CALIFORNIA

Proposition 65 Warning

WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm. **Wash hands after handling.**

MF 5600 tractors - Operation

MF 5608
MF 5609
MF 5610

AGCO S.A. - Beauvais - France - RC B562 104 539
MASSEY FERGUSON is a worldwide brand of AGCO

Original Operator's Manual

October 2013
No. 7060055M2
Issue 1
5600 Dyna-4 - NA
English

1.1 Locating serial numbers

1.1.1 Locating serial numbers

T017254

IMPORTANT: *Please quote the serial number of your tractor in all correspondence with your dealer or agent.*

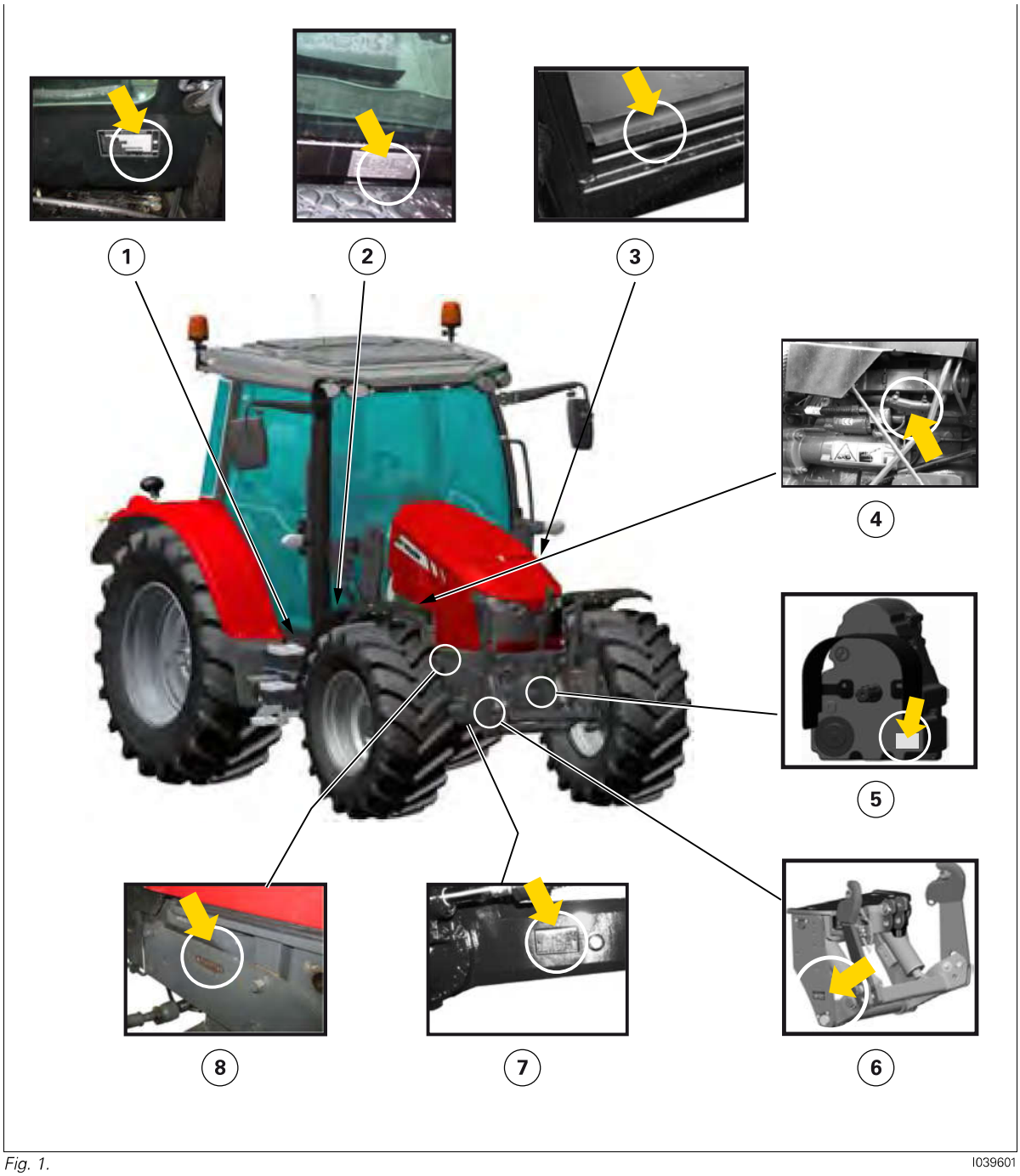
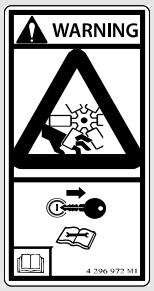
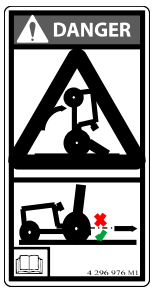


Fig. 1.

I039601

1 Name plate with serial number
2 Homologation plate (according to country)
3 Cab serial number
4 Engine serial number AGCO Power
5 Front PTO serial number
6 Front linkage serial number
7 Front axle serial number
8 Chassis number

	– **4296959M1** ((P) *fig. 1*) – **WARNING:** Risk of being crushed under tractor in the event of a rollover. Keep seat belt fastened snugly when operating, do not jump if tractor starts to tip.
	– **4296968M1** ((C) *fig. 1*) – **WARNING:** Burn hazard – hot surfaces. Keep away from hot engine components when engine has been running. Shut off engine, remove key, and wait for system to cool before performing maintenance or repair work.
	– **4296970M1** ((M) *fig. 1*) – **WARNING**: Crushing hazard between tractor and implement. Stand outside of tractor tire when using external controls for 3-point hitch. Do not stand between tractor and implement.
	– **4296972M1** ((B) *fig. 1*) – **WARNING:** Shearing hazard – engine fan. Keep your hands away from the fan and the belts when the engine is running. Shut off engine and remove key before performing maintenance or repair work.
	– **4296976M1** ((K) *fig. 1*) – **DANGER:** Rear overturn hazard, which may result in personal injury or death. Pull only from approved drawbar or bottom links of 3-point hitch at horizontal position or below. Never pull from above rear axle centerline.
	– **4296978M1** ((L) *fig. 1*) – **DANGER:** Entanglement hazard – PTO driveline. Stand clear of rotating shafts. Keep all driveline, tractor, and equipment guards in place during operation.

– **WARNING:**
Fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause serious physical injury, blindness or death.
Leaks of pressurized fluid may not be visible. Use a piece of cardboard or wood to detect leaks. DO NOT USE YOUR BARE HANDS. Wear safety goggles for eye protection. If any fluid penetrates the skin, seek medical advice within a few hours from a doctor familiar with this type of injury fig. 3.

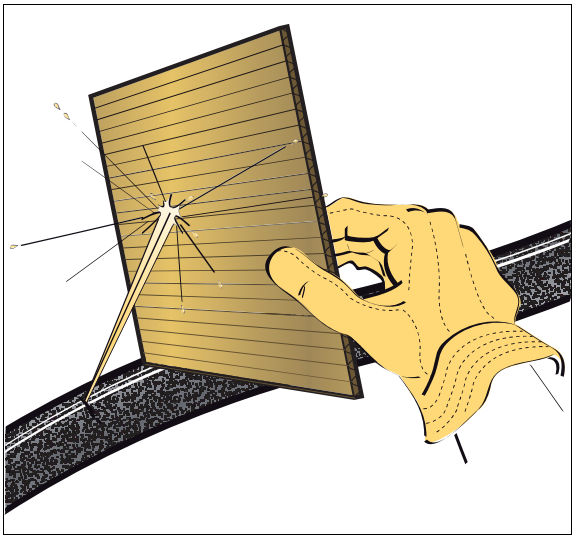


Fig. 3. I002860

WARNING:
Release the pressure of the hydraulic or fuel systems before disconnecting them.

Check the hydraulic system for the tractor and the implement as well as the tractor fuel system: Correct tightening of all the unions; check that there is no damage to the lines, pipes, or hoses; ensure that the hydraulic systems do not cross one another.
Have any leakages or damaged parts repaired or replaced. Do this before each working day

– **WARNING:**
The liquid cooling system builds up pressure as the temperature increases. Stop the engine and let the system cool before removing the radiator cap.

Check the engine cooling system and add coolant if required.

– All maintenance procedures must have been complied with.

– Check that the weight of the tractor/implement assembly is less than the tractor total permissible load.

- Always use implements suitably adapted to the desired conditions of use (load to transport, speed, slope, etc.) to ensure that work is carried out in complete safety.
- Always read the implement instruction books fully for implements to be used with the tractor and comply with the safety instructions they contain. If these instructions cannot be observed in full, do not use the tractor fitted with the machine or trailer.
- Do not modify or remove any parts of an implement.
- Do not touch the mechanism of an implement or lean over it or attempt to reach it. Do not allow anyone else to do this either.
- Do not allow anyone (including yourself) to stand or pass in front of, under or behind an implement.
- If the tractor is not immobilized according to the "mandatory procedure before dismounting the tractor" *see §2.4.5, page 25*, never stand or allow any person to stand between the tractor and the implement.
- Always use implements that are capable of safely carrying the load that you wish to place in it. (See information given on the name plate)and the chapter on the hitch.
- Do not overload a trailed implement. Use appropriate counterweights to maintain tractor stability.
- The top link and the lift rods must never be taken beyond the point where the thread starts to appear.
- When using chemicals, follow the chemical manufacturer's instructions for use, storage and disposal carefully.
- All trailed implements and trailers should be connected to the tractor by a safety chain (1) *fig. 9*.
  Should a trailed implement accidentally become separated from the drawbar during transport, this safety chain will help to retain the trailed implement. Using the appropriate adapter parts, attach the chain to the tractor's drawbar anchor or any other specified anchor point. Leave only enough slack in the chain to allow for maneuvering.
  The safety chain must have a strength equal or greater than the weight of the trailed implement: contact your Massey Ferguson dealer to obtain a suitable chain.

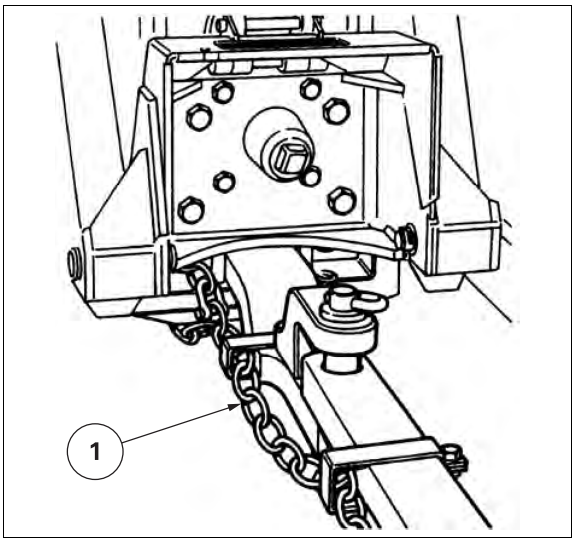


Fig. 9. I002872

- Only tow using the drawbar. Attaching the trailed implement to another location could cause the tractor to overturn.

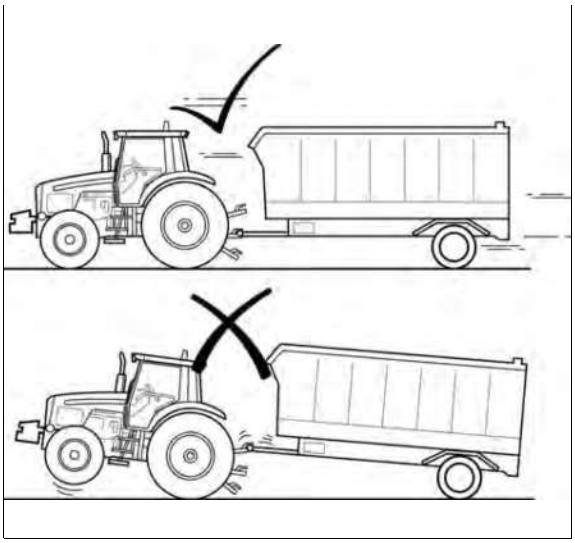


Fig. 10. I002873

d. Repair or replacement of any warranted part under the warranty provisions of this article shall be performed at no charge to the owner at a warranty station.

e. Notwithstanding the provisions of Subsection (4) above, warranty services or repairs shall be provided at all manufacturer distribution centers that are franchised to service the subject engines.

f. The owner shall not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

g. The engine manufacturer shall be liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

h. Throughout the engine's warranty period defined in Subsection (A)(2), the engine manufacturer shall maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

i. Any replacement part, as defined in Section 1900(b)(13), Title 13, may be used in the performance of any maintenance or repairs and must be provided without charge to the owner. It is not necessary for replacement parts to be the same brand or by the same manufacturer as the original part sold with the engine. Such use shall not reduce the warranty obligations of the engine manufacturer.

j. Add-on or modified parts, as defined in Section 1900(b)(1) and (b)(10), Title 13, that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts shall be grounds for disallowing a warranty claim made in accordance with this article. The engine manufacturer shall not be liable under this article to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

k. The Executive Officer may request and, in such case, the engine manufacturer shall provide, any documents which describe that manufacturer's warranty procedures or policies.

3. Each manufacturer shall include a copy of the following emission warranty parts list with each new engine, using those portions of the list applicable to the engine.

a. Fuel Metering System
(A) Fuel injection system
(B) Air/fuel ratio feedback and control system
(C) Cold start enrichment system

b. Air Induction System
(A) Controlled hot air intake system
(B) Intake manifold
(C) Turbocharger/Supercharger Systems
(D) Charge Air Cooling Systems

c. Catalyst or Thermal Reactor System
(A) Catalytic converter
(B) Diesel Oxydation Catalyst (DOC)
(C) Exhaust manifold

d. Particulate Controls
(A) Smoke Puff Limiters

e. Advanced Oxides of Nitrogen (NOx) Controls
(A) NOx Absorbers
(B) Selective Catalyst Reduction (SCR)
(C) Reluctant (urea/fuel) containers/dispensing systems

f. Positive Crankcase Ventilation (PCV) System
(A) PCV Valve
(B) Oil Filler Cap

g. Miscellaneous items Used in Above Systems
(A) Vacuum, temperature, and time sensitive valves and switches
(B) Electronic control units, sensors, solenoids, and wiring harnesses
(C) Hoses, belts, connectors, assemblies, clamps, fittings, tubing, sealing gaskets or devices, and mounting hardware
(D) Pulleys, belts and idlers
(E) Emission Control Information Labels
(F) Any other part with the primary purpose of reducing emissions or that can increase emissions during failure without significantly degrading engine performance

3.1 Standard cab

3.1.1 Steering console

T015573

Fig. 1.

I035068

(1) Instrument panel (see instrument panel)
(2) Control unit (*see §3.1.3, page 66*)
This assembly controls the following functions: Direction indicator, high beam/low beam lights, windshield wiper, front and rear windshield washer and horn.
(3) Steering wheel adjustment (*see §3.1.5, page 68*)
(4) Controls for access to the Dash Control Center menus (see Dash Control Center screens)
(5) PowerShuttle control (see PowerShuttle)

Legroom adjustment

Move the locking lever (1) upward to enable legroom adjustment. After the adjustment has been carried out, the locking lever should be engaged in the required position. It should not be possible to move the operator's seat into another position when it is locked *fig. 16*.

IMPORTANT: *Do not lift the locking lever with your leg or calf.*

Fig. 16. I038343

Seat depth adjustment (depending on model)

To adjust the depth of the seat, pull the handle (1) upward while moving the seat backward or forward to find the required position *fig. 17*.

NOTE: *There are two tilt angles, spaced 2.5° apart.*

Fig. 17. I038362

Storage space for books and user instructions

The storage compartment or storage pocket (depending on model) is located on the back of the seat. To open the compartment, first pull the tab (A) upward and then pull the cover backward (B).

Fig. 37. I038379

Seat belt

Wearing the seat belt plays an essential role in protecting the operator.

WARNING:
Always wear the seat belt adjusted correctly.

3.1.9 Manual adjustment mechanical seat

T016823

Availability of adjustments varies according to the seat option fitted

WARNING:
Never adjust the seat when the tractor is in motion.

(1) Legroom adjustment
(2) Seat swivel control
(3) Seat weight and height adjustment
(4) Armrest tilt
(5) Backrest tilt adjustment
(6) Mechanical adjustment of lumbar support or high lumbar support (depending on model)
(7) Backrest extension
(8) Storage space for books and user instructions

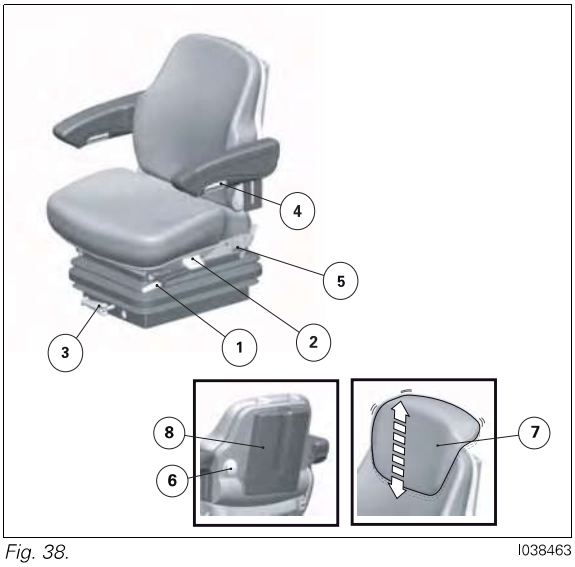


Fig. 38. I038463

Identifying the connectors

Socket on rear of right-hand console, terminal no.:

(1) +12 V permanent or controlled by switch (3) *fig. 54* protected by fuse F52 (15 A) and F8 (30 A)

(2) +12 V ignition on protected by fuse F14 (10 A)

(3) - Earth

NOTE: *A female plug (3779786M2 or P/N 1714005) that connects to the power socket (1) is available from your dealer.*

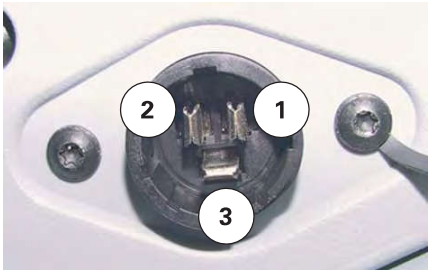


Fig. 55. I006197

3.1.17 Emergency exits

T015102

The emergency exits may differ depending on the tractor models and options available.

– For standard cabs: Right-hand door, rear window.

– For panoramic cabs: Rear window and hammer to break the glass *see §3.2.17, page 126*.

Rear window: Emergency exit function

To open, turn the handle to 90° and push the window outwards.

Fig. 56. I033868

Dash Control Center menu access controls

(11) Up scrolling key
(12) Down scrolling key
(13) Left scrolling key.
(14) Right scrolling key.
(15) Confirmation key
(16) Cancel key.
(17) Parameter display selector on Dash Control Center screen *fig. 8*

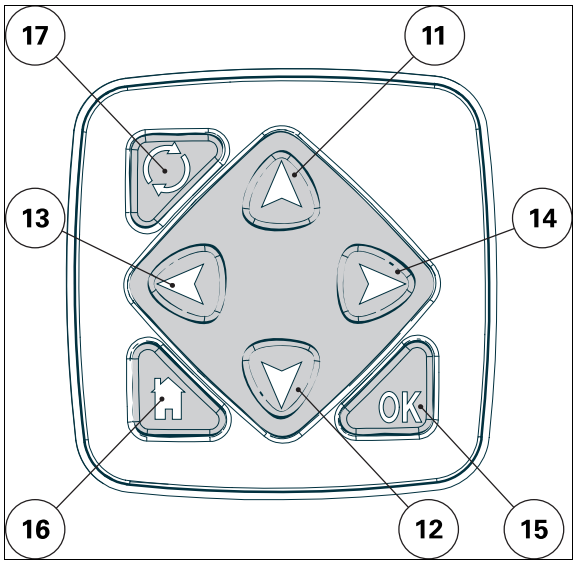


Fig. 10. I004852

3.2.3 Control unit

T001274

(1) Windshield wiper
0. Off
J. Intermittent
I. First speed
II. Second speed
(2) Left-hand indicator:
(A): momentary. Cancels once it is released.
(B): locked. Cancels when the steering wheel returns to the center (straight line).
It is the left-hand indicators that flash; the right-hand side remains permanently lit.
(3) Right-hand indicator:
(A): momentary. Cancels once it is released.
(B): locked. Cancels when the steering wheel returns to the center (straight line).
It is the right-hand indicators that flash; the left-hand side remains permanently lit.
(4) Horn
(5) Main beam lights flash.
(6) Main beam lights position (after engaging the main lighting) (see main lighting control module).
NOTE: *If the side lights are illuminated on the module, the main beam lights cannot be operated.*
(7) Front windshield washer.

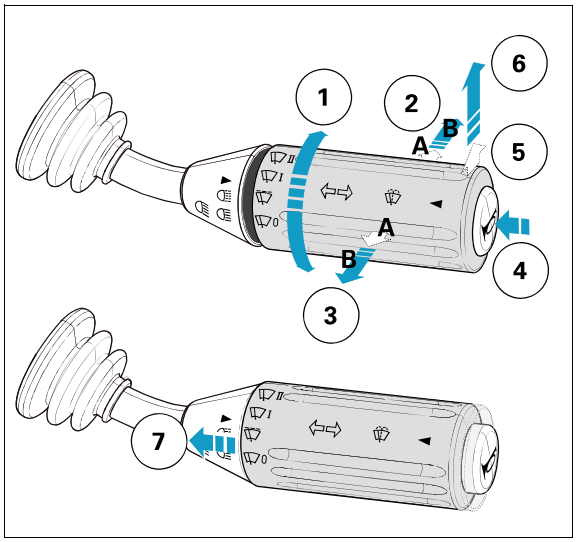


Fig. 11. I004676

Heating

Place the switch in position (2) to activate seat heating and place the switch in position (1) to turn it off *fig. 26*.

Fig. 26. I038364

Storage space for books and user instructions

The storage compartment or storage pocket (depending on model) is located on the back of the seat. To open the compartment, first pull the tab (A) upward and then pull the cover backward (B) *fig. 27*.

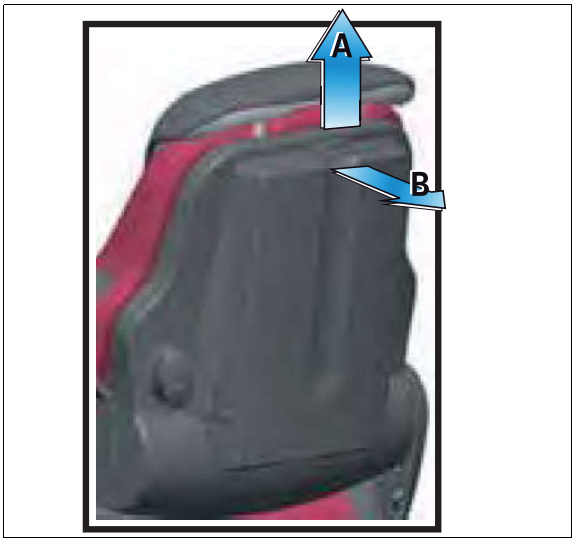


Fig. 27. I038379

Seat belt

Wearing the seat belt plays an essential role in protecting the operator.

WARNING:
Always wear the seat belt adjusted correctly.

3.2.8 Manual adjustment pneumatic seat

T016812

Availability of adjustments varies according to the seat option fitted

WARNING:
Never adjust the seat when the tractor is in motion.

3.2.11 Left-hand pillar

T016991

(A) Work lights module *see §3.15.2, page 207*
(B) PTO speed selection *see §3.10.2, page 165* and *see §3.10.3, page 167*
(C) Electronic linkage control plate *see §3.11.2, page 172* and *see §3.11.3, page 173*
(D) Rear windshield wiper control and rear windshield washer control
(E) Flashing warning lights indicator light and switch
(F) Start switch *see §3.5.3, page 139*
(G) Control switches: side lights/dipped beam lights, front axle/differential, suspended front axle *see §3.15.1, page 206* *see §3.8.1, page 160*, *see §3.9.1, page 162*

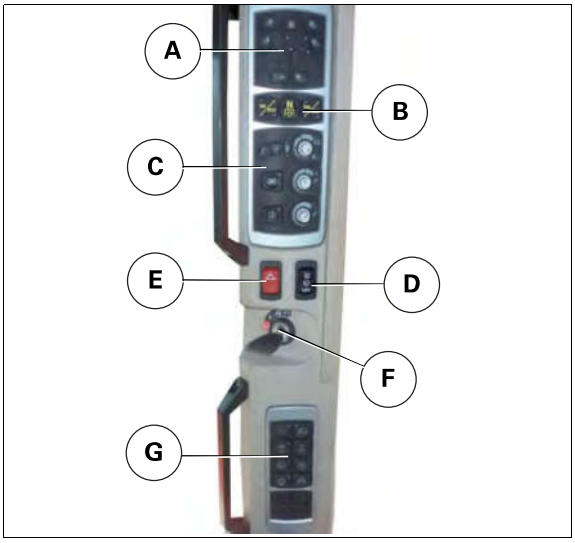


Fig. 47. I038926

3.2.12 Upper console

T018480

Standard roof

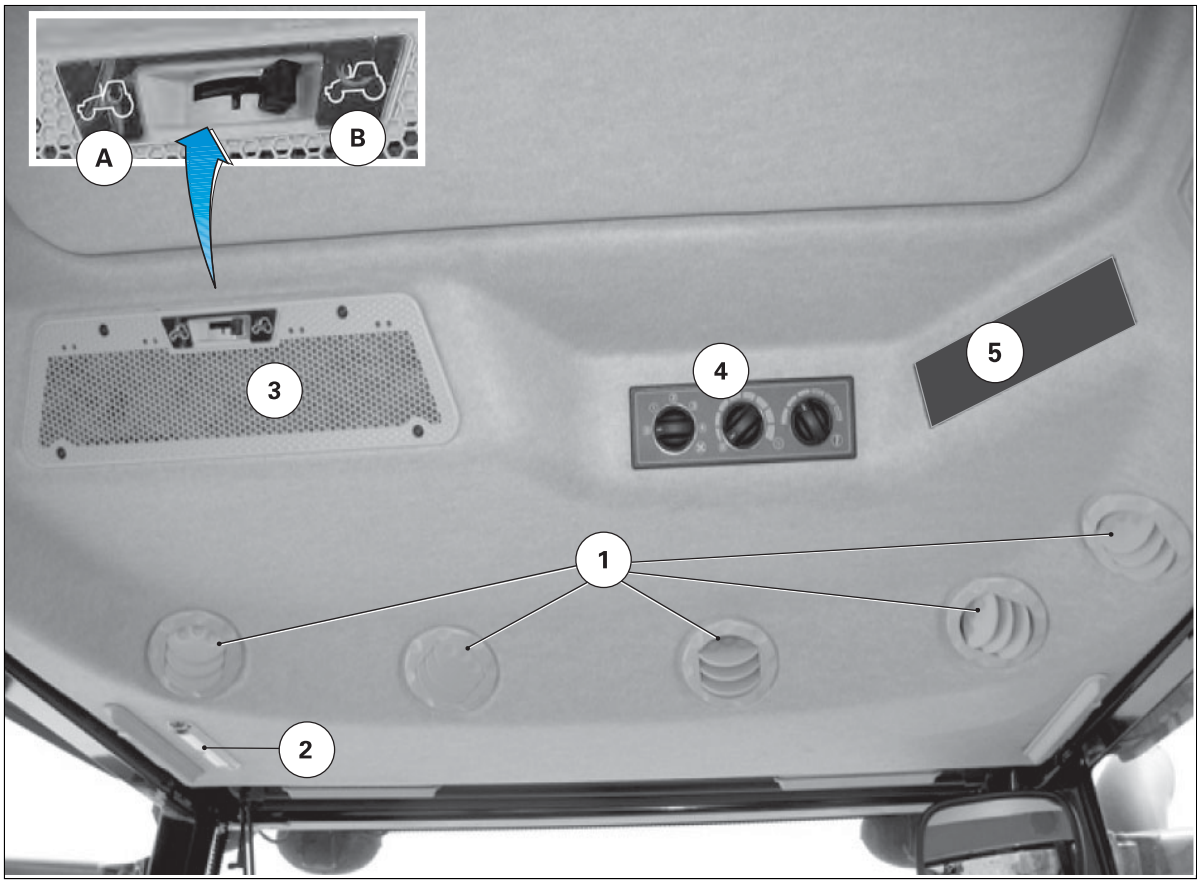


Fig. 48. I032567

(1) Adjustable air circulation vents.
(2) Interior light
(3) Adjustable ventilation grilles: (A) Recycling of air inside the cab, (B) outside air intake
(4) Air conditioning control module (see description of air conditioning system)
(5) Radio slot.

3. Gently release the top of the chock.

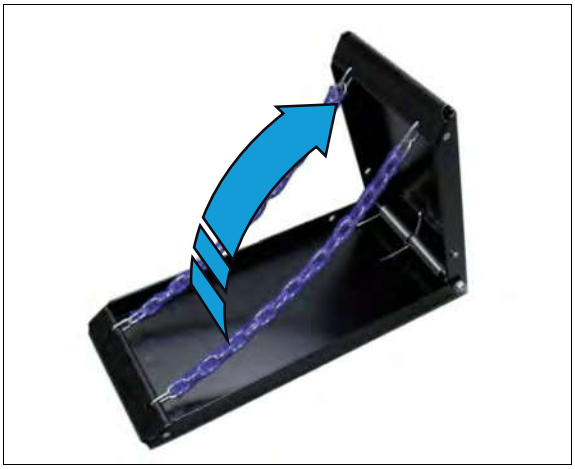


Fig. 66. I017855

4. ***IMPORTANT:*** *Ensure the chock is facing in the right direction before placing it under the vehicle.*

   To immobilize the tractor, position the chock underneath a wheel as shown.

Fig. 67. I017857

3.5.5 Start-up sheet

T017252

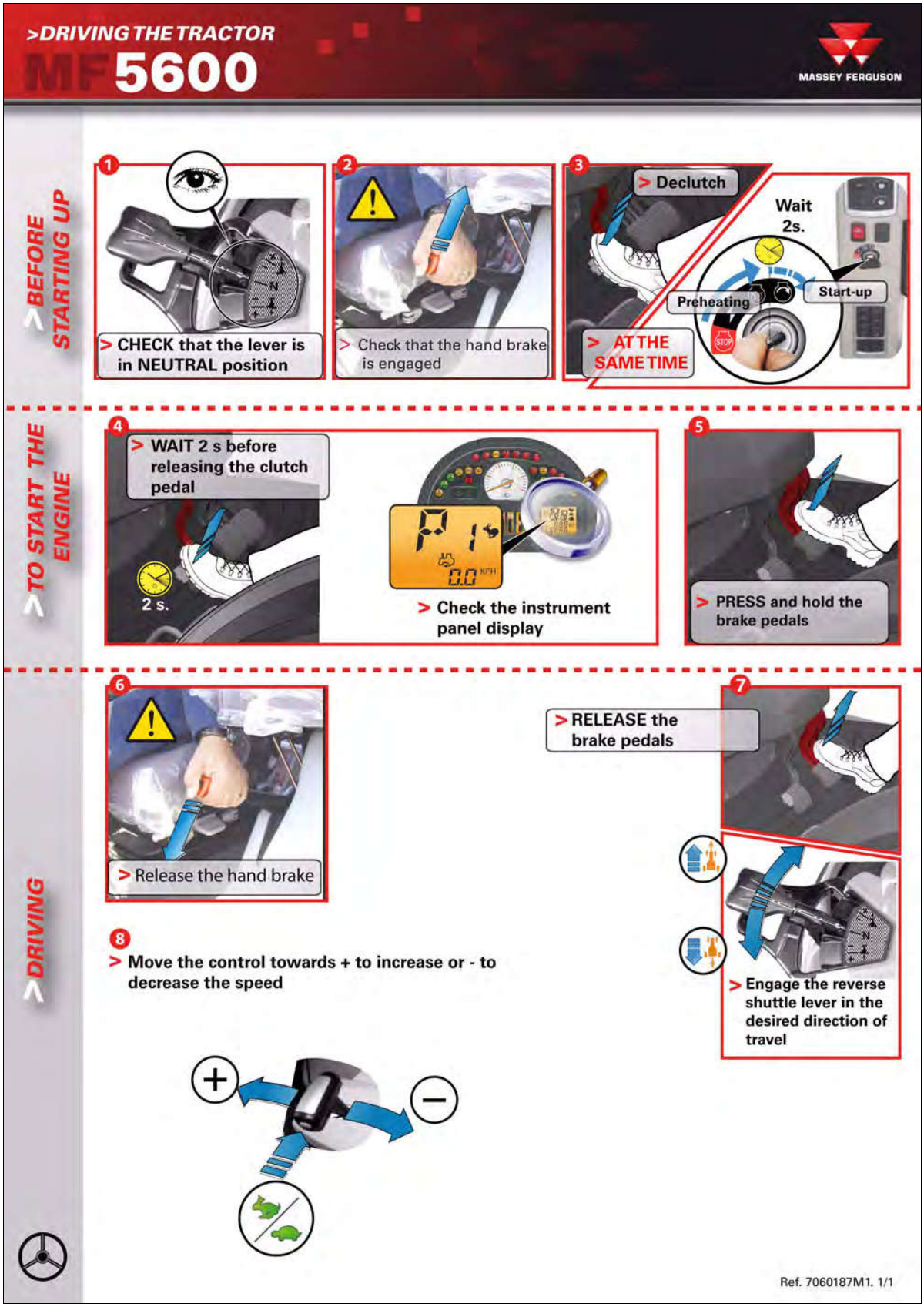


Fig. 2.

I039529

3.6.6 Pedal mode (AutoDrive)

T015483

When the tractor is started, it is necessary to release the throttle pedal and press the Pedal mode switch (AutoDrive)/Lever (Speedmatching) (1); the selected mode appears on the screen -.

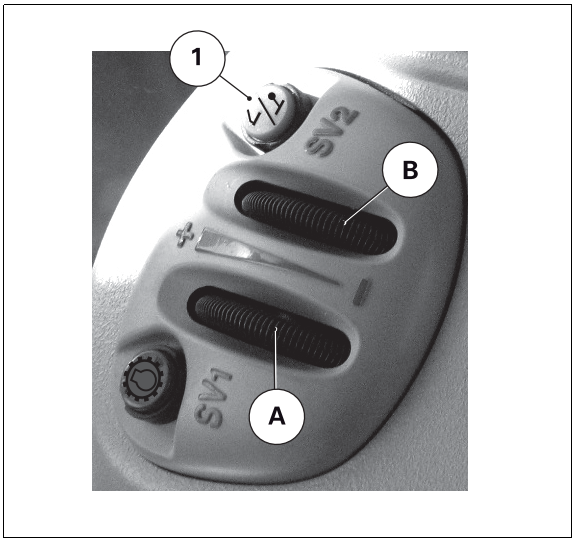
The transmission can be controlled by the throttle pedal or by the throttle lever.

The maximum forward speed setting is set using the potentiometer SV2 (B) *fig. 11*:

– Ranges and ratios 1A to 4D in road mode (hare) for Dyna 4.

– Ratios A to D only in field mode (tortoise) for Dyna 4.

It is also possible to set the maximum engine speed to between 1400 rpm and 2160 rpm using the SV1 potentiometer (A) *fig. 11*.



I031483

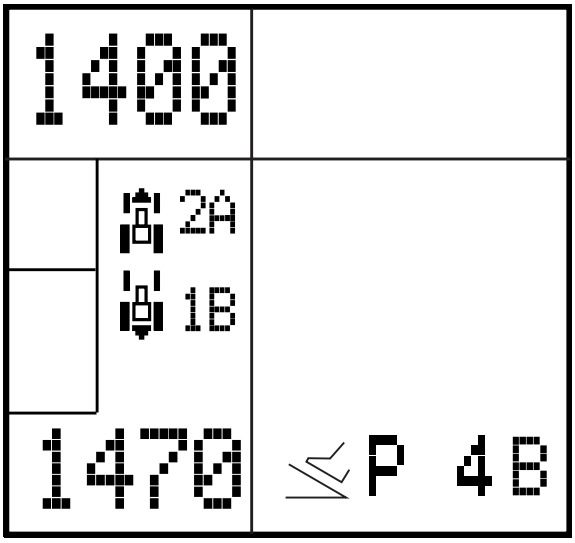


Fig. 11. I034950

In Pedal mode, three modes can be selected according to tractor use

Mode choices:

– field mode (tortoise) (A) for field use.

– road mode (hare) (B) for road use.

– creeper range (snail) (C) for specific uses requiring low forward speeds (optional).

NOTE: *see forward speeds in the Maintenance section of the Operator's Manual*

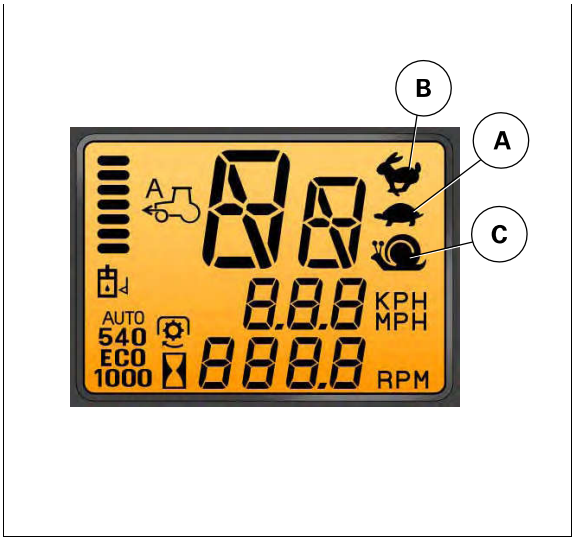


Fig. 12. I005737

Use of the 4-wheel drive front axle in automatic mode

Press the switch (1) to engage the 4-wheel drive front axle in automatic mode.
This procedure cancels manual mode if it was engaged.
The 4-wheel drive front axle indicator lights on the instrument panel and on the switch (1) illuminate.
The 4-wheel drive front axle in automatic mode symbol (A) appears on the digital display (3).

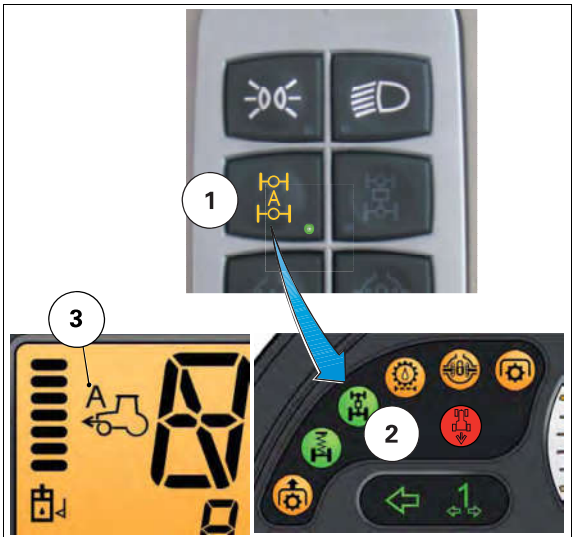


Fig. 2. I031283

Actions	Consequences
Forward speed of the tractor greater than 20 km/h (12 mile/h)	Temporary disengagement of the 4-wheel drive front axle
Forward speed of the tractor lower than 19 km/h (12 mile/h)	Re-engagement of the 4-wheel drive front axle
Steering angle greater than 25° (with steering angle sensor option)	Temporary disengagement of the 4-wheel drive front axle
Steering angle less than 23° (with steering angle sensor option)	Re-engagement of the 4-wheel drive front axle

NOTE: *The disengagement angle can be adjusted by your dealer.*
The automatic mode is not available with the Headland Management

3.8.2 Permissible load on the front axle

T011855

Loaded weight/front track width of tractor

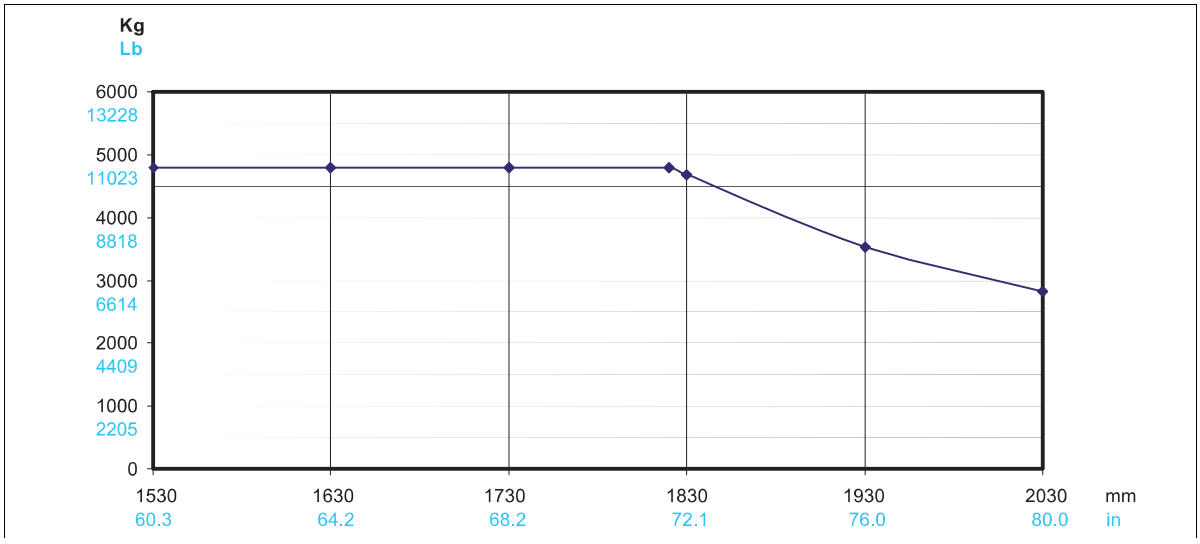


Fig. 3. I027513

The load allowed on the front axle varies with the track width adjustment.
The graph *fig. 3* shows the possible loads according to track width adjustment.

3.10.8 Power take-off protection

T003440

Power take-off cap

When the power take-off is not in use, fit the protective cap *fig. 11* to prevent any faults from occurring related to the rotation of the power take-off shaft.

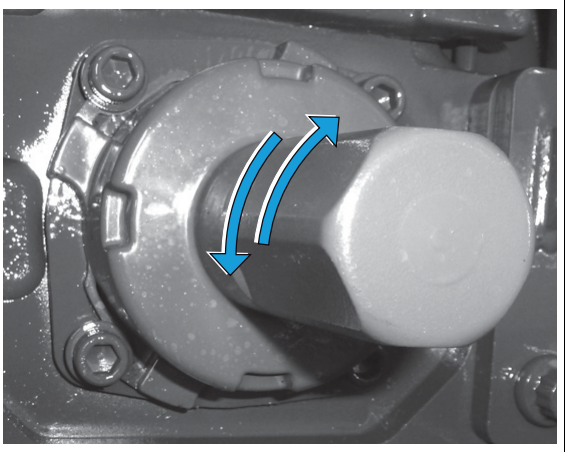


Fig. 11. I009873

Power take-off guard

WARNING:

To avoid risk of injury, always fit the power take-off guard in the correct position. Do not use the power take-off guard as a step.

2 valves located on top of the auxiliary spool valves allow the various functions of the front linkage to be selected.
A descriptive label located in the cab displays the configuration of the linkage depending on the position of the valves.

(1) Single-acting: The linkage rams receive hydraulic pressure for lifting only; lowering is ensured by the weight of the hitched implement.
NOTE: *The linkage can take a long time to lower if no implement is attached.*

(2) Double-acting: The lift rams receive hydraulic pressure for lifting and lowering.

(3) Transport control system: A hydraulic transport control system locks the linkage in position for road transportation.

(4) Single-acting transport control system: The linkage operates as in the single-acting mode to absorb linkage movement.

WARNING:
When travelling on the road, the valves must be in the "active transport control system" position (see decal) to deactivate the spool valve action and prevent accidental lowering of the implement.

Lifting/lowering in the cab

The front linkage is connected to the second spool valve, identifiable by its green discs and controlled by the second lever (1) *fig. 20*.

The flow rate is adjusted directly via the relevant spool valve at the rear of the tractor.

The lever is locked using the control (2).

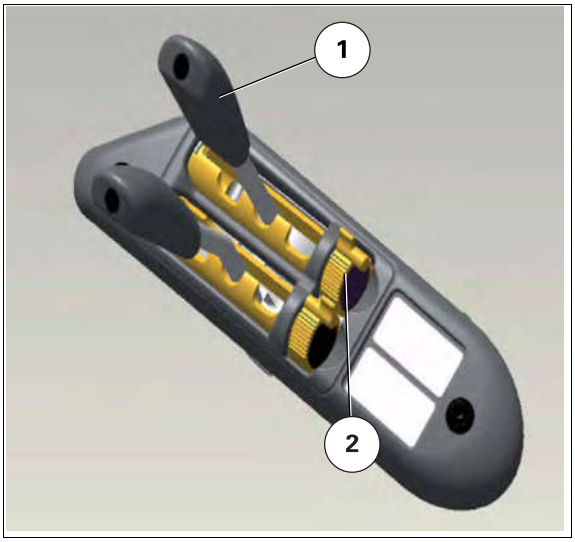


Fig. 20. I035666

Depth control

IMPORTANT: *Use of the front implement can lead to a loss of control or difficulty in steering the tractor.*

Several types of front linkage control can be used depending on the work to be carried out or the type of implement.

– For implements fitted with leveling wheels allowing the working depth to be controlled, the working front linkage must be in the floating position.
This position allows the implement to follow the ground profile.
It is obtained using the linkage hydraulic control.
In this case, the linkage can be used in single or double-acting mode.

– For implements requiring position control and not fitted with leveling wheels, the working depth or position holding is obtained using the linkage hydraulic control.
In this case, the linkage can be used in single or double-acting mode.

– For implements requiring the tractor load to be transferred to the implement, the front linkage must be used in double-acting control mode.
The transfer of the tractor load to the implement is controlled using the front linkage hydraulic control.

3.13 Auxiliary hydraulics

3.13.1 General

T015935

MF 5608/MF 5609/MF 5610 tractors are sold with the 57 l/min (15.1 gal/min (US)) Open Center hydraulic system (as standard) or the 100 l/min (26.4 gal/min (US)) Open Center hydraulic system (optional).

The tractor may be fitted with a maximum of 4 spool valves. It may be fitted with up to 4 pairs of couplers at the rear and one pair of couplers at the front.

The spool valve controls are grouped together on the right-hand console.

IMPORTANT: *Do not operate the hydraulics unless the oil is warm. If necessary, allow the engine to run for several minutes before use.*
In the event of the hydraulics overheating, stop the tractor immediately.

3.13.2 Description of mechanically controlled hydraulic couplers on Open Center system

T016303

Depending on its configuration, the tractor is fitted with rear couplers and front couplers.

Description of the rear couplers

Mechanically controlled 57 l/min (15.1 gal/min (US)) or 100 l/min (26.4 gal/min (US)) hydraulic system

(1) Spool valve no. 1 (and pick-up hitch if fitted)
(2) Spool valve no. 2 (and front linkage if fitted)
(3) Spool valve no. 3 (and front couplers if fitted)
(4) Spool valve no. 4

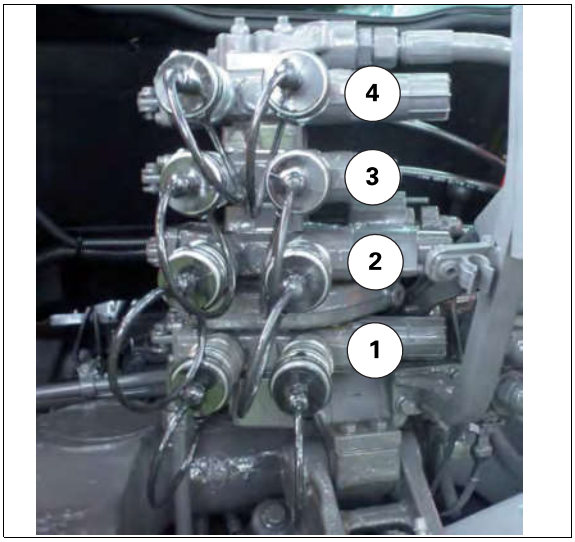


Fig. 1. I043551

3.14.3 Using the mechanical joystick of the front-end loader

T015940

Locking/unlocking the front-end loader control

1. Move control (1) laterally to lock or unlock the front-end loader joystick
   NOTE: *When the hydraulic functions are not in use, it is essential to lock the front-end loader joystick*

Fig. 3. I035778

Joystick in working position

1. Lift the joystick gaiter to access the two attachment screws
2. Slightly unscrew the two attachment screws
3. Position the joystick unit to the left so you can place the first screw in position (1)
4. Tighten the two attachment screws to a torque of 24 Nm (18 lbf ft) to keep the joystick unit in the working position

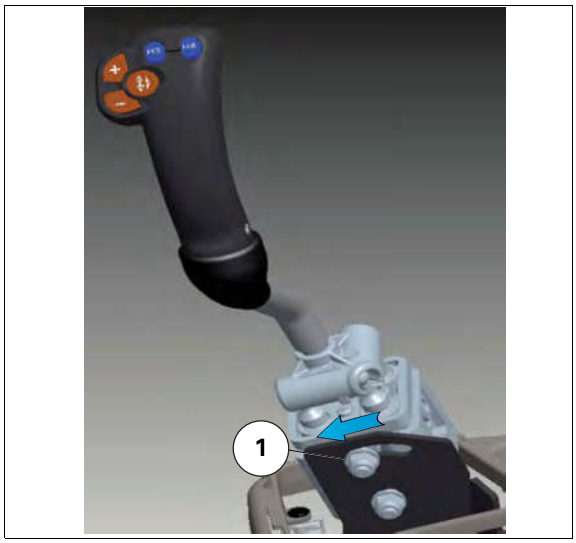


Fig. 4. I038270

3.16.3 Front track width: Two-wheel drive front axle

T018550

General

The track widths available depend on the type of wheel rim and the tire dimensions.

The front track width is adjustable in increments of 100 mm (3.9 in).

(A) Center of the tractor
(B) Wheel to wheel distance
The wheel to wheel distance is the inner distance between the two front tires
(C) Track width
The track width is the distance between the center of the right tire and the center of the left tire
(D) Plate-to-plate distance
The plate-to-plate distance is the distance between the two bearing faces of the left and right rims
(E) External dimension
The external dimension is the longest distance between the outer sides of the tires

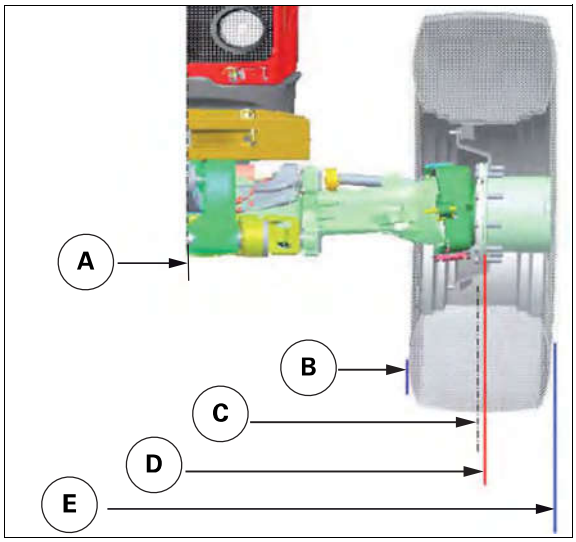


Fig. 3. I042449

Plate-to-plate distance	2-wheel drive axles
Minimum distance	1506 mm (59.3 in)
Intermediate distances	1606 mm (63.3 in) 1706 mm (67.2 in) 1806 mm (71.2 in) 1906 mm (75.1 in)
Maximum distance	2006 mm (79.0 in)

Rims with fixed disc

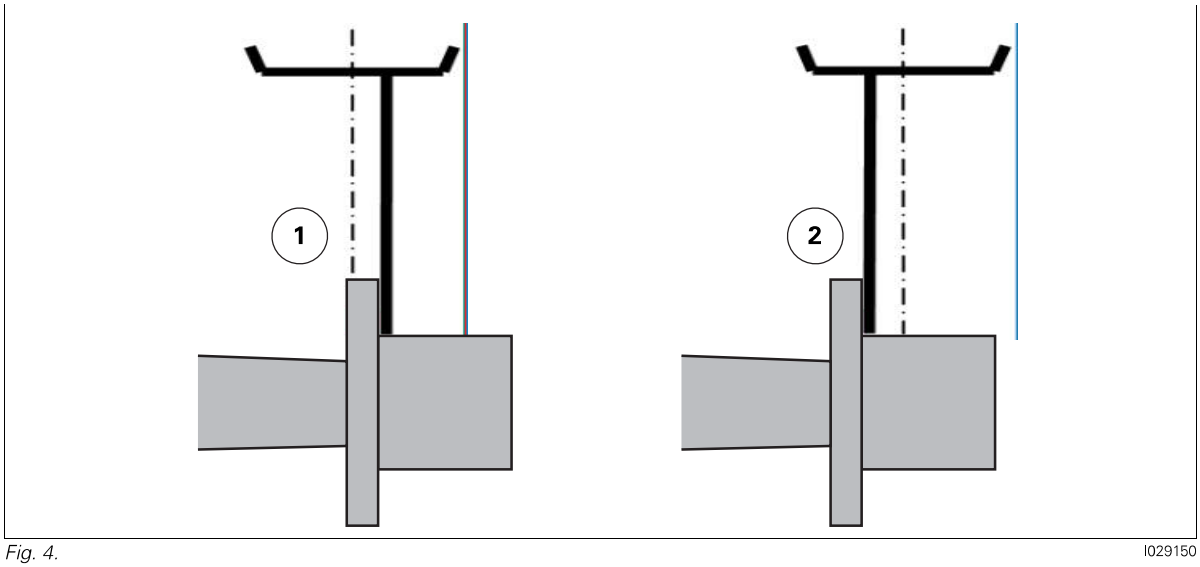


Fig. 4. I029150

Two track widths (1) and (2) can be obtained by reversing the rims.

NOTE: *Limit the load on the front axle beam when using wide track widths.*