LOCAL	MF5700RC3	270/95R48	270/95R32	ROW CROP
LOCAL	MF5700RC10	380/85R38	320/85R328	ROW CROP

Please note, **ALL LOCAL** wheel and tyre options above are sourced from Australia and subject to a **3 week lead time**.

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## Wheel and Tyres

As a further enhancement to versatility and performance the **Massey Ferguson 6700 Global Series** tractors, a select range of wheels and tires are available from both factory and locally. The below is a layout of the options available on each model in the range:

### MF6700

OPTION	CODE	REAR	FRONT	TYPE
FACTORY	STANDARD	460/85R34	380/85R24	AG
FACTORY	W5E47	540/65R38	440/65R28	AG
FACTORY	W5E09	600/65R38	480/65R28	AG
LOCAL	MF6700NWH	LESS WHEELS & TYRES	LESS WHEELS & TYRES	NIL
LOCAL	MF5700AG1	420/85R34	380/85R24	AG
LOCAL	MF5700AG2	520/70R34	420/70R24	AG
LOCAL	MF5700AG3	18.4X34	14.9X24	AG – BIAS PLY
LOCAL	MF5700AG4	480/70R38	380/70R28	AG
LOCAL	MF5700AG5	420/85R38	340/85R28	AG
LOCAL	MF5700AG6	18.4X38	14.9R28	AG – BIAS PLY
LOCAL	MF5700AG7	540/65R38	440/65R28	AG
LOCAL	MF5700AG8	600/65R38	440/65R28	AG
LOCAL	MF5700RC1	320/95R50M	270/95R38	ROW CROP
LOCAL	MF5700RC2	340/90R48M	320/85R34M	ROW CROP
LOCAL	MF5700RC3	270/95R48	270/95R32	ROW CROP
LOCAL	MF5700RC10	380/85R38	320/85R328	ROW CROP

Please note, **ALL LOCAL** wheel and tyre options above are sourced from Australia and subject to a **3 week lead time**.

A range of accessories allow tractor specification to be tailored to application and customer requirements.

## Premium Front End Loaders

Massey Ferguson Global Series tractors are available with the Massey Ferguson 900X Series and professional FL Series Loaders. All loaders are Euro hitch compatible and feature a world renowned quick release mechanism, allowing for attachment/detachment within minutes.

All MF 900X series loaders have mechanical self-level and euro style hitch, with 3<sup>rd</sup> service and loader suspension optional. Although the loaders have a relatively high lifting capacity against other loaders on the market. these loaders are designed for more infrequent applications.

All MF FL series loaders have mechanical self-level, euro style hitch and 3<sup>rd</sup> service as standard, with loader suspension optional. These loaders are designed for heavier duty applications and frequent use due to their heavy duty boom design and fabrication.

	936X	946X	956X	FL.4018	FL.4121
4700	YES	NO	NO	NO	NO
5700	NO	YES	YES	YES	YES
6700	NO	YES	YES	YES	YES



### MC-4 Quick Couplers

All MF front end loaders are compatible with our optional quick release MC-4 coupler.

The MC-4 allows the user to release the valves **UNDER PRESSURE** for increased flexibility.



<b>Chapter</b>	<b>Page Number</b>
MF Global Series Specifications	
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• PTO	79
• Rear Linkage & Hydraulics	80
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**Disclaimer:**

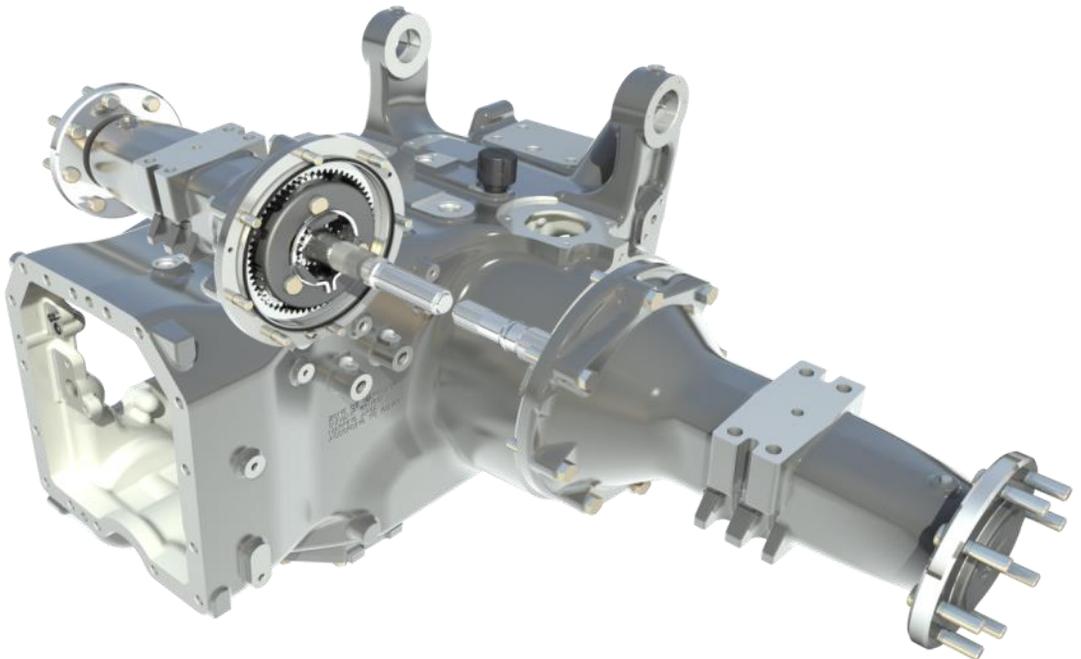
Every effort has been made to ensure that the information contained in this publication is as accurate and current as possible. However, inaccuracies, errors or omissions may occur and details of the specifications may be changed at any time without notice. Therefore, all specifications should be confirmed with your Massey Ferguson Distributor prior to any purchase.

## TRANSMISSION

	MF 4700	MF 5700	MF 6700
<b>Transmission Type</b>	6 Synchromesh x 2 Constant Mesh Ranges		
<b>Control Position</b>	Side shift with synchronised shuttle		
<b>Forward Gears</b>	12		
<b>Reverse Gears</b>	12		
<b>Ranges</b>	2		
<b>ST Variant Shuttle Operation</b>	LH side shift	-	-
<b>ES Variant Shuttle Operation</b>	MF Power Control Lever		
<b>ST Variant Clutch Type</b>	Single Plate Dry	-	-
<b>ES Variant Clutch Type</b>	Multi Plate Wet		
<b>ST Variant Clutch Operation</b>	Mechanical	-	-
<b>ES Variant Clutch Operation</b>	Hydraulic		
<b>Clutch Plate Diameter</b>	310mm / 12"		
<b>Clutch Plate Material</b>	Ceremetallic		
<b>ST Variant Nominal Min Speed</b>	2.5km/h	-	-
<b>ST Variant Nominal Max Speed</b>	30km/h	-	-
<b>ES Variant Nominal Min Speed</b>	2 km/h		
<b>ES Variant Nominal Min Speed (with Creep)</b>	0.15km/h		
<b>ES Variant Nominal Max Speed</b>	40km/h		

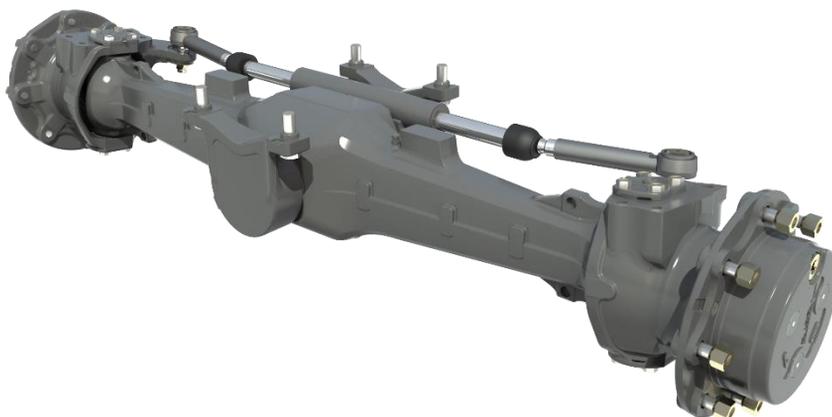
## REAR AXLE

	MF 4700	MF 5700	MF 6700
<b>ST Variant Brakes</b>	Mechanical Oil Immersed Multi-Disc	-	-
<b>ES Variant Brakes</b>	Oil Immersed Multi-Disc with Hydraulic Actuation		
<b>Park Brake</b>	Mechanical		
<b>Number of Brake Discs</b>	4 LH / 4 RH		
<b>Rear Differential Lock</b>	Electro-Hydraulic Engagement		
<b>Final Reduction Type</b>	Inboard Epicyclic		
<b>Final Reduction Ratio</b>	4.765		
<b>Wheel Stud PCD</b>	203mm		
<b>Wheel Stud Size</b>	8mm x M18 x 1.5mm		
<b>Flange to Flange Dimensions</b>	1569mm		



## 4WD FRONT AXLE

	MF 4700	MF 5700	MF 6700
<b>Type</b>	Centre Drive		
<b>Steering</b>	Hydrostatic		
<b>Max Steering Angle</b>	55°		
<b>Axle Oscillation</b>	11°		
<b>ST Variant Steering Column</b>	Fixed	-	-
<b>ES Variant (ROPS) Steering Column</b>	Tilt		
<b>ES Variant (CAB) Steering Column</b>	Tilt & Reach		
<b>ST Variant Front Differential Lock</b>	Hydra-lock		
<b>ES Variant Front Differential Lock</b>	Hydra-lock		
<b>4WD Engagement</b>	Electro-Hydraulic		
<b>Final Reduction Type</b>	Epicyclic		
<b>Final Reduction Ratio</b>	1.331		
<b>Wheel Stud PCD</b>	275mm		
<b>Wheel Stud Size</b>	8mm x M18 x 1.5mm		
<b>Flange to Flange Dimensions</b>	1640mm		



## PTO

	<b>MF 4700</b>	<b>MF 5700</b>	<b>MF 6700</b>
<b>iPTO Clutch Type</b>	Independent Oil Immersed Multi-Disc		
<b>Clutch Engagement</b>	Electro-Hydraulic Engagement		
<b>ST Variant PTO Speeds</b>	540		
<b>ES Variant PTO Speeds</b>	540/540E	540/540E 540/1000 OPT	540/540E/1000
<b>Output Shaft</b>	6 spline	6 spline 6 & 21 spline OPT	6 & 21 Spline



## REAR LINKAGE & HYDRAULICS

	MF 4700	MF 5700	MF 6700
<b>Lift Capacity @ 24"</b>	3000kg	4300kg	5200kg
<b>ST Variant</b> Lower Link Type	Cat II Fixed Ball Ends	-	-
<b>ES Variant</b> Lower Link Type	Cat II Hook Ends		Cat II/II Hook Ends
<b>ST Variant</b> Top Link Type	Telescopic Ball End	-	-
<b>ES Variant</b> Top Link Type	Telescopic Hook End		
<b>Draft Sensing</b>	Top Link		
<b>Stabilisers</b>	Telescopic		
<b>Control</b>	Electronic Linkage Control		
<b>Type</b>	Open Centre		
<b>Pump Type</b>	Gear		
<b>Pump Output</b>	65 l/min	98 l/min (combined)	
<b>System Pressure</b>	200 bar		
<b>Remote Valves</b>	2 (3 <sup>rd</sup> valve optional)		
<b>Operation</b>	Mechanical		
<b>ST Variant</b> Valve Configuration	DA FL DA FL	-	
<b>ES Variant</b> Valve Configuration		DA KO FL DA KO FL	



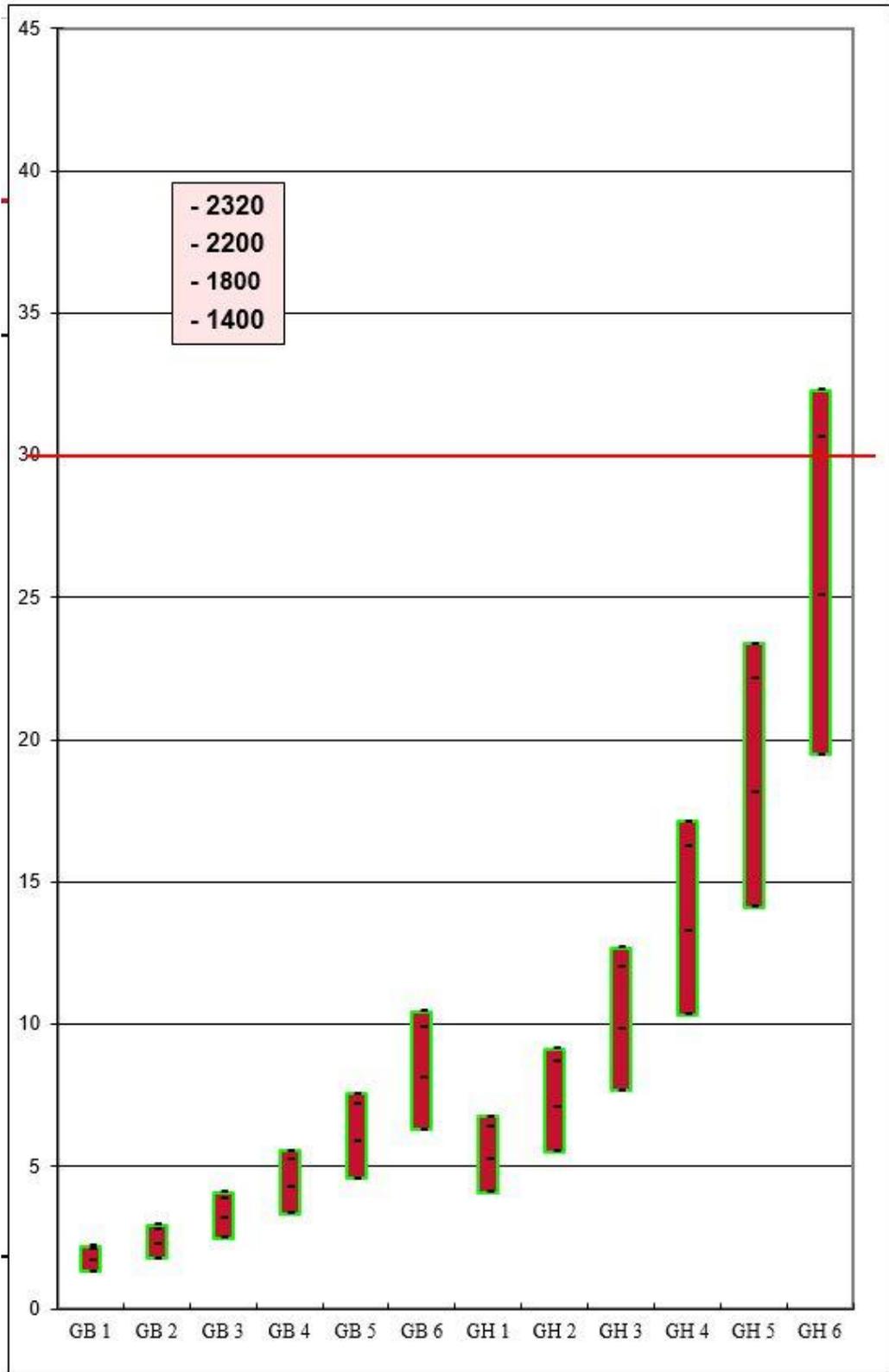
## WEIGHTS & CAPACITIES

	MF 4700	MF 5700	MF 6700
<b>ROPS</b> Weight – 4WD (No Ballast)	3300kg	3700kg	3900kg
<b>ES CAB</b> Weight – 4WD (No Ballast)	3900kg	4100kg	4300kg
<b>Engine Oil</b>	7L	7L	12L
<b>Engine Coolant</b>	14L	14L	14L
<b>Transmission/Rear Axle</b>	35L	35L	35L
<b>ST Variant</b> Fuel Tank	82L	-	-
<b>ES ROPS Variant</b> Fuel Tank	105L	170L	197L
<b>ES CAB Variant</b> Fuel Tank	125L	153L	190L

## MF 4700 ST

12 x 12 Synchronmesh Speed Chart

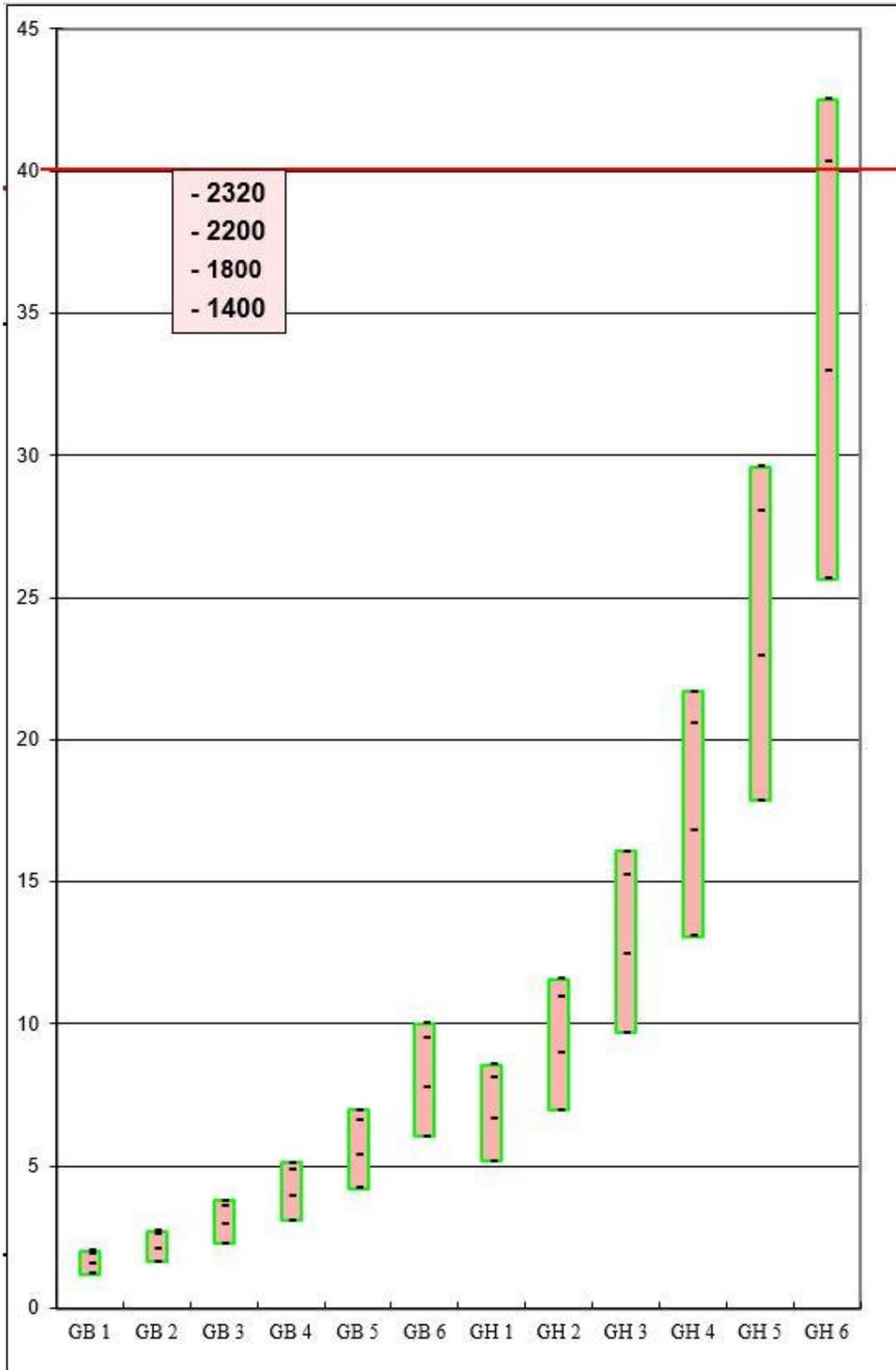
30km/h max speed



## MF 4700 ES

12 x 12 Synchromesh Speed Chart

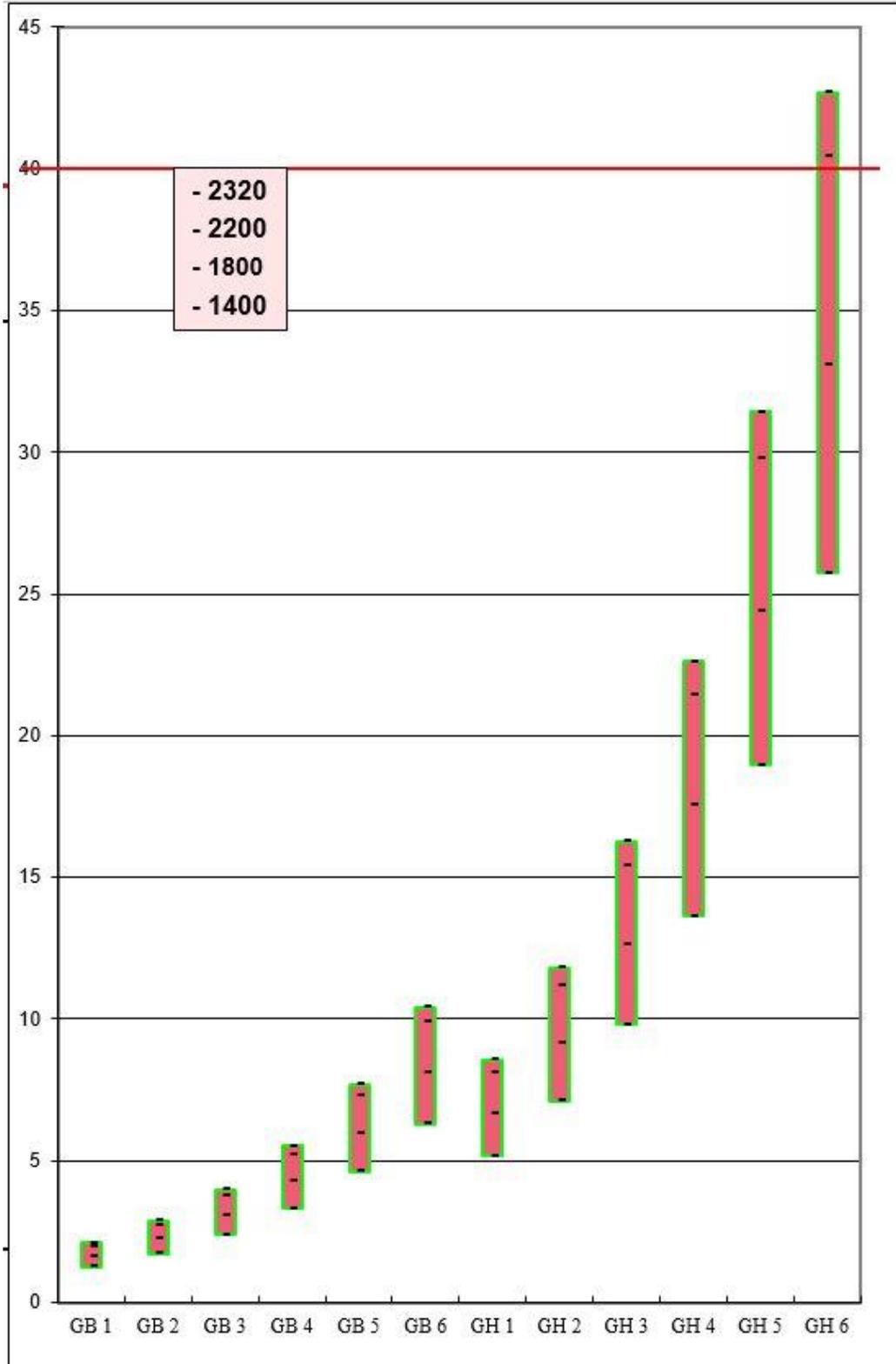
40km/h max speed



## MF 5700 ES

12 x 12 Synchronmesh Speed Chart

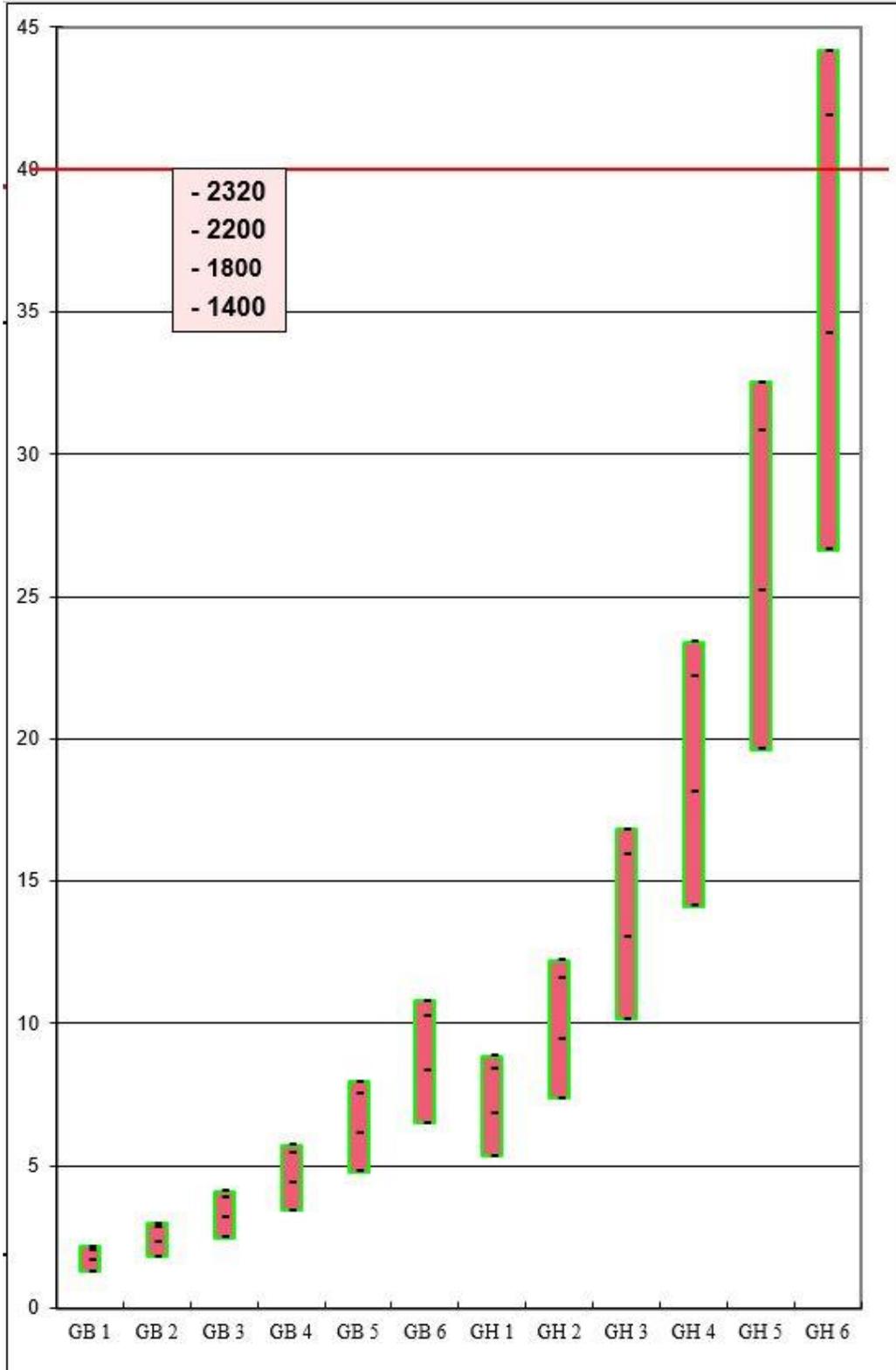
40km/h max speed

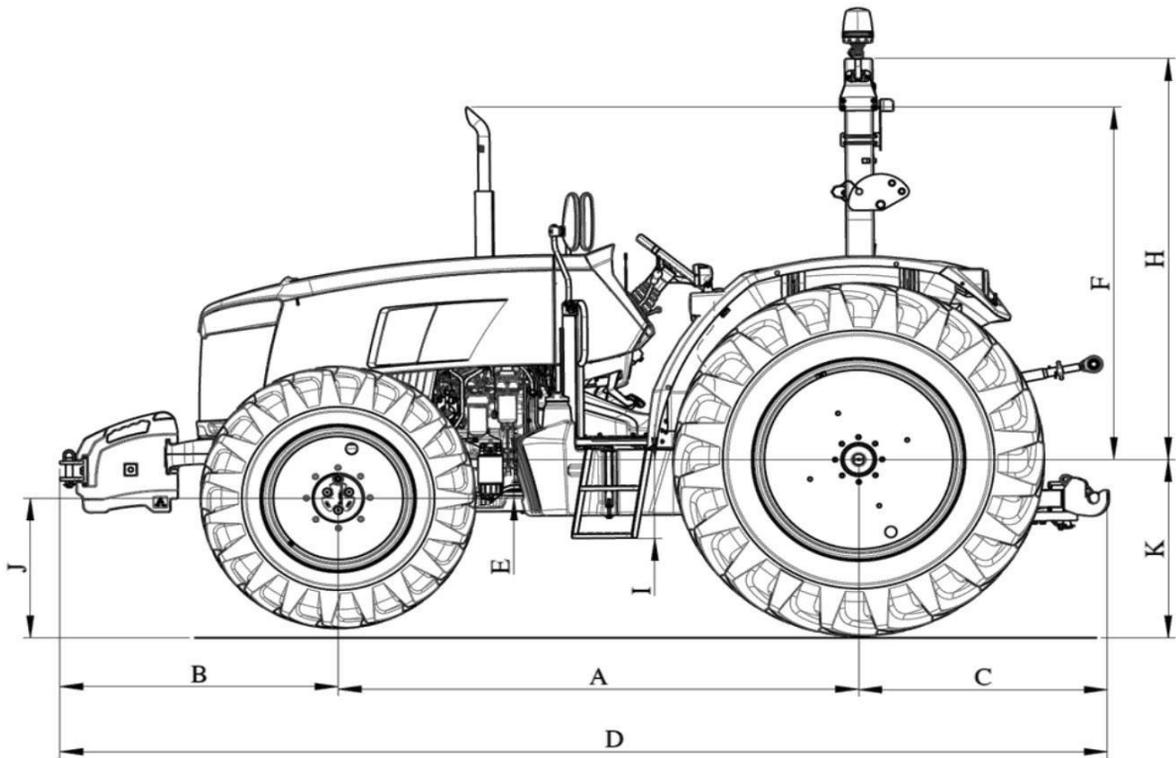


## MF 6700 ES

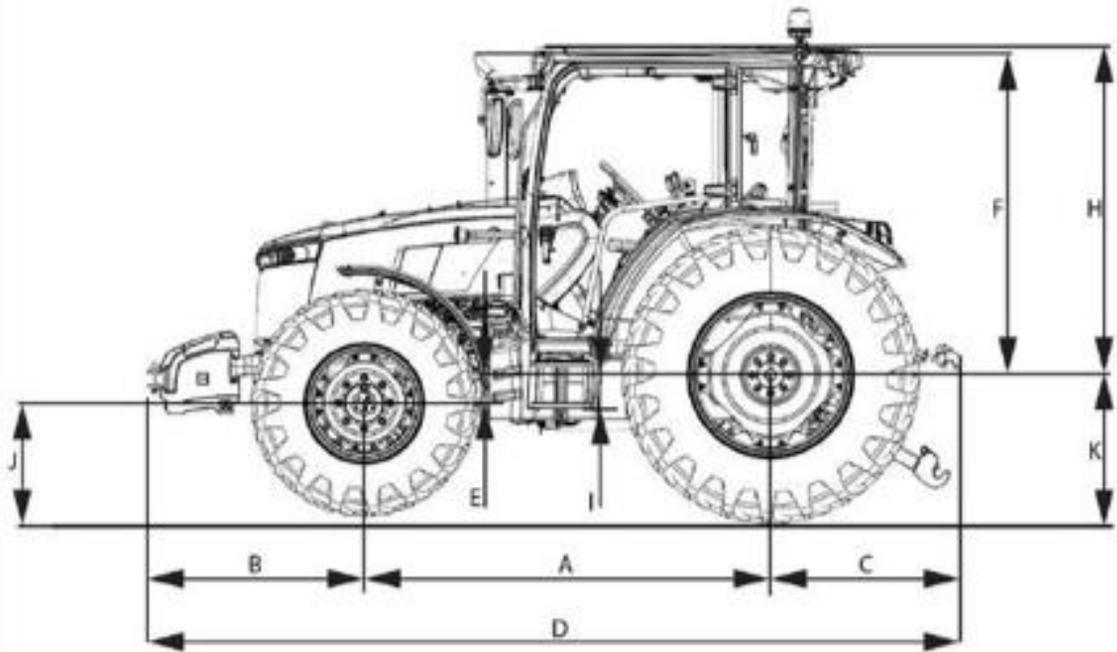
12 x 12 Synchromesh Speed Chart

40km/h max speed

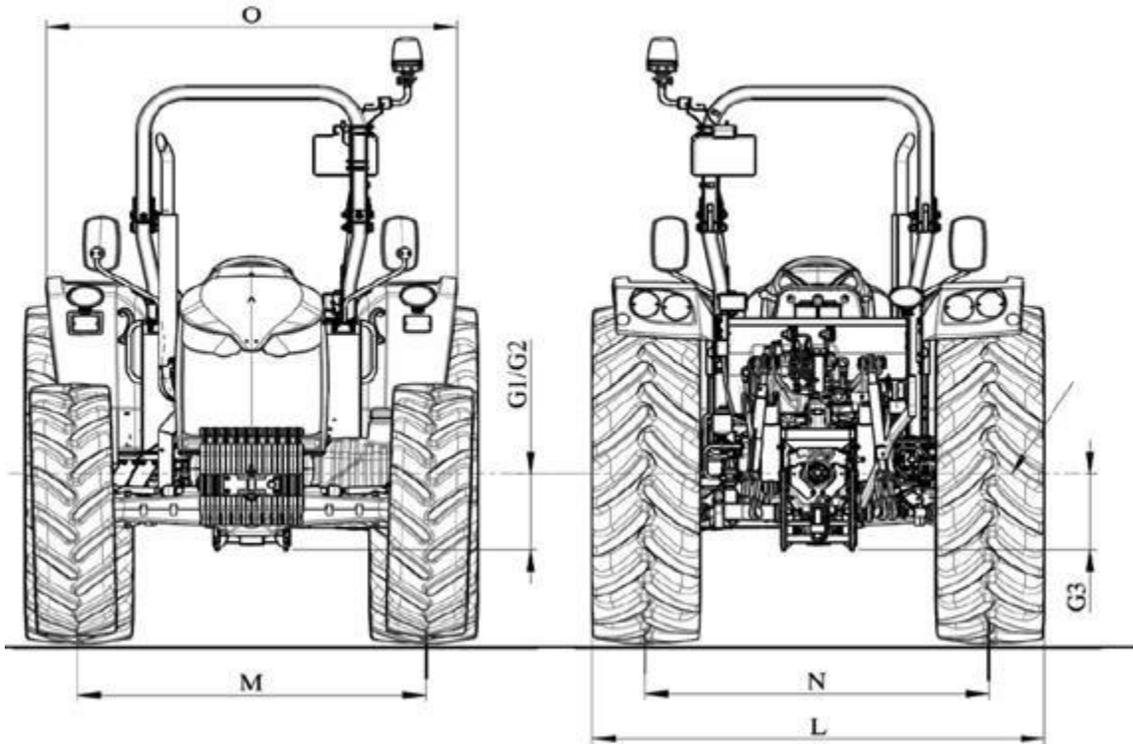




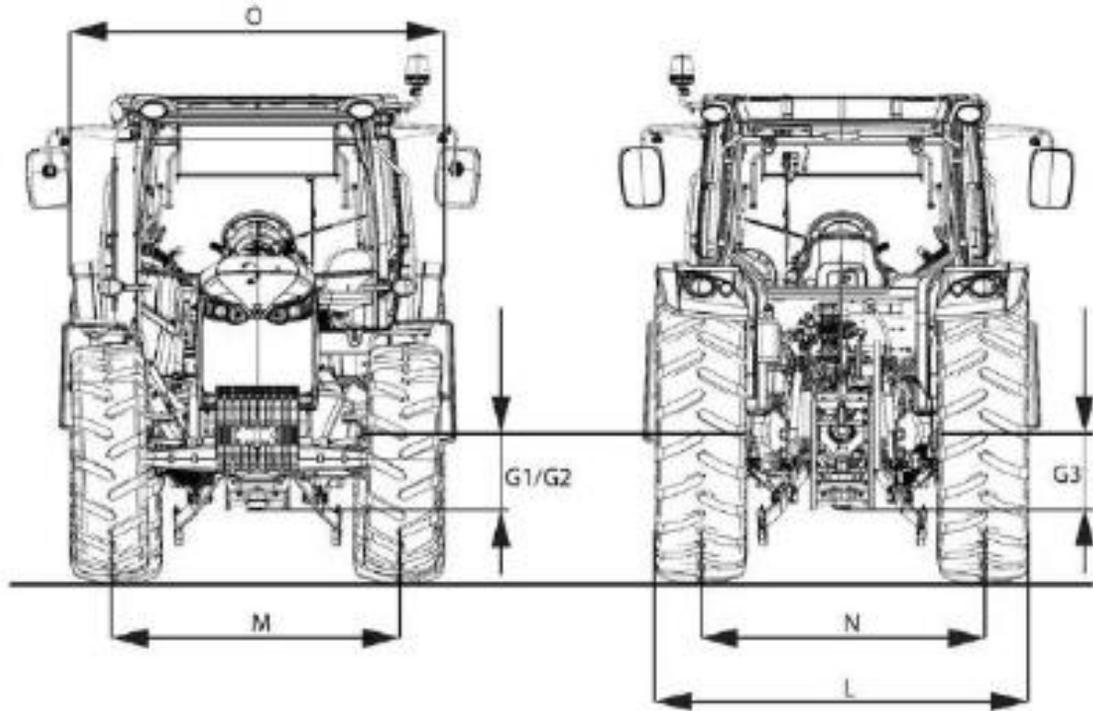
Type	Dimension	FT/RR	Comments	4707/4708	Key
Length	Wheelbase			2250	A
Overhang	Less Weight	Front		742	B
Overhang	With Weights	Front		1190	B
Overhang	With Weights and tow	Front		1260	B
Overhang	With Linkage	Rear	Horizontal	1074	C
Length	Less Weight	Front	To Rear Linkage	4066	D
Length	With Weights	Front	To Rear Linkage	4515	D
Length	With Weights and tow	Front	To Rear Linkage	4585	D
Height	Axle	Rear	Axle CL to Axle CL - 4WD	151	E
Height	Axle	Front	To top of standard exhaust	1616	F
Height	Axle	Rear	To ROPS	1822	H
Ground Clearance	Front Axle/Drawbar Pin		460/85R30	450/430	



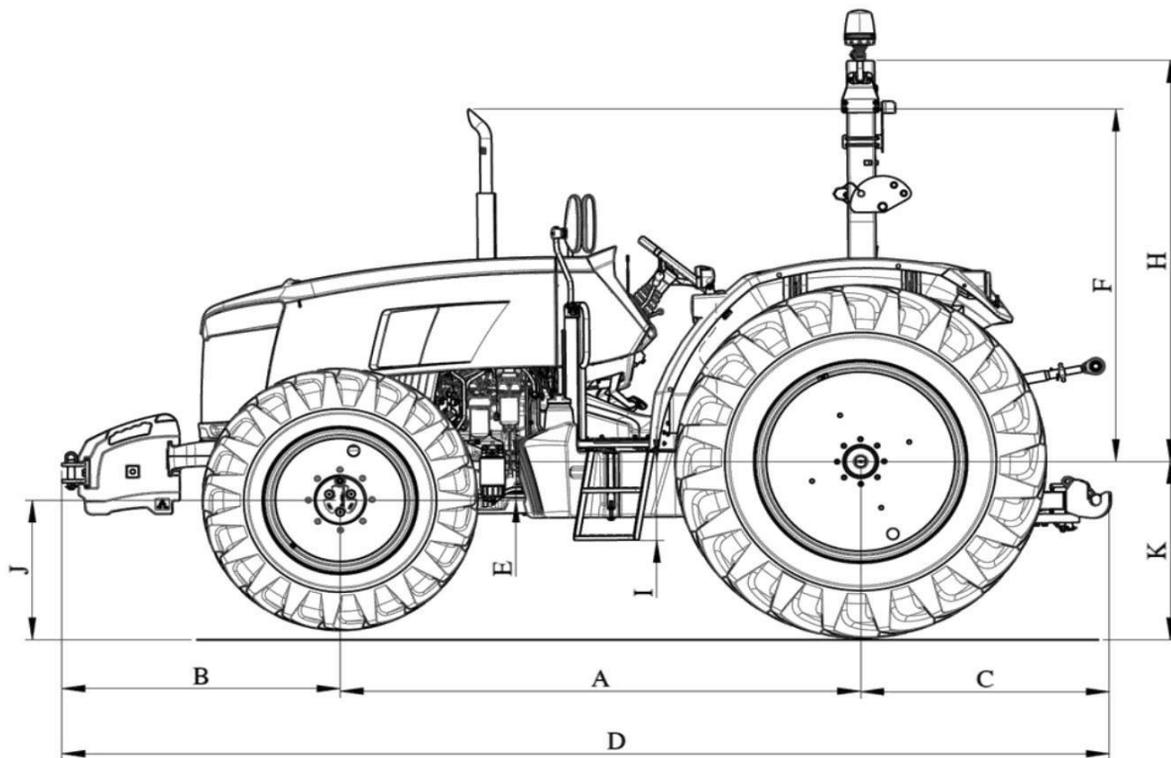
Type	Dimension	FT/RR	Comments	4707/4708	Key
Length	Wheelbase			2250	A
Overhang	Less Weight	Front		742	B
Overhang	With Weights	Front		1190	B
Overhang	With Weights and tow	Front		1260	B
Overhang	With Linkage	Rear	Horizontal	1074	C
Length	Less Weight	Front	To Rear Linkage	4066	D
Length	With Weights	Front	To Rear Linkage	4515	D
Length	With Weights and tow	Front	To Rear Linkage	4585	D
Height	Axle	Rear	Axle CL to Axle CL - 4WD	151	E
Height	Axle	Front	To top of standard exhaust	1780	F
Height	Axle	Rear	To top of cab	1815	H
Ground Clearance	Front Axle/Drawbar Pin		460/85R30	450/430	



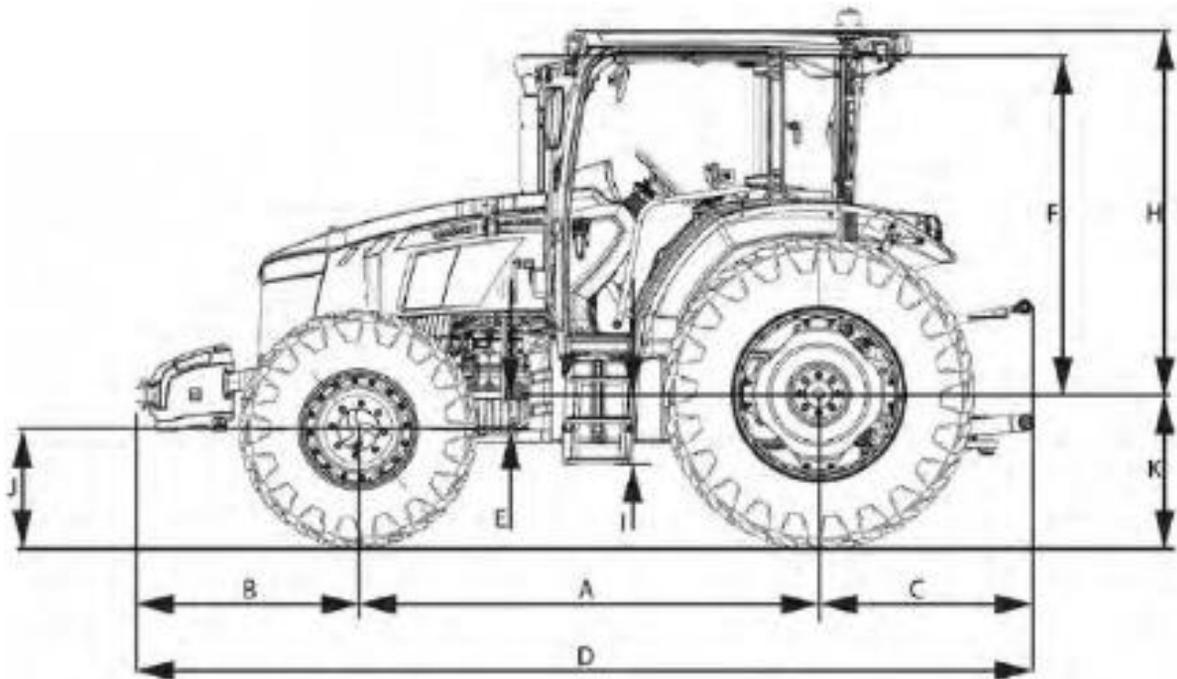
Type	Dimension	FT/RR	Comments	4707/4708	Key
Height	Lowest Point – Pin		Axle to lowest point	Min: 233 Max: 387	G3
Height	Axle	Rear	Top step to the bottom step – Footstep	206	I
Height	Axle	Rear	Top step to the bottom step – Platform	348	I
Radius				475	J
Radius				575	J
Radius				625	K
Radius				750	K
Width	Tire	Rear	Minimum	1795	L
Width	Tire	Rear	Maximum	2155	L
Width	Track	Front	Minimum	1350	M
Width	Track	Front	Maximum	1895	M
Width	Track	Rear	Minimum	1297	N
Width	Track	Rear	Maximum	1848	N
Width	Guards (less extension)			1795	O



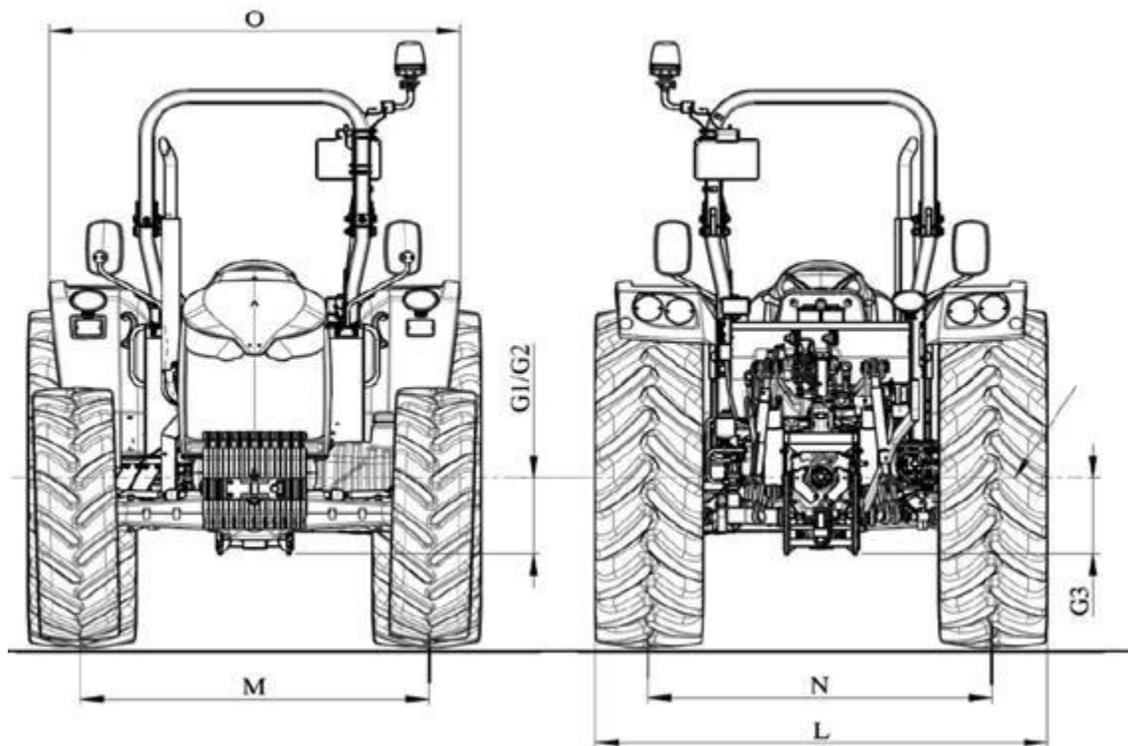
Type	Dimension	FT/RR	Comments	4707/4708	Key
Height	Lowest Point – Pin		Axle to lowest point	Min: 233 Max: 387	G3
Height	Axle	Rear	Top step to the bottom step – Footstep	206	I
Height	Axle	Rear	Top step to the bottom step – Platform	348	I
Radius				475	J
Radius				575	J
Radius				625	K
Radius				750	K
Width	Tire	Rear	Minimum	1795	L
Width	Tire	Rear	Maximum	2155	L
Width	Track	Front	Minimum	1350	M
Width	Track	Front	Maximum	1895	M
Width	Track	Rear	Minimum	1297	N
Width	Track	Rear	Maximum	1848	N
Width	Guards (less extension)			1795	O



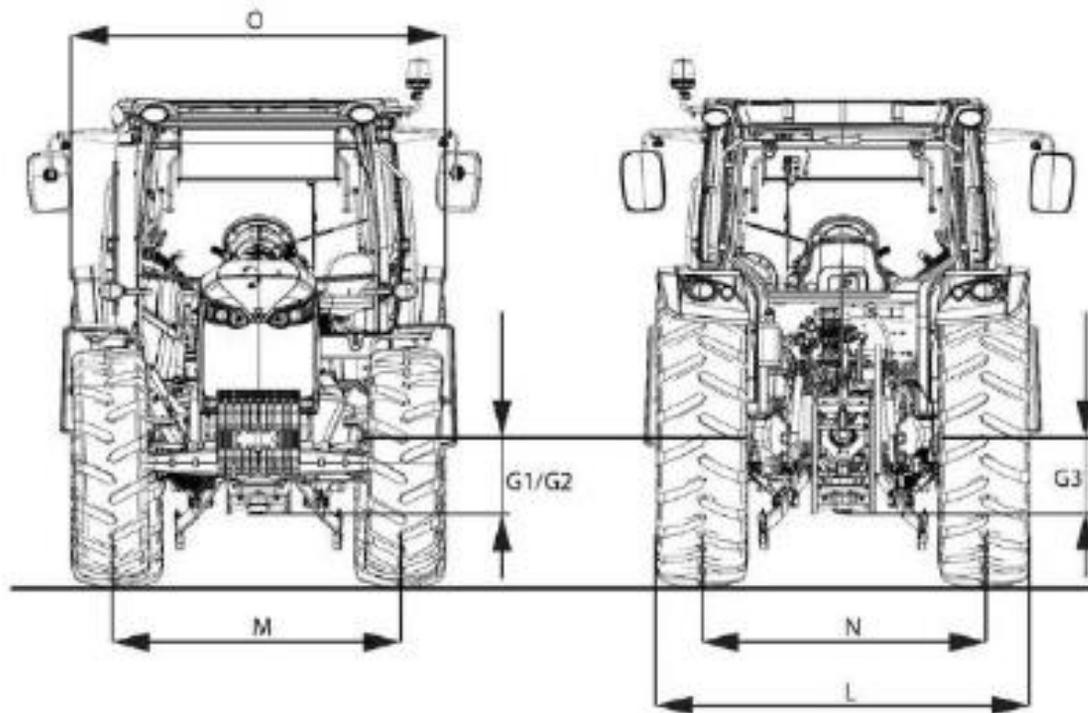
Type	Dimension	FT/RR	Comments	5700/6700	Key
Length	Wheelbase			2430	A
Overhang	Less Weight	Front		675	B
Overhang	With Weights	Front		1125	B
Overhang	With Weights and tow	Front		1195	B
Overhang	With Linkage	Rear	Horizontal	1200	C
Length	Less Weight	Front	To Rear Linkage	4305	D
Length	With Weights	Front	To Rear Linkage	4755	D
Length	With Weights and tow	Front	To Rear Linkage	4825	D
Height	Axle	Rear	Axle CL to Axle CL - 4WD	185	E
Height	Axle	Front	To top of standard exhaust	1656	F
Height	Axle	Rear	To ROPS	1952	H
Ground Clearance	Front Axle/Drawbar	Front	460/85R34 on rear	470/460	
Ground Clearance	Front Axle/Drawbar	Front	460/85R38 on rear	520/500	



Type	Dimension	FT/RR	Comments	5700/6700	Key
Length	Wheelbase			2430	A
Overhang	Less Weight	Front		675	B
Overhang	With Weights	Front		1125	B
Overhang	With Weights and tow	Front		1195	B
Overhang	With Linkage	Rear	Horizontal	1200	C
Length	Less Weight	Front	To Rear Linkage	4305	D
Length	With Weights	Front	To Rear Linkage	4755	D
Length	With Weights and tow	Front	To Rear Linkage	4825	D
Height	Axle	Rear	Axle CL to Axle CL - 4WD	185	E
Height	Axle	Front	To top of standard exhaust	1778	F
Height	Axle	Rear	To Cab	1915	H
Ground Clearance	Front Axle/Drawbar	Front	460/85R34 on rear	470/460	
Ground Clearance	Front Axle/Drawbar	Front	460/85R38 on rear	520/500	



Type	Dimension	FT/RR	Comments	5700/6700	Key
Height	Lowest Point – Pin		Axle to lowest point	350	G3
Height	Axle	Rear	Top step to the bottom step – Footstep	244	I
Height	Axle	Rear	Top step to the bottom step – Platform	231	I
Radius				475	J
Radius				575	J
Radius				625	K
Radius				750	K
Width	Tire	Rear	Minimum	1795	L
Width	Tire	Rear	Maximum	2550	L
Width	Track	Front	Minimum	1300	M
Width	Track	Front	Maximum	2000	M
Width	Track	Rear	Minimum	1297	N
Width	Track	Rear	Maximum	1780	N
Width	Guards (less extension)			1795	O



Type	Dimension	FT/RR	Comments	5700/6700	Key
Height	Lowest Point – Pin		Axle to lowest point	350	G3
Height	Axle	Rear	Top step to the bottom step – Footstep	244	I
Height	Axle	Rear	Top step to the bottom step – Platform	231	I
Radius				475	J
Radius				575	J
Radius				625	K
Radius				750	K
Width	Tire	Rear	Minimum	1795	L
Width	Tire	Rear	Maximum	2550	L
Width	Track	Front	Minimum	1300	M
Width	Track	Front	Maximum	2000	M
Width	Track	Rear	Minimum	1297	N
Width	Track	Rear	Maximum	1780	N
Width	Guards (less extension)			1795	O



# **MASSEY FERGUSON**

**A world of experience. Working with you.**

**Disclaimer:**

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