Operator's Manual

MASSEY FERGUSON

# MF 7700 - Operation

## versions Efficient and Exclusive

MF 7719
MF 7720
MF 7722
MF 7724
MF 7726


Dyna-6

Beauvais
AGCO S.A.S. - 41 avenue Blaise Pascal - 60000
Beauvais - France - RC B562 104 539

Original Operator's Manual

January 2016
ACT0021060
EAME
English

# 1. Tractor identification

## 2.3.2 Presentation and location of the safety decals and instructions

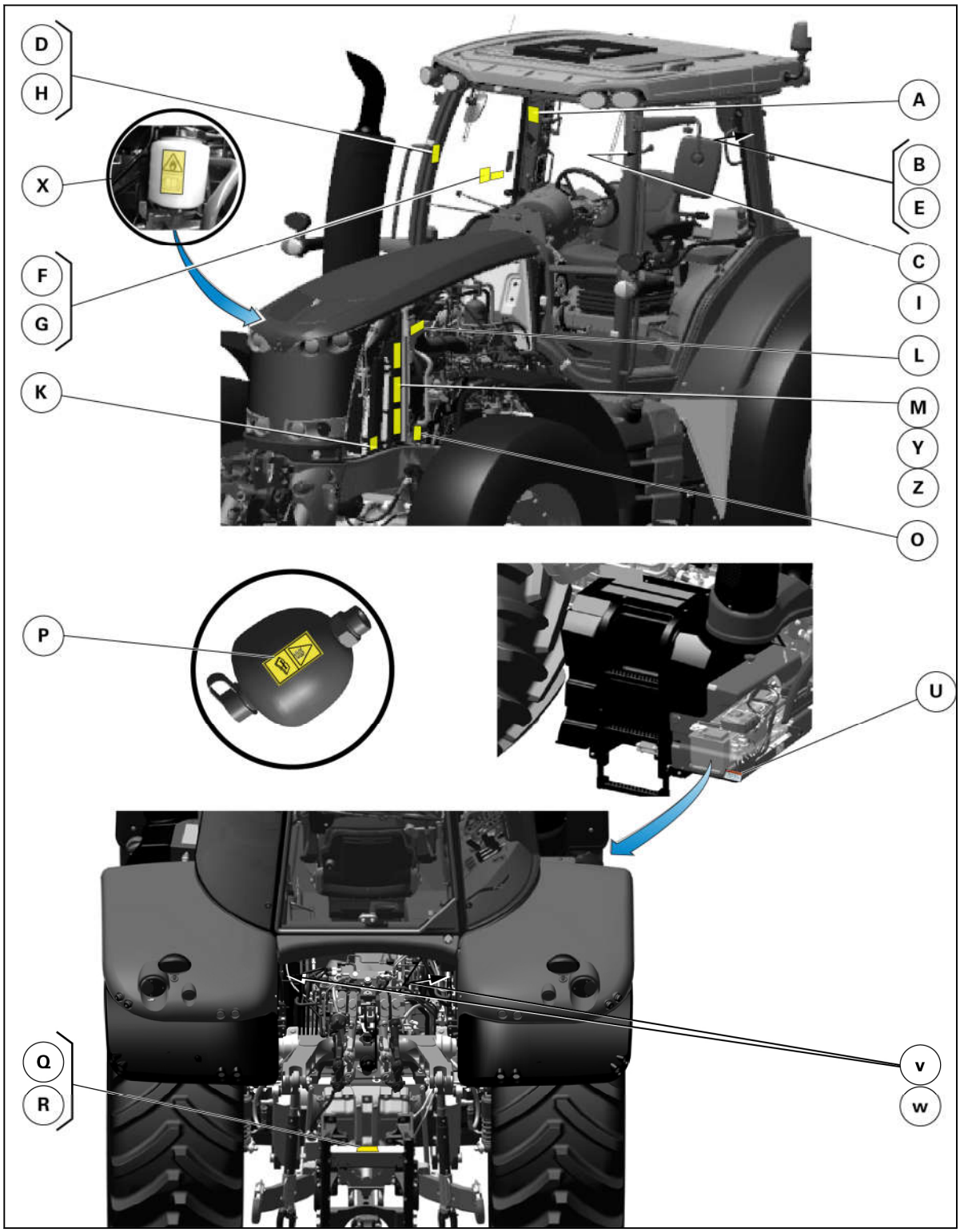


*Fig. 1*

5. Management System Review: Management is required to review the management system to ensure its suitability, adequacy and effectiveness. This cycle includes provisions for exposure monitoring and the monitoring of control measure performance. It is the responsibility of the manager of the safety and health program to determine how worker exposure to air contaminants and other hazards are to be controlled. It is also the responsibility of this manager to take whatever actions are needed to control work-place hazards. This includes but is not limited to exposure assessment, audits of varies programs such respiratory protection, ventilation system maintenance, etc.

**Limitations of Cabs Used in Hazardous Environments:**

While it may seem that respiration (breathing) exposure would present the greatest risk for personal exposure to contaminants, this is not the case when working with pesticides. The most prevalent method of exposure for applicators and those working around agricultural pesticides is through dermal (skin) contact.

Dermal contact with contaminants may occur directly from air-borne contaminants. It may also happen when contaminants are transferred from one object to another or when air-borne contaminants settle on objects that are subsequently contacted. Any surfaces in or out of the cab that have been contaminated are potential hazards for dermal exposure.

Within the cab, seats, upholstery, controls and other surfaces that become contaminated will pose such a hazard. In addition to dermal exposure, a contaminated cab interior will also pose a respiration hazard as the contaminant may, after settling on a surface, become air-borne once again whereby it may be inhaled.

Recirculation filters can be used to help reduce these contaminates from the cab interior air space. When a vehicle is operated in an environment where air-born contaminants exist, the cab can be an effective engineering control for reduction of exposure risk to persons within it.

In order for a cab to be used for this purpose, it must be of appropriate design. It must also be manufactured, maintained, tested and operated according to the specific requirements defined by evaluation of the hazards.

No cab should ever be considered an effective engineering control unless it has been qualified as such within a comprehensive OHSMS. While the cab manufacturer can design and manufacture a cab to physical specifications, the cab manufacturer can not qualify the cab as an appropriate engineering control for any specific application.

Site-specific information is needed to evaluate the appropriateness of control measures. To use the cab to control hazards, the managers of the OHSMS must carefully consider and evaluate the effectiveness of all engineering controls in their specific application.

**The Cab as an Engineering Control**

The engineering control requirements of the respiratory protection regulation may be fulfilled by the application of a cab, but this can only be done properly within an OHSMS. Elements of such a program are:

1. Assessment of the hazard with identification of the risk involved.
2. A survey of the machine and the cab involved in the hazardous operation.
3. Reviewing the cab ventilation system and the filter to ensure the filter provides the reduction in contaminants required.
4. Defining how long the filter can be used in this application.
5. Testing the cab ventilation system to ensure it provides the protection required for the operation to be performed. This also includes a review of any monitoring equipment to ensure it is working properly.
6. Repair and/or replacement of any defects or defective equipment found.
7. Retesting of the cab air system as required.
8. Recording in the appropriate log book all information regarding the test results, and repairs and replacement of parts and/or components.
9. Assessment of the effectiveness of the program at a specified time in the cycle of the activity.

- Without brakes and which, when fully loaded, weighs over 3000 kg
- With independent brake and which, when fully loaded, exceeds 6000 kg
- With overrun brake and which, when fully loaded, exceeds 16,000 kg
- With assisted braking (hydraulic or pneumatic) and which, when fully loaded, exceeds 32,000 kg

**Total permitted weight of tractor-implement combination**

| | Weight technically permissible for the tractor/trailer assembly | | |
|---|---|---|---|
| | MF 7719/MF 7720 Standard final drives (GPA 41) | MF 7722/MF 7724/ MF 7726 Reinforced final drives (GPA 42)/ Sealed reinforced final drives (GPA 44) | MF 7724/MF 7726 Composite final drives (GPA 45) |
| With trailer without brakes | 15,000 kg | 16000 kg | 17,000 kg |
| With trailer equipped with independent brake | 18,000 kg | 19,000 kg | 20,000 kg |
| With trailer equipped with overrun brake | 28,000 kg | 29,000 kg | 30,000 kg |
| With trailer with hydraulic braking | 44,000 kg | 44,000 kg | 44,000 kg |

**Load and ballast distribution per axle**

Axle load distribution

| | | 4-wheel drive | | | |
|---|---|---|---|---|---|
| | | MF 7719/MF 7720/MF 7722 | | MF 7724/MF 7726 | |
| Weights of unladen vehicle based on optional equipment | | min. | max. | min. | max. |
| | | 6,500 kg | 9,500 kg | 7,000 kg | 9,500 kg |
| Total weight distribution | Front axle | 2500 kg | 4300 kg | 2500 kg | 4300 kg |
| | Rear axle | 4000 kg | 6200 kg | 4,500 kg | 6200 kg |

**Ballast distribution per axle**

| | | 4-wheel drive | | |
|---|---|---|---|---|
| | | MF 7719/MF 7720 Standard final drives (GPA 41) | MF 7722/MF 7724/MF 7726 Reinforced final drives (GPA 42)/ Sealed reinforced final drives (GPA 44) | MF 7724/MF 7726 Composite final drives (GPA 45) |
| Maximum technically permissible loaded weights of the vehicle | | 12,000 kg | 13,000 kg | 14,000 kg |
| Maximum distribution of weight per axle | Front axle | 6,400 kg | 6,400 kg | 6,400 kg |
| | Rear axle | 9000 kg | 9,500 kg | 10,000 kg |
| Minimum percentage of maximum permissible | Front axle | 20% | 20% | 20% |
| | Rear axle | 42% | 46% | 50% |

**Cab sling points**

*Fig. 25*

## 2.9.4 Special instructions for cleaning the tractor

- Before cleaning the tractor, always:
  - Follow the mandatory procedure before dismounting the tractor
  - remove or put away implements, buckets, chains and hooks.
- Clean steps, pedals and floor. Remove grease or oil. Brush away dust and mud. In winter, scrape away snow and ice. Remember — slippery surfaces are hazardous.
- When washing the tractor with a jet of water, do not direct the jet straight onto electrical components.
- If using a high-pressure cleaning device, maintain a sufficient distance so as not to damage the paintwork and the sealed sections.
- Keep work surfaces and engine compartments clean.
- After washing, grease the lubrication points, the hinged sections and the bearings.

# 3.1 Cab

## 3.1.1 Steering console


*Fig. 1*

(1) Instrument panel
(2) Control unit. This assembly controls the direction indicators, high beam and low beam lamps, windscreen wipers, windscreen washer and horn.
(3) Steering wheel adjustment
(4) Setup and Information Screen menu access controls
(5) PowerShuttle control and ParkLock electrohydraulic brake

| Logic of operation: | | | |
|---|---|---|---|
| **Rear power take-off status** | **Presence detector status** | **Position of the parking brake or ParkLock** | **Result** |
| | | | baler). The power take-off stops for five seconds after the clutch pedal is released. |

| Front power take-off status | Presence detector status | Position of the parking brake or ParkLock | Result |
|---|---|---|---|
| OFF | OFF | ON or OFF | Power take-off cannot be engaged |
| OFF | ON | ON or OFF | Front power take-off can be engaged using the cab control |
| ON | ON | ON or OFF | The power take-off is in operation |
| ON | OFF > 2 seconds and < 5 seconds | ON or OFF | The power take-off (PTO) continues to operate but an audible signal sounds (ten seconds) and a symbol is displayed on the instrument panel |
| ON | OFF > 5 seconds | ON | The power take-off continues to operate |
| ON | OFF > 5 seconds | OFF | The PTO stops<br>If there is a presence detector fault, depressing and keeping the clutch pedal pressed will re-engage the PTO in the cab, using the ON/OFF switch to unblock/clean an implement (for example: mower). The power take-off stops for five seconds after the clutch pedal is released. |

| Headland Mode status | Presence detector status | Position of the parking brake or ParkLock | Result |
|---|---|---|---|
| OFF | OFF | | Headland mode cannot be engaged |
| OFF | ON | | Headland mode can be engaged |
| ON | OFF < 2 seconds | | Headland mode remains ON |
| ON | OFF > 2 seconds | | An audible signal sounds (10 seconds) and a symbol is displayed on the control panel screen and headland mode OFF |

(13) Range shift confirmation switch

**Version with Multi Function Joystick (optional)**

(1) PowerShuttle switch
(2) Switch to decrease ratios A/B/C/D/E/F.
(3) Switch to increase ratios A/B/C/D/E/F.
(4) H3 switch for hydraulic loader function or other tractor functions
(5) H4 switch for hydraulic loader function or other tractor functions
(6) Transmission shift to neutral switch

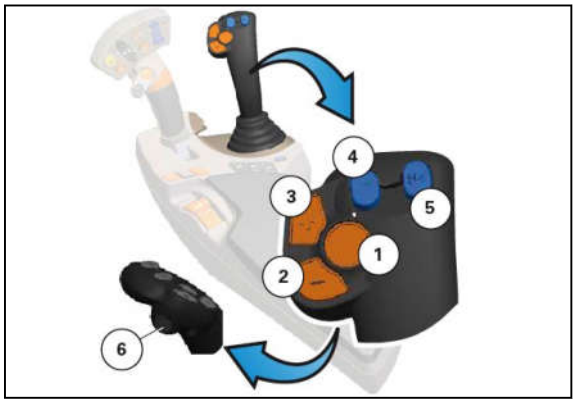


*Fig. 32*

**Throttle control**

(1) Hand throttle


*Fig. 33*

**Transmission functions with the version with T Handle**

(1) Stored transmission ratio C1 switch
(2) Stored engine speed (A) switch
(3) Headland Management switch or stored transmission ratio C2 switch

**NOTE:**
*The Headland Management switch activates stored transmission ratio C2 if no Headland sequence is programmed.*
*If a Headland sequence is programmed by default, the Headland Management switch will be reassigned to its Headland function.*


*Fig. 34*

### Storing the function

All manual actions carried out before the tractor is switched off are stored.

When the tractor is started, these actions are suggested in successive order (with the exception of the defrosting function).

### Changing the air flow

#### Automatic fan

When the fan control knob (1) is in auto position (A), air flow is selected automatically. Air flow changes are gradual.

Depending on the level of solar radiation, the air flow adjusts automatically

Air flow can be adjusted to maintain the temperature inside the cab at pre-selected levels.

To turn off automatic mode, move fan control knob (1) to the "OFF" position.

It is possible to set the system to economy mode by pressing switch (3) (the compressor cannot be activated and the indicator light on the air conditioning switch is off)

If the desired temperature is lower than the outside temperature, the temperature indicator on the LCD screen flashes

The ventilation is then increased.

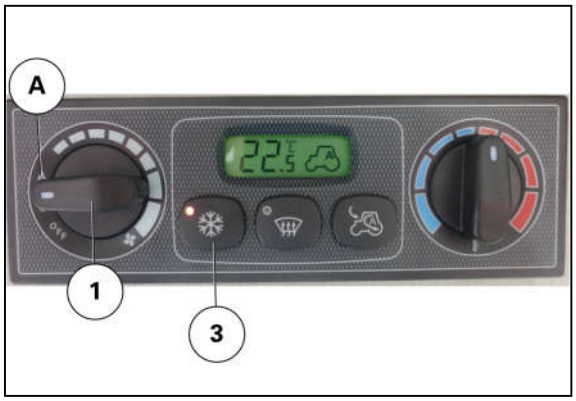


*Fig. 54*

#### Manual ventilation

It is possible to manually select an air flow that is different to the air flow selected automatically. When the knob is moved to a different position, air flow change is instantaneous.

Air flow can be adjusted to maintain the temperature inside the cab at pre-selected levels.

To turn it off, move fan control knob (1) to the "OFF" position.

It is possible to set the system to economy mode by pressing switch (3) (the compressor cannot be activated and the indicator light on the switch is off)

If the desired temperature is lower than the outside temperature, the temperature indicator on the LCD screen flashes

The ventilation is then increased.

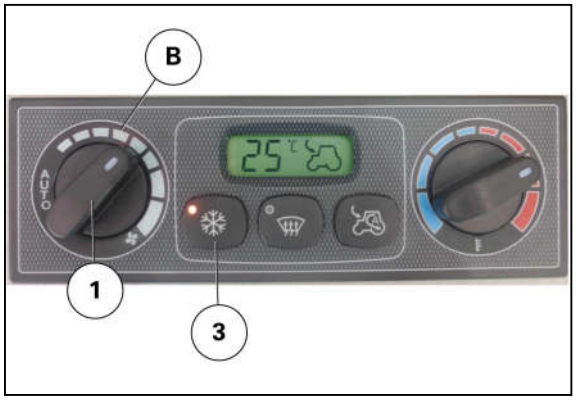


*Fig. 55*

**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. 81*

| Screen | Function |
|---|---|
| | • Press the<br>or<br>arrows to increase/decrease the activation time of stored engine speed (A) when the rear power lift is in working position and a ground speed >0 km, and then press<br>to confirm<br>• Press the<br>or<br>arrows to increase/decrease the deactivation time of stored engine speed (A) when the rear power lift is in transport position and a ground speed >0 km, and then press<br>to confirm |
|  | **Transmission settings screen 2**<br>This screen allows you to activate/deactivate the neutral brake pedal function and the C2/pedal mode function.<br>Press the<br>or<br>arrows to choose which function to adjust (the index moves), then press<br>(the function is greyed out when it can be adjusted)<br>• Press the<br>or<br>arrows to enable/disable the neutral brake pedal function (shifting the transmission to neutral when the brake pedals are pressed with a forward speed below 20 kph) and then press<br>to confirm |

# 3.4 Engine

## 3.4.1 Running-in

- Experience has shown that the first 50 hours of tractor operation have a significant effect on the performance and life of the engine.
- From the first operation, the tractor must run with the engine at full load. The engine should be allowed to reach a temperature of 60°C before being subjected to full load.
- It is quite normal for oil consumption to be relatively high during the running-in period. Therefore, during running-in, the engine oil level must be checked twice a day during the first 50 hours of operation to avoid the risk of lubrication failure.
- During running-in, check the tightness of all nuts, bolts and screws frequently. The wheel nuts must be retightened daily until their torque has stabilized.

## 3.4.2 Filling with fuel

Before filling, ensure that the fuel being used is in compliance with applicable regulations (see the Maintenance section of the Operator's Manual).

**WARNING:**

**Always switch off the engine before filling up. Do not smoke while refueling the tractor. Keep away from naked flames . Wear suitable gloves when filling up.**

**Diesel fuel**

The filler port is located on the left-hand side of the tractor. The tank is filled after removing the BLACK plug. Fuel quality: See the Maintenance section of the Operator's Manual.

*Fig. 95*

## 3.4.3 Start switch

(1) Off
(2) Contact position to be used for electrical equipment when the engine is not running.
(3) Preheating position
(4) Start-up

**NOTE:**

- *The tractor starts with the key in position* (4).
- *When the engine is running, the key is in position* (3).
- *Always make sure that the ignition key is in position* (1) *before getting out of the tractor so that the electrical system is switched off.*

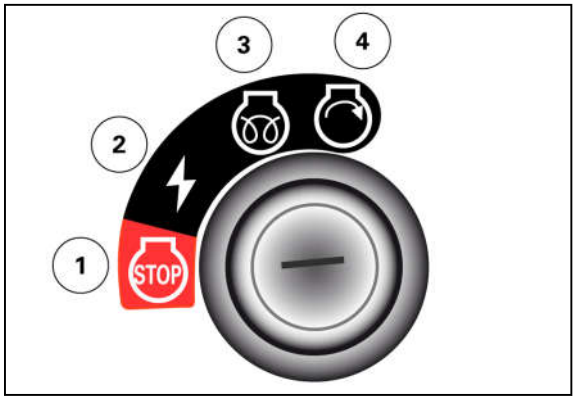


*Fig. 96*

For ease of use, the start ratio can also be adjusted in 0F for forward and reverse travel.

In this case, there is no longer any start ratio stored and the last ratio used corresponds to the restart ratio.

## 3.5.5 Storage of transmission ratios (1A, 1B, 1C, etc.)

It is possible to store two transmission ratios C1 and C2

They can be activated in both directions of travel and in the following modes:

- Lever (Speedmatching)
- Pedal (AutoDrive)

**NOTE:**
*The C1 and C2 stored transmission ratios may be different depending on the field mode (tortoise) or the road mode (hare).*

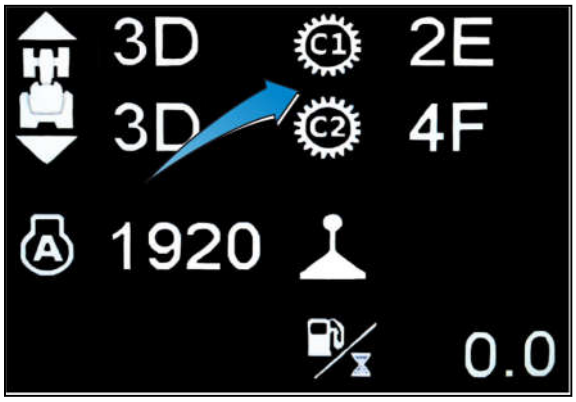


*Fig. 110*

To adjust the stored transmission ratios C1 and C2, go to the main screen in lever mode and use the C1 and C2 potentiometers respectively.

The recorded transmission ratios remain in the memory after the engine is switched off.

The stored transmission ratios can be easily recalled by pressing the C1 or C2 switch.


*Fig. 111*

**MultiPad lever**

It is also possible to store the transmission ratios using the C1 and C2 switches.

The desired transmission ratios must be selected using the MultiPad/Power Control lever.

Then hold down the transmission ratio switch for C1 ((2)) or C2 ((3)) positioned on the MultiPad lever ((A)) for 3 seconds.

The transmission ratio is then stored and activated, and is displayed in green on the main screen of the Setup and Information Screen

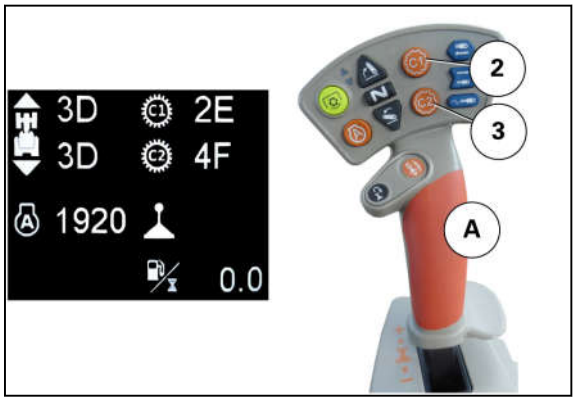


*Fig. 112*

# 3.6 Brakes

## 3.6.1 Brake pedals

**WARNING:**

- **When driving on the road:**
  - **The brake pedals must stay locked together**
  - **Only the foot throttle should be used**
  - **The hand throttle lever must be in the idle position**
  - **Check that the memorized A/B speed is not activated.**

- Use the brake pedals separately to apply the brake to just one wheel at a time. To uncouple the brake pedals:
  - Pull the lever (1) outward
  - Push the locking lever (1) downward
  - Use the brake pedal corresponding to the side the brake is to be applied

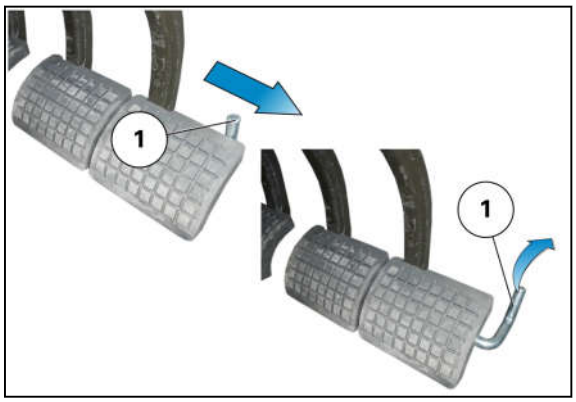


*Fig. 132*

- Use the brake pedals locked together when traveling on the road. To lock the brake pedals together:
  - Raise the locking lever (1)
  - Pull the lever (1) inward

    **NOTE:**
    *A spring enables an automatic return.*
  - The brake acts on the two rear wheels, the front axle (4-wheel drive only) and on the trailer brake.

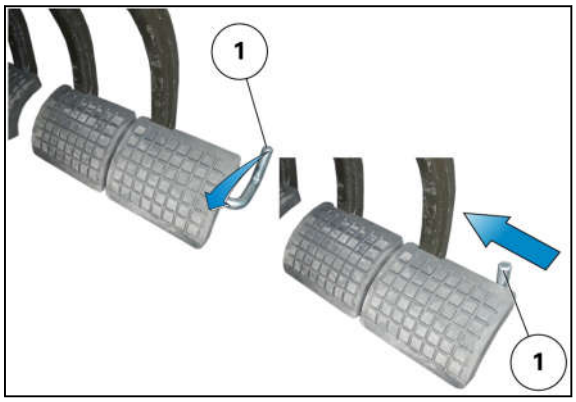


*Fig. 133*

## 3.6.2 Hydraulic trailer brake

**WARNING:**
**When using the trailer brake, it is recommended that the brake pedals are locked together .**

Trailer brake system available as an option.

If a trailer equipped with a hydraulic brake system is hitched to the tractor and connected, the trailer brakes are activated as soon as the operator presses the tractor brake pedals.

**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.

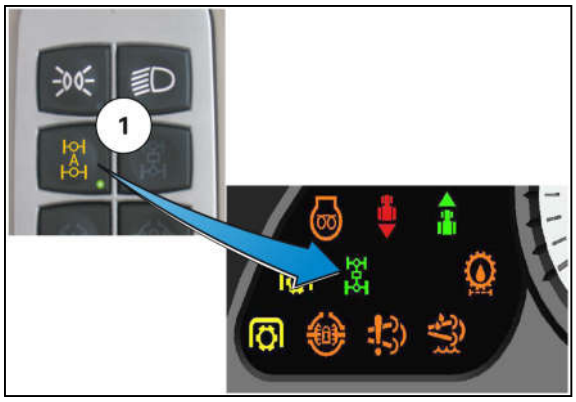


*Fig. 150*

| Actions | Consequences |
|---|---|
| Forward speed of tractor greater than 20 kph | Temporary disengagement of the 4-wheel drive front axle |
| Forward speed of tractor less than 19 kph | 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 |
| Wheel slip rate < 15% | Temporary disengagement of the 4-wheel drive front axle |
| Wheel slip rate > 20% | Re-engagement of the 4-wheel drive front axle |

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

## 3.8.2 Suspended front axle

The suspended front axle (optional) is designed to improve the operator's comfort by enabling better shock absorption during road use and also to increase the vehicle's stability at high speeds by improving contact with the road surface.

The axle suspension can be activated and deactivated using the switch located on the right-hand pillar in the cab.

**Procedure**

1. Press the PTO engagement control button (A) once a PTO speed has been selected. The PTO engaged indicator light (C) is illuminated.

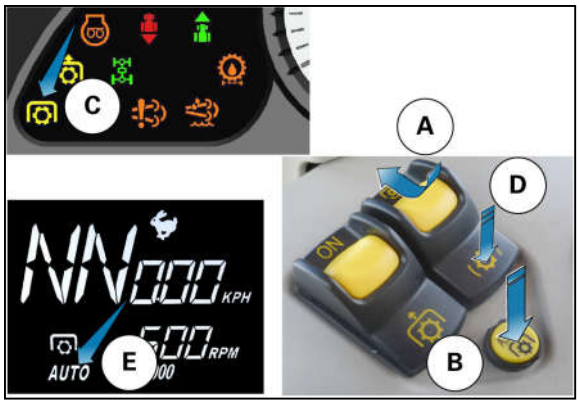


*Fig. 163*

2. Move the Lift/Lower switch of the rear linkage to Lower position.
3. Press the automatic mode engage button (B). The **AUTO** symbol appears on the digital display (E).

4

| Initial setting | Actions | Consequences |
|---|---|---|
| Rear linkage control is in lowering position and forward speed is greater than 0.1 kph | The rear linkage control is in the lifting position | The rear PTO is temporarily disengaged and the indicator light (C) flashes |
| Rear linkage control is in lifting position and forward speed is greater than 0.1 kph | If the rear linkage control is in lowering position and is not reactivated within 150 seconds | The rear PTO is permanently disengaged and the indicator light (C) is off |
| Rear linkage control is in lifting position and forward speed is greater than 0.1 kph | The rear linkage control is in the lowering position | The rear PTO is re-engaged and the indicator light (C) is permanently lit |
| Rear linkage control is in lowering position and forward speed is greater than 0.1 kph | Forward speed equal to 0 kph | The rear PTO remains engaged and the indicator light (C) remains permanently lit |
| Rear linkage control is in lowering position and forward speed is equal to 0 kph | The rear linkage control is in the lifting position | The rear PTO is temporarily disengaged and the indicator light (C) flashes |
| Rear linkage control is in lifting position and forward speed is equal to 0 kph | The rear linkage control is in the lowering position | The rear PTO remains temporarily disengaged and the indicator light (C) flashes |
| Rear linkage control is in lowering position and forward speed is equal to 0 kph | Forward speed greater than 0.1 kph | The rear PTO is re-engaged and the indicator light (C) is permanently lit |
| Forward speed equal to or greater than 0 kph | Forward speed greater than 25 kph | The rear PTO is permanently disengaged and the indicator light (C) is off |

5. Press the selector switch (D) to disengage the rear PTO permanently

## 3.10.3 Economy PTO

Operating the engine at a lower speed saves fuel. The economy PTO is designed to drive lightweight implements that do not require a large amount of engine power.

### Position for maximum draft control

The potentiometer (C) must be in the maximum position to obtain maximum draft control In the maximum draft control position, there is more sensitivity when reacting to draft variations.

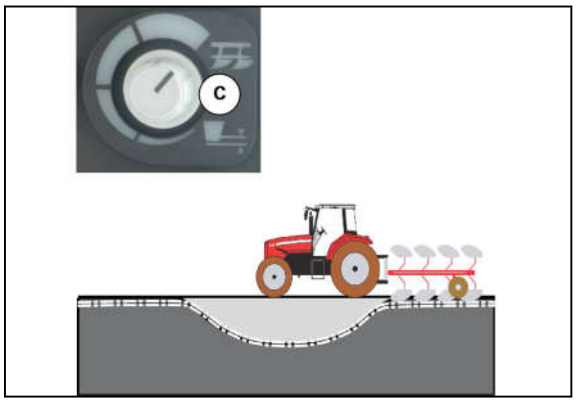


*Fig. 183*

### Intermediate position

The potentiometer (C) must be in the middle position to obtain the mixed control. In this position, there is less sensitivity when reacting to draft variations.

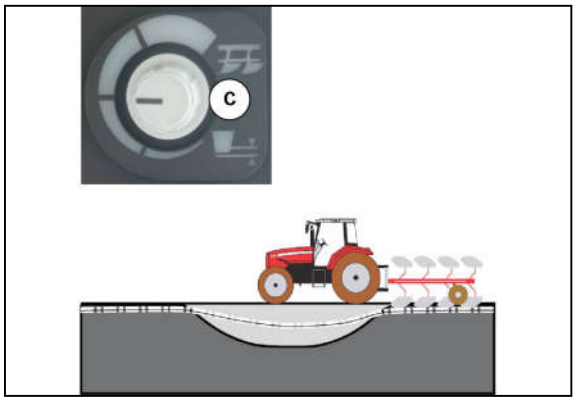


*Fig. 184*

### Wheel slip control

Significant rear wheel slip is inevitable in order to achieve the best pulling force of the tractor in the field It becomes a problem if the slip rate exceeds 25–30%.

This wheel slip control function can be accessed from the Setup and Information Screen settings window. It is used to display the current wheel slip and to adjust the maximum permissible wheel slip.

A low setting enables a higher correction rate to maintain traction, which results in a more irregular working depth. A higher setting reduces corrections, which results in a more regular working depth

- The wheel slip control offers the following advantages:
  - Saves time and fuel
  - Reduces tire wear
  - Causes less damage to the soil

## 3.11.7 Bottom links

(5) Link with category 3 hook
(6) Category 3 telescopic link

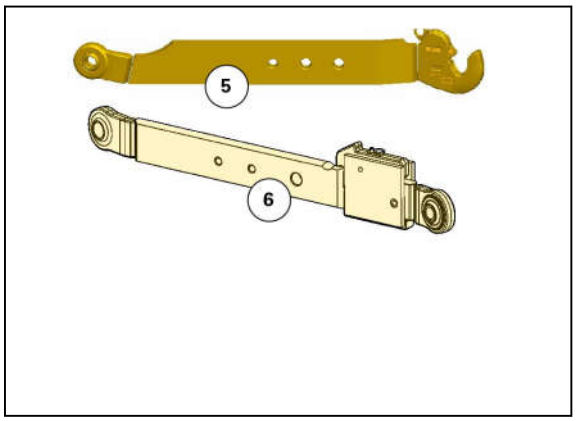


*Fig. 206*

**Links with category 3 hook (5)**

The hooks engage automatically in the ball joints which are fitted to the hitch pins.

The normal balls are used for clevis-end hitches.

The balls with guide cones are used for single pin linkages.

The hooks can be unlocked for uncoupling from the cab, using specific cables (supplied as an accessory).

For use under harsh conditions (e.g. forestry work), place a screw (M8 x 55 class 8.8) into the hole (A) for each link with hook, then lock it with a nut (standard flat washer and nylon locknut) to prevent unintentional unlocking.

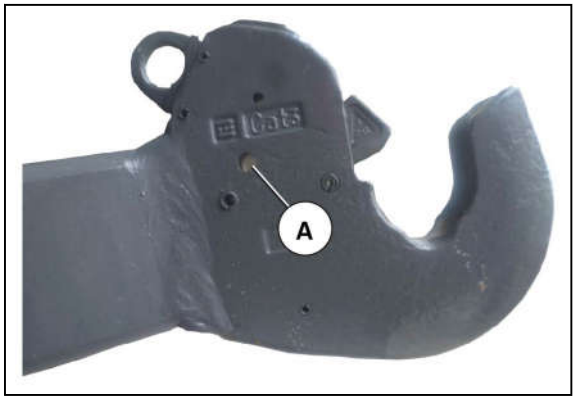


*Fig. 207*

**IMPORTANT:**
*Check the locking of the hooks after hitching an implement*

**Category 2 or 3 telescopic bottom links (6)**

The ends of these links are telescopic to make hitching implements easier.

To release the joints, pull the ring (1) and slide the end of the links toward the rear (A) (extended position).

During hitching, connect the links to the implement and carefully back up the tractor until the ends (B) lock (locked position).

The ends can be unlocked for unhitching from the cab using specific cables (available as accessories) fixed onto the rings (1).

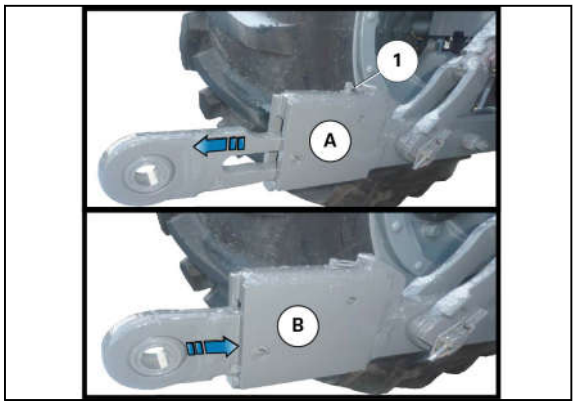


*Fig. 208*

## 3.12.4 Pick-up hitch

### Authorized load

This hitch is designed to tow trailers that transfer heavy loads to the tractor and require frequent hitching and unhitching.

See loads indicated on the hitch plate.

Maximum permitted tire type: 20.8R38.

**NOTE:**
*Maximum vertical static load: See Equipment chapter for towing*
*Maximum trailed weight: See Equipment chapter for towing*

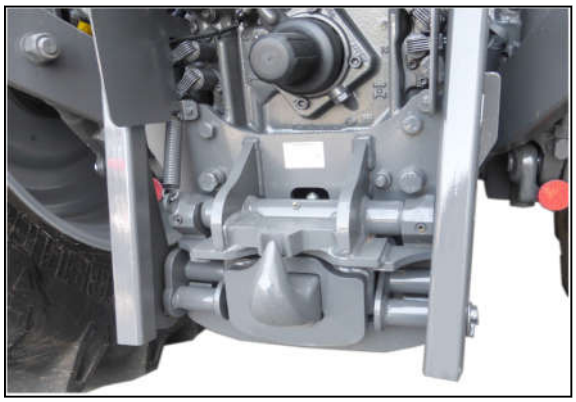

*Fig. 227*

### 3.12.4.1 Lowering the hook

### Procedure

1. Unlock the electronic linkage by pressing on the lifting switch (1) then the lowering switch (2).
2. Raise the hitch to its maximum using the lifting switch (1) to unlock the hook.

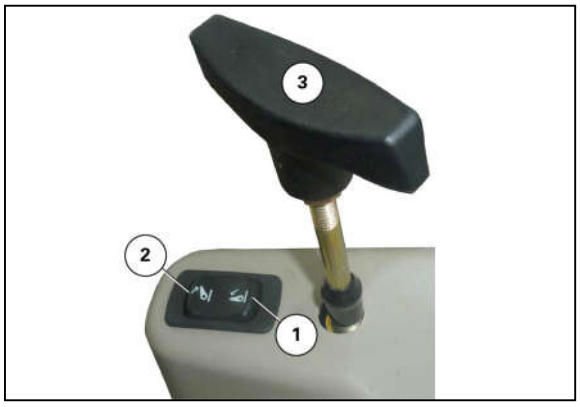


*Fig. 228*

3. Pull the locking lever (3) to release the hook, then press the lowering switch (2) to lower the hook to the ground (A).

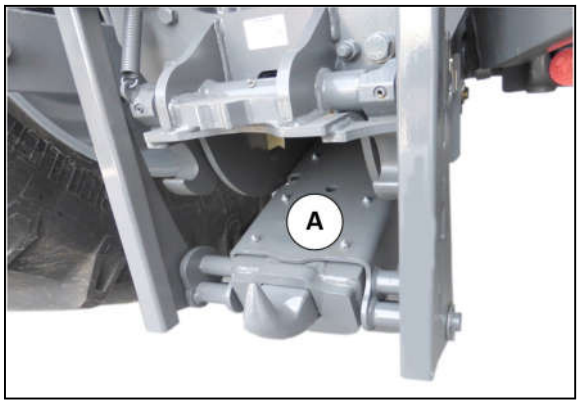


*Fig. 229*

### Connecting a bi-directional hydraulic motor with a drain

Connect the hydraulic motor supply hose (1) to the upper coupler of the auxiliary hydraulic spool valve and connect the return hose (2) to the lower coupler of the same spool valve.

The drain (3) must be connected to the free return line (without counter-pressure) and must be directly connected to the tank (4).

Use the control lever located in the cab to supply the hydraulic motor (see Hydraulic control lever).

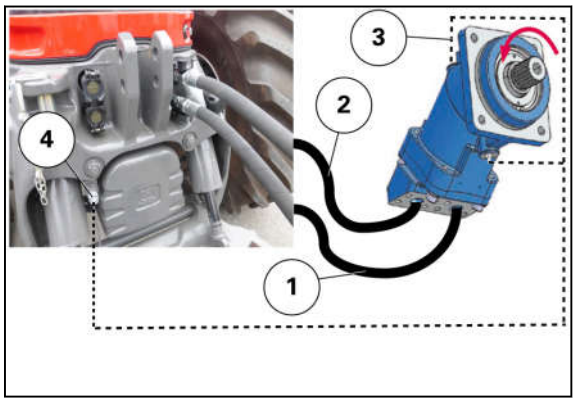


*Fig. 250*

**NOTE:**
*A hydraulic motor can be supplied by two spool valves (combination of the two flows).*
*For hydraulic motors with little inertia or a high flow rate, the return hose* (2) *can be connected to free return* (4).

**IMPORTANT:**
*The oil passing through union* (4) *returns directly to the tank and is not filtered. Ensure that no impurities pollute the system.*

**CAUTION:**
**Do not connect the drain to the return hose as the hydraulic motor can operate in both directions of rotation.There must be no pressure in the drain as it may damage the hydraulic motor.**

**NOTE:**
*The hydraulic flow can be adjusted so that the hydraulic system only supplies the quantity of oil required by the hydraulic motor (see Adjusting the flows).*

### Using additional hydraulic unions

#### Rear hydraulic unions

(1) Direct outlet pressure (P)
(2) Tank direct return (T)
(3) Connection to the Load Sensing (LS) load signal
(4) Valve and flow rate control valve
(5) Drain

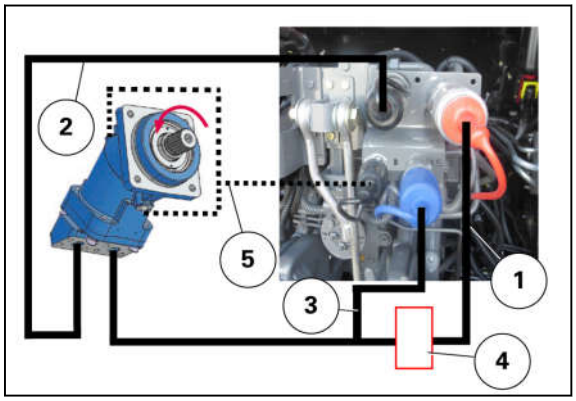


*Fig. 251*

The pressure (1) from the hydraulic pump supplies the hydraulic motor. Fit a valve (4) to control the hydraulic motor and a flow regulator (4) to adjust the hydraulic demand.

The oil is returned directly from the hydraulic motor to the tank (2)

The drain (5) must be connected to a free return line (without counter-pressure) and must be directly connected to the tank.

The Load Sensing line (3) allows you to have a load sensor.

## 3.13.7 Description and use of the external controls

(1) Ram rod extension switch **+** coupler on the spool valve
(2) Ram rod retraction switch **-** coupler on the spool valve

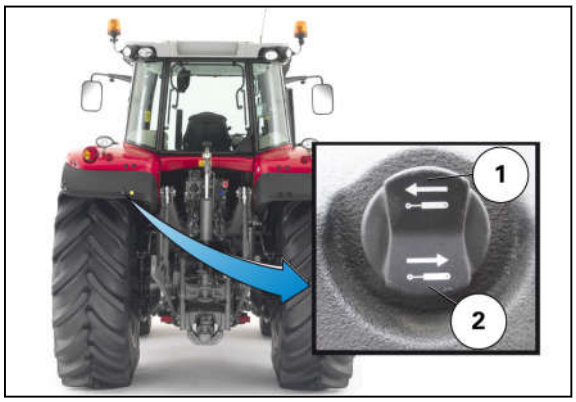


*Fig. 275*

By default, the external hydraulic controls operate spool valve no. 1. If the tractor is fitted with a Datatronic CCD, it is possible to operate another hydraulic spool valve using the controls (refer to the Datatronic CCD Operator's Manual)

- Before it is possible to use the external controls, unlock the hydraulics.
  - Either by pressing the cab control.
  - Or by pressing the ram extension external control switch (1) then the ram retraction switch (2).

The spool valve control is active when the button is pressed. Using the external controls locks the spool valve controls in the cab. The external controls are inactive as soon as the forward speed exceeds 2 kph. They are reactivated as soon as the speed drops below 2 kph

## 3.13.8 Setting flow rates and time delay

### Adjustment of the hydraulic flow rates with the Datatronic CCD

If the tractor is fitted with Datatronic CCD, refer to the Datatronic CCD Operator's Manual for details on how to adjust the hydraulic spool valves.

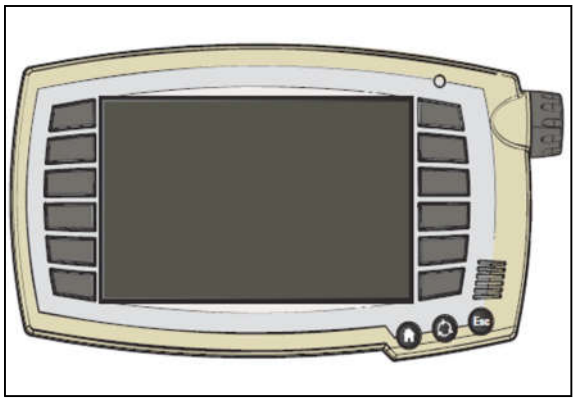

*Fig. 276*

### Adjustment of the hydraulic flow rates with the Setup and Information Screen

**NOTE:**
*If the tractor is fitted with a Datatronic CCD, it is not possible to adjust the hydraulic flow rates via the screen (it is only possible to view the flow rates).*

This menu allows you to choose the spool valve to change (rear spool valves 1 to 5 (depending on options), front spool valves 1 and 2 (displays F1 and F2) and front power lift spool valve)

### 3.14.3.6 Front loader/engine speed automation

The engine speed increases according to the action on the front loader control.

Press the ⓘ or ⓓ arrows to choose which function to adjust (the index moves), then press ⓞⓚ (the function is grayed out when it can be adjusted)

- Press the ⓘ or ⓓ arrows to activate/ deactivate the front loader/engine speed function then press ⓞⓚ to validate

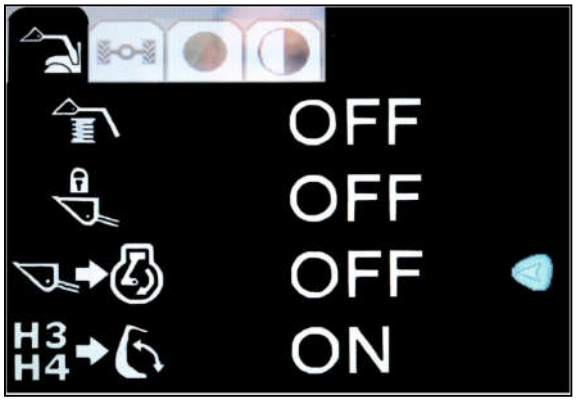


*Fig. 296*

### 3.14.3.7 3rd and 4th functions

**IMPORTANT:**
*The 3rd and 4th functions are activated temporarily.*
*When using the 3rd and 4th functions, check in the Datatronic CCD or in the Setup and Information Screen that there are no functions assigned to switches H3 and H4.*

Press the ⓘ or ⓓ arrows to choose which function to adjust (the index moves), then press ⓞⓚ (the function is grayed out when it can be adjusted)

- Press the ⓘ or ⓓ arrows to activate/ deactivate the 3rd function with switches H3/ H4, then press ⓞⓚ to validate

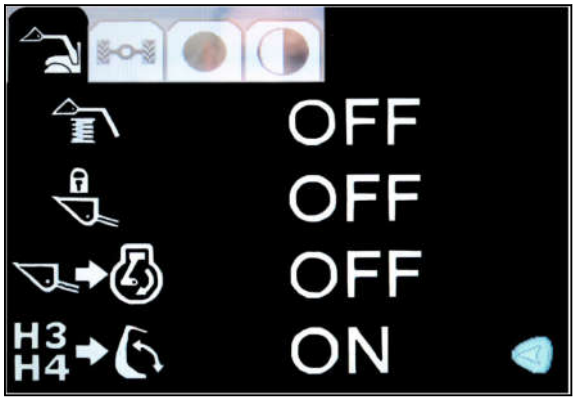


*Fig. 297*

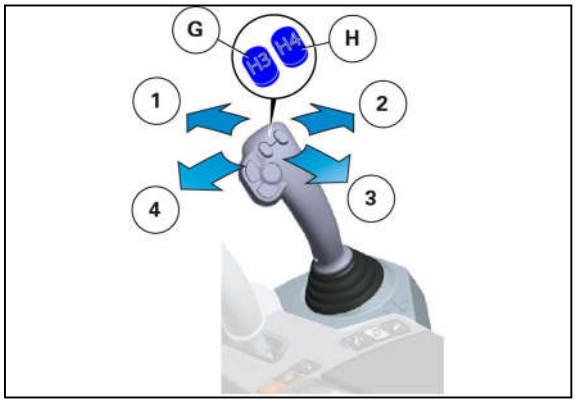


*Fig. 298*

**Rims with fixed disk**

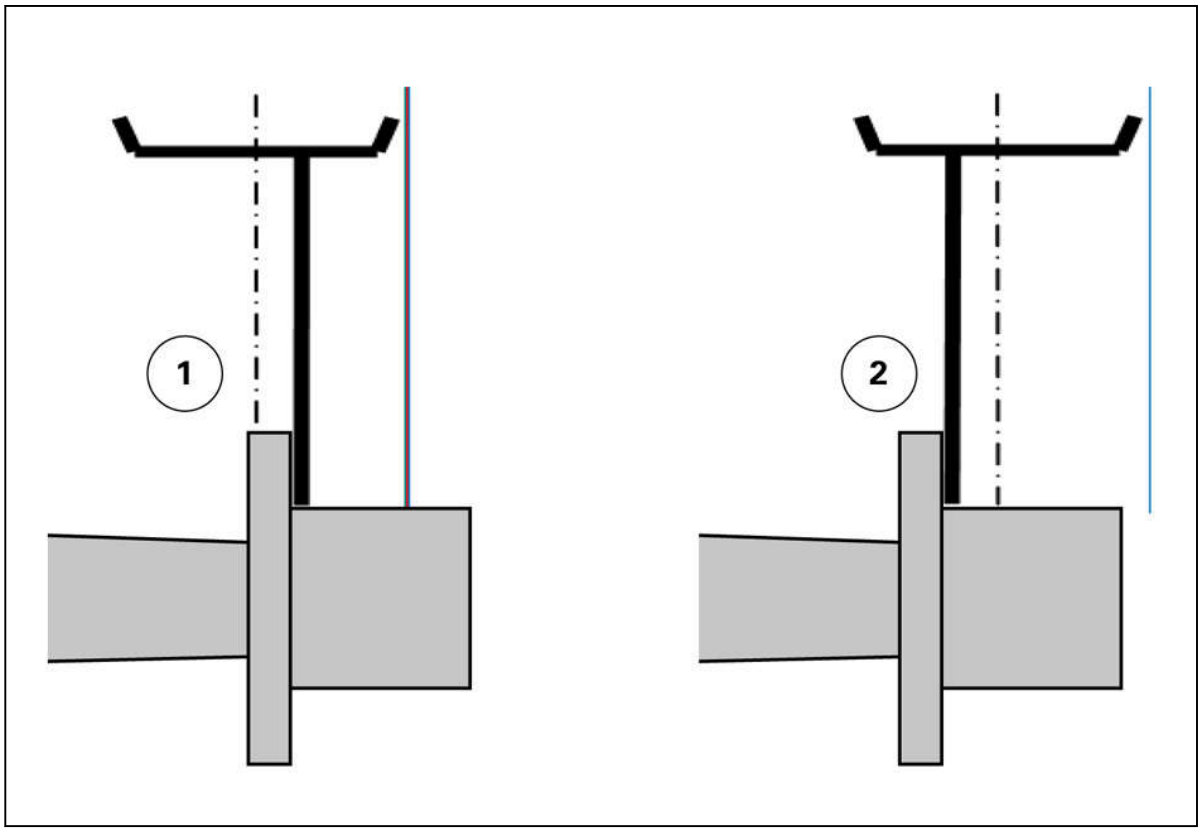


*Fig. 310*

Steel rims fitted to front axle (depending on front axle model), two track widths can be obtained by reversing the rims.

| Description of the 4-wheel drive front axle | Plate-to-plate distance | Minimum track width (1) | Maximum track width (2) |
|---|---|---|---|
| DANA 745/750/755 | 1892 mm | 1842 mm | 1992 mm |

When refitting, gradually tighten the nuts to the torque setting according to the recommendations in the table of tightening torques (see tightening torque in the Maintenance section of the Operator's Manual).

| Rear axle type | Rim in position (1) | | Rim in position (2) | |
|---|---|---|---|---|
| | Minimum track width with plate-to-plate distance of 1826 mm | Maximum track width with plate-to-plate distance of 2144 mm | Minimum track width with plate-to-plate distance of 1826 mm | Maximum track width with plate-to-plate distance of 2144 mm |
| GPA 41 | 1676 mm | 1994 mm | 2002 mm | 2320 mm |

*Track widths possible with rims with steel disks*

| Rear axle type | Rim in position (1) | | Rim in position (2) | |
|---|---|---|---|---|
| | Minimum track width with plate-to-plate distance of 1766 mm | Maximum track width with plate-to-plate distance of 2138 mm | Minimum track width with plate-to-plate distance of 1766 mm | Maximum track width with plate-to-plate distance of 2138 mm |
| GPA 42 | 1616 mm | 1988 mm | 1942 mm | 2314 mm |

*Track widths possible with rims with steel disks*

| Rear axle type | Rim in position (1) | | Rim in position (2) | |
|---|---|---|---|---|
| | Minimum track width with plate-to-plate distance of 1688 mm | Maximum track width with plate-to-plate distance of 2072 mm | Minimum track width with plate-to-plate distance of 1688 mm | Maximum track width with plate-to-plate distance of 2072 mm |
| GPA 44 | 1538 mm | 1922 mm | 1864 mm | 2248 mm |

*Track widths possible with rims with steel disks*

| Rear axle type | Rim in position (1) | | Rim in position (2) | |
|---|---|---|---|---|
| | Minimum track width with plate-to-plate distance of 1738 mm | Maximum track width with plate-to-plate distance of 2202 mm | Minimum track width with plate-to-plate distance of 1738 mm | Maximum track width with plate-to-plate distance of 2202 mm |
| GPA 45 | 1588 mm | 2052 mm | 1914 mm | 2378 mm |

*Track widths possible with rims with steel disks*

When refitting, gradually tighten the nuts to the torque setting according to the recommendations in the table of tightening torques (see tightening torque in the Maintenance section of the Operator's Manual).

# 3.19 Dual wheels

## 3.19.1 Dual wheels

In general, dual wheels should be used only for reducing soil compaction work (surface treatment work).

**WARNING:**

**If work is carried out on the wheels, check to ensure the tractor is immobilized. If work is carried out on the tractor while it is raised on a jack, there should be nobody underneath the tractor.**

For dual rear wheels, it is recommended to place the original wheel on the outside and a wheel with a thicker disk on the inside.

When selecting dual wheels that reuse the rims fitted as standard in the factory with a disk thickness less than 16 mm, you must obtain additional wheels with a thickness equal to or greater than 16 mm and fit them on the inside and then lock together with the standard rims (factory fitted) on the outside.

**IMPORTANT:**
*Use a tube type dual wheel kit, which is fitted to the hubs and not to the rims (kit available from your dealer).*

The following four criteria must be taken into account when selecting the correct dual rear wheels:

1. Soil conditions
2. Traction (narrow wheels)
3. Overall dimensions (2.50 m for road use)
4. Tire type

**IMPORTANT:**
*The wrong choice of dual wheels has a direct influence on the mechanical components and the wheel rims of the tractor. Avoid using dual wheels for intensive pulling, even for short periods (hauling out a tractor stuck in the mud etc.).*

**NOTE:**
*It is preferable to use wide tires or low-pressure tires instead of dual wheels.*

**Conditions of use of dual wheels**

**IMPORTANT:**
*Certain conditions must be respected with dual wheels*

- *Double the rear lights, marker lights and reflectors when the fitted series lights are more than 400 mm away from the sides of the tractor.*
- *Maximum forward speed of the tractor is limited to 25 kph*
- *Check that the steering angle is large enough.*

**CAUTION:**
**The distance between the side of the inner tire and the cab must always be higher than or equal to 40 mm (European Directive 89-173)**

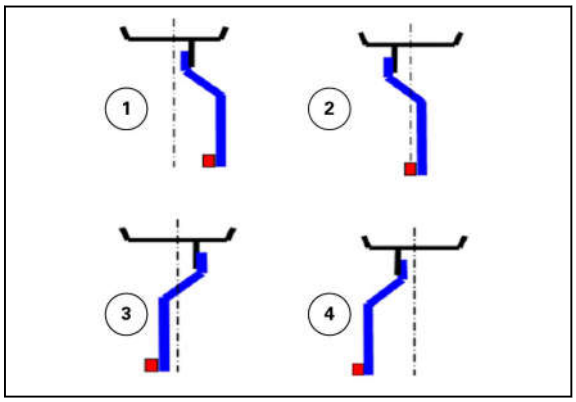


*Fig. 345*

**CAUTION:**
**The distance between the side of the inner tire and the cab must always be higher than or equal to 40 mm (European Directive 89-173)**

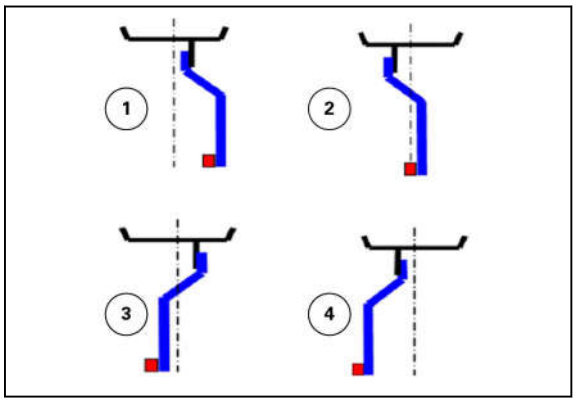


*Fig. 353*