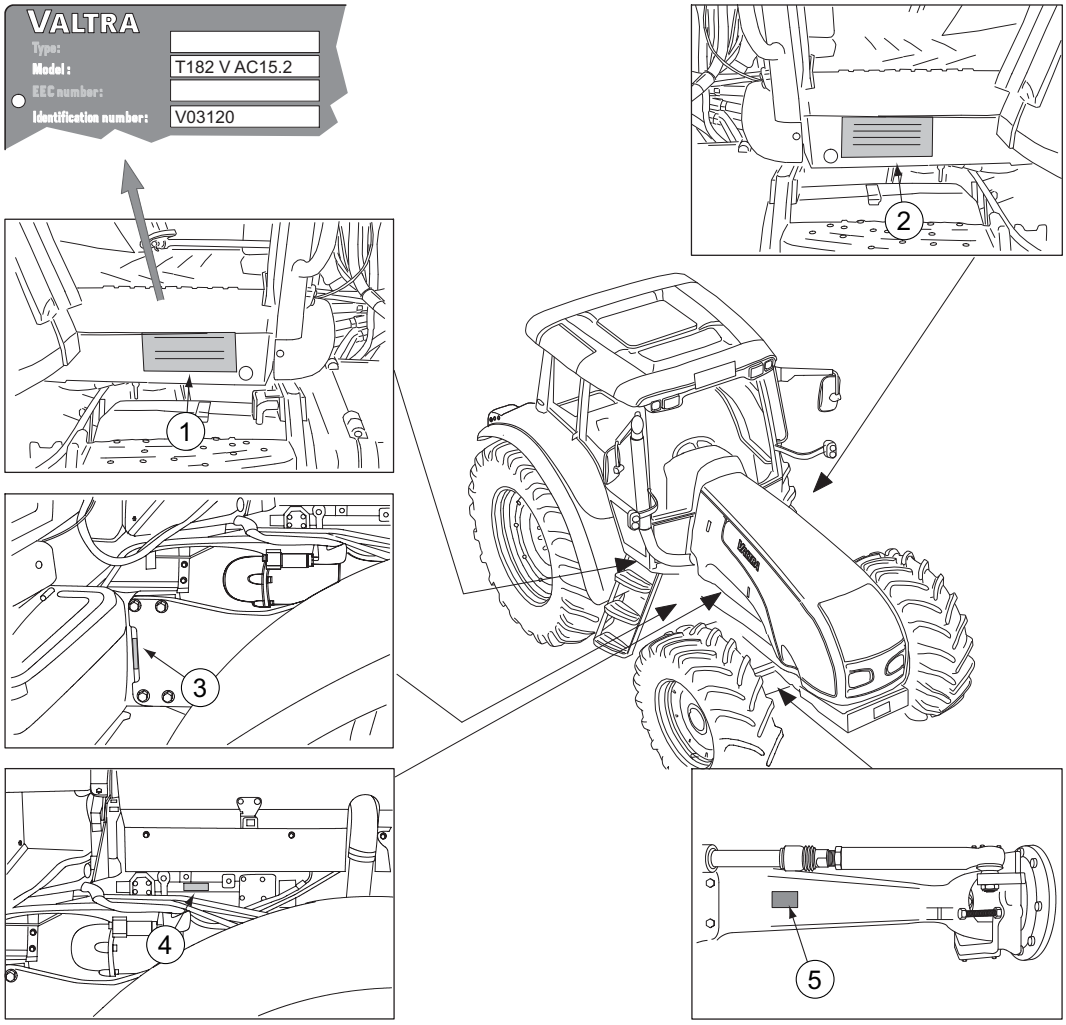
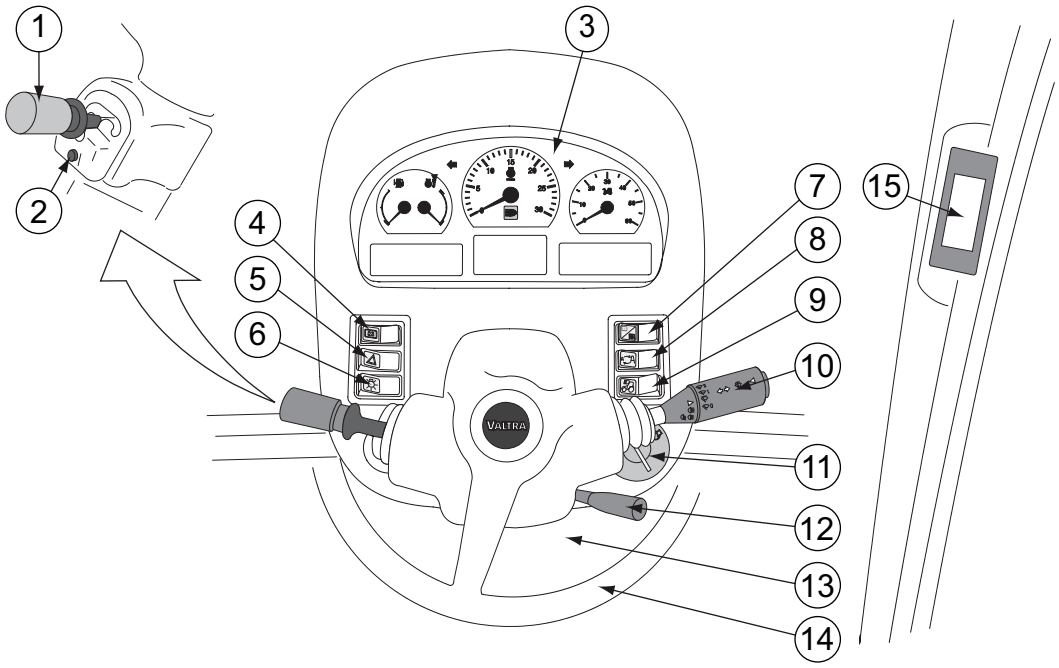
Tractor serial numbers

When ordering spare parts or service, give the model indication and serial numbers and, in some cases, the engine, front axle, cab and transmission numbers.



1. Type plate EEC
   - Model = model indication used by service/spare part department
   - Identification number = tractor serial number
2. Cab number
3. Tractor serial number
4. Engine number
5. Front axle number

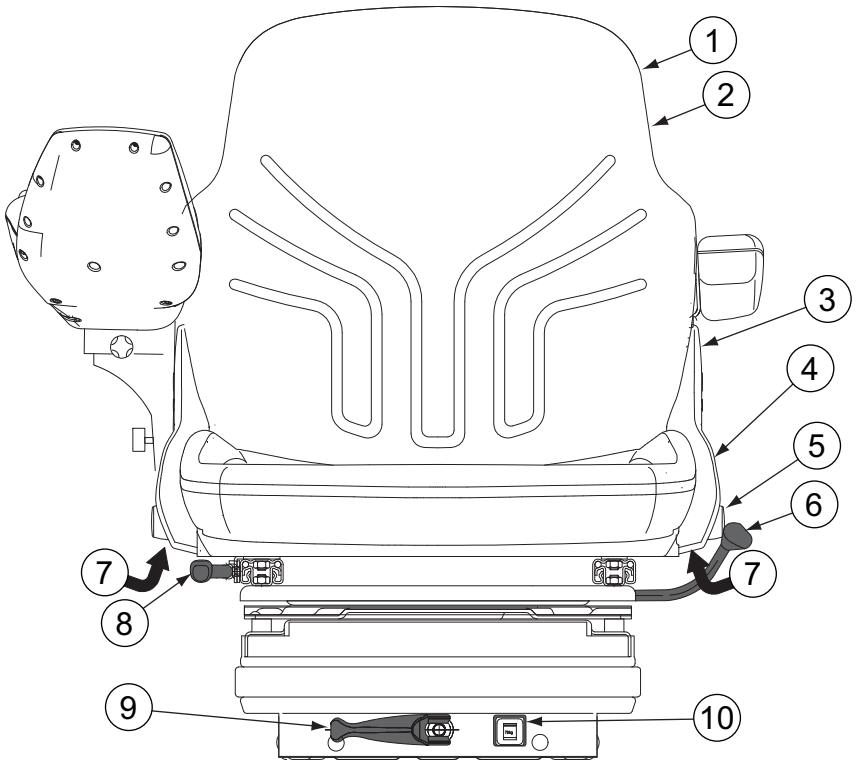
2.2 Dashboard



1. Power shuttle lever
2. Powershift preprogramming push button
3. Proline instrument panel
4. Main switch (extra equipment)
5. Hazard warning flasher switch
6. Light switch
7. Proline instrument panel display change-over switch
8. Proline instrument panel display setting switch
9. Upper headlights (extra equipment)
10. Multifunctional lever
11. Ignition switch
12. Lever for adjusting steering wheel position
13. Electric centre, lower part of the dashboard
14. Steering wheel
15. A-pillar display

2.2.1 Proline instrument panel

The operator receives information from the gauges, coolant thermometer, tachometer, speedometer and indicator lights. All this can be seen on the Proline instrument panel.



1. Storage compartment for manuals
2. Seat heating
3. Armrest adjustment
4. Backrest inclination adjustment
5. Seat belt anchor point
6. Seat turning lock/release
7. Height adjustment
8. Forward/backward adjustment
9. Suspension adjustment
10. Operator weight display

- **Turn the seat.**
  - **Pull the locking lever upwards to release the lock.**
  - **Turn the seat 180° anti-clockwise to the desired position.**

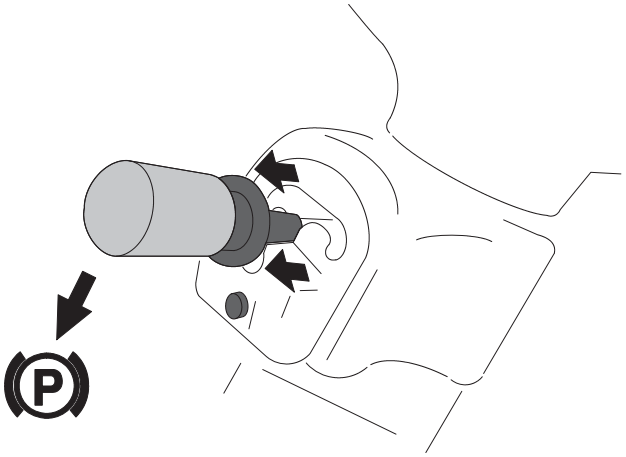
    The seat has set positions at intervals of 10°, to be used, for example, when ploughing.

- **Adjust the seat forwards or backwards.**
  - **Pull up the forward/backward adjustment lever.**
  - **Move the seat to the desired position.**

- **Adjust the suspension.**

  The operator weight display shows the settings for operators of different weights.
  - To increase the suspension, turn the suspension adjustment lever clockwise.
  - To decrease the suspension, turn the suspension adjustment lever anti-clockwise.

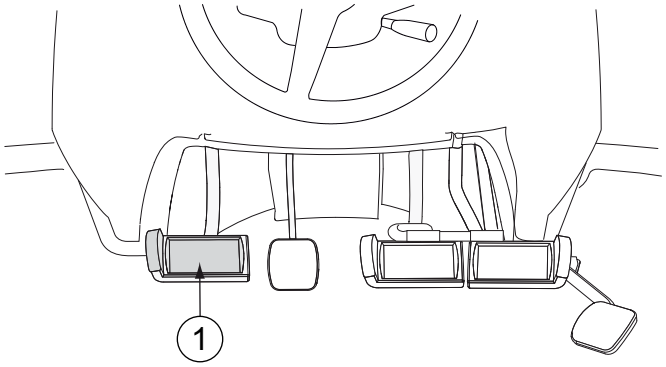
2. **Pull up the collar round the power shuttle lever, and move the lever to the parking brake (P) position.**



When the parking brake is on, four-wheel drive (4WD) is engaged and all wheels brake.

3. **To release the parking brake, pull up the collar, and move the power shuttle lever away from the parking brake (P) position.**

3.8.6 Using the clutch pedal



1. Clutch pedal

1. **Press the clutch pedal to release the traction.**
2. **Let the clutch pedal up gradually.**

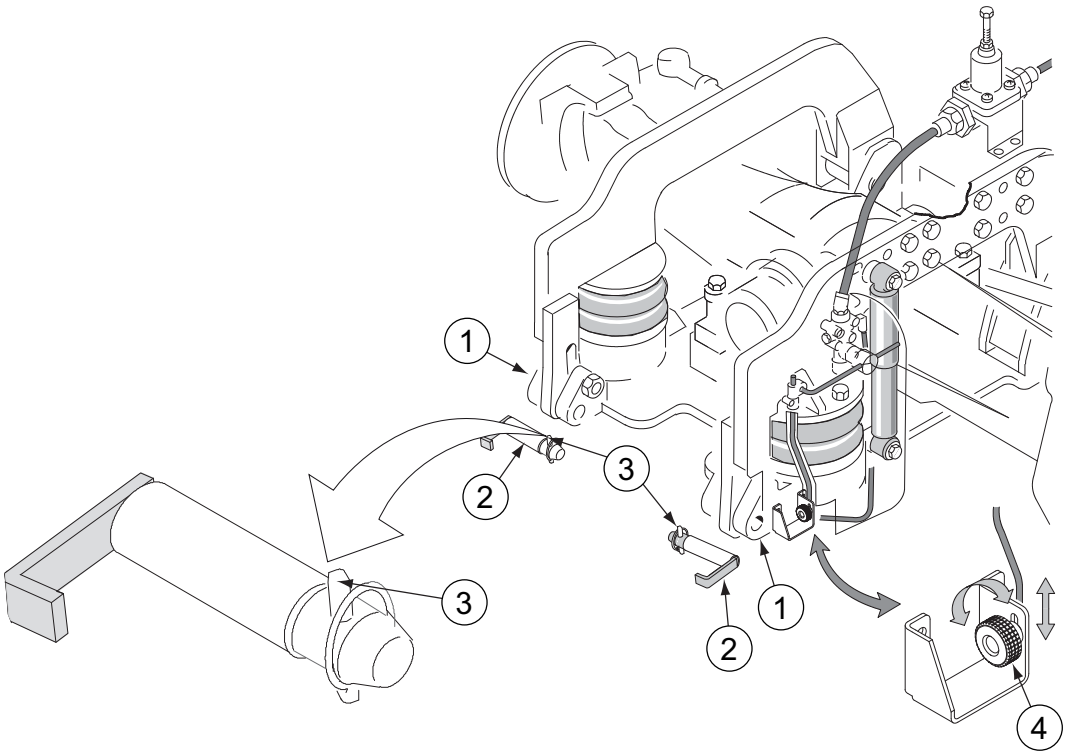
   IMPORTANT: Never rest your foot on the clutch pedal while driving.

   IMPORTANT: Do not allow the clutch to slip more than necessary when moving off.

3. **Do not fully press the clutch pedal if you want the tractor to move very slowly.**

   You can use this feature when attaching implements.

   NOTE: When using the clutch to move the tractor very slowly, the coupling point of the clutch may change and the clutch engages sooner.



1. Lock holes
2. Lock pins
3. Ring pins
4. Locking wheel

1. **To disengage the air suspension, secure the lock pins in the lock holes.**
2. **Make sure that the ring pins of the lock pins are in place.**
3. **If the lock holes do not line up when installing the lock pins, loosen the locking wheel and adjust the suspension height a little to line up the holes.**

   NOTE: After the adjustment, lock the wheel into the middle point. This ensures that there is enough suspension travel in both directions when the suspension is operating.

3.8.19 AutoComfort cab suspension

AutoComfort cab suspension is a semi-active system that controls the cab suspension either automatically or manually.

The AutoComfort cab suspension system is extra equipment.

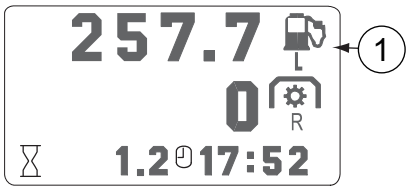
It is recommended to keep the front axle suspension (extra equipment) on especially when driving on a road.

The automatic mode of the AutoComfort system adjusts the damping automatically based on:

- Unevenness of the driving surface
- Driving speed
- Change of the Powershift gear

You can reset the fuel consumption information.

Total fuel consumption



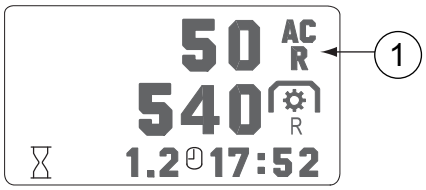
1. Total fuel consumption

You can reset the fuel consumption information.

3.9.3.9 Rear lower links' position view

The view shows the position of the rear lower links.

The position of the rear lower links **AC R** is shown on the top or middle row of the display.



1. Position of the rear lower links

The display shows the symbol **AC R** and the position of the rear lower links on a percentage scale 0-100:

- 0 = The lower links are in the lowest position.
- 50 = The lower links are in the middle position.
- 100 = The lower links are in the top position.

NOTE: The percentage value may not achieve the limit values (0 or 100) even if the linkage is functioning correctly.

3.9.3.10 Front lower links' position view

The view shows the position of the front linkage (extra equipment) lower links on a percentage scale.

Even if the display is activated, the percentage is not changing as the function is not available.

The lower link position of the front linkage **AC F** is shown on the top or middle row of the display.

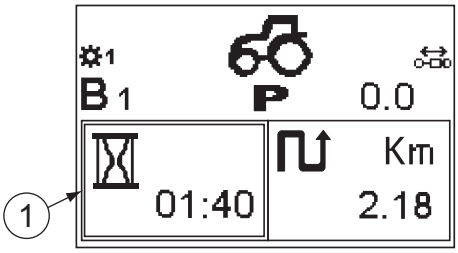
1. **If the main menu is not shown on the display, press ESC as many times as needed.**
   The main menu is displayed.
2. **Press the left arrow button.**
   The split drive view is displayed.

3.11.10 Changing the lower field views

You can select the views shown in the lower fields of the split drive view. The same view cannot be seen in both the fields at the same time.

You have to select the split drive view to change the lower field views.

1. **Press OK.**
   The lower left field is activated, and a rectangle is displayed around it.



1. The activated field.

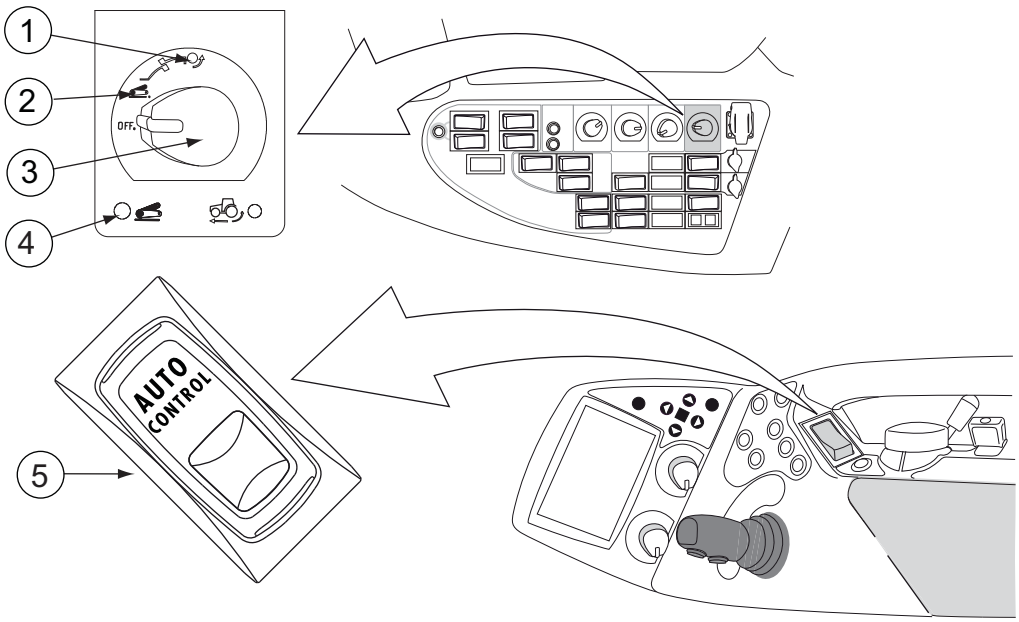
2. **Activate either the left or the right field with the left and right arrow buttons.**
3. **Select the desired view in the field with the up and down arrow buttons.**
4. **Press OK.**
   The selected field stays on the screen.

3.11.11 Lower field views

Several views can be displayed in the lower fields of the split drive view.

The functions selected for the lower fields are shown in the following order:

Symbol	Function
F	Front power-take-off (PTO) speed (rpm)
R	Rear power-take-off (PTO) speed (rpm)
	Engine speed (rpm)
Settings for the auxiliary hydraulics valves	
M1 M2 M3	Memory locations for auxiliary hydraulics valve settings
1 2 3 4	Settings for the rear hydraulic valves 1-4 of the memory locations M1, M2 and M3.
Table continued on next page	



1. Slip limit position
2. Drive balance position
3. Drive balance control selector
4. Drive balance control light
5. Lift/stop/lower switch

1. **To activate the drive balance control, turn the drive balance control selector to the drive balance position.**

   The drive balance control light is lit when the balance control is activated.

2. **Set the lift/stop/lower switch to the transport position.**

3. **To deactivate the drive balance control, turn the drive balance control selector to the Off or Slip position.**

3.12.15 Slip control

You can use the slip control when working with implements that operate below the surface of the ground and are connected to the three-point linkage.

NOTE: The slip control operates only when the draft control is activated.

The slip control function lifts the linkage a little when the wheels exceed the slip limit. It lowers the implement back to the set depth when the wheel slip is below the slip limit again.

Tractors are equipped with radar under the right side of the cab. When all wheels slip, the real driving speed can only be measured with the radar.

WARNING: Do not go under the tractor until the ignition key has been turned to the STOP position. The tractor is equipped with radar which presents a hazard to your eyes.

IMPORTANT: Do not turn the joystick round its vertical axis, because the joystick may get damaged and the wires can break.

1. **To activate the position lock or the floating position, push the joystick in the desired direction and to the extreme position for less than 1 second.**
2. **Release the joystick.**

   If you hold the joystick in its extreme position for more than 1 second, the output starts to follow the joystick movements.

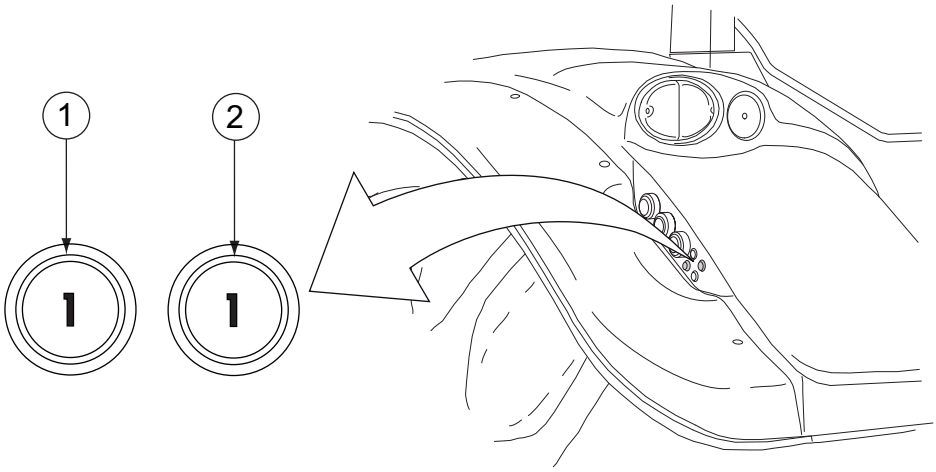
3.14.5 Controlling the rear valve 1 from rear mudguard push buttons

You can control the auxiliary hydraulic functions on the rear valve 1 from outside the cab by using the push buttons on the rear mudguards. This is useful, for example, for adjusting the length of a hydraulic top link when attaching implements.

Before you start, you have to activate the auxiliary hydraulics with the auxiliary hydraulics on/off push button.

IMPORTANT: Using the rear mudguard push buttons is permitted only with driving speeds lower than the safety limit of 2 km/h. If you try to use the push buttons with higher driving speeds, the buttons are disabled and an error code is shown on the tractor terminal display. The buttons remain disabled until you stop the engine and the tractor terminal shuts down.

When the rear mudguard push buttons are used, the oil flow is limited to 30% of the selected predefined factory/user settings for auxiliary hydraulics. You cannot activate any other hydraulic functions at the same time.



1. Push button (blue) for controlling the + port of the rear valve 1
2. Push button (green) for controlling the – port of the rear valve 1

The order of the push buttons is the same on both the left and right side mudguards.

1. **Press the left (blue) push button 1 on the rear mudguard to increase the pressure in the (+) port of the rear valve 1.**
2. **Press the right (green) button 1 on the rear mudguard to increase the pressure in the (-) port of rear valve 1.**

pause switch stops the operation momentarily. Pressing the switch again continues the operation.

The functions activated with the switches and the travelled distances between the functions are stored in system memory. The actual driving speed can differ from the driving speed used during programming the U-Pilot, but the distances between the different functions are kept the same. The time intervals between the programmed functions can therefore also differ from the programmed time intervals.

DANGER: When using the U-Pilot, the functions of an operational cycle start automatically. Ensure that nobody is in the hazard area.

CAUTION: The switches on the side panel do not show the status of the equipment when using the U-pilot.

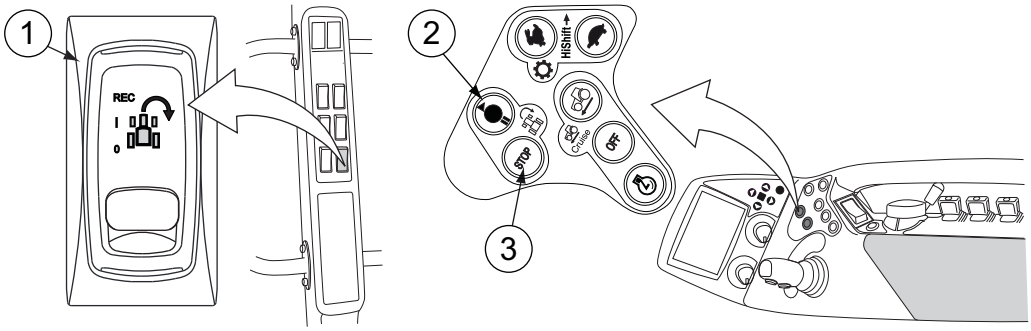
IMPORTANT: Check that the programme is for the intended work and that all the switches and controls are in the same position as when the programme was recorded.

3.18.1 U-Pilot operating requirements

For the U-Pilot to work properly, certain requirements have to be met.

- The driving speed must be 0.5-20 km/h.
- The maximum amount of operations for one operation cycle is 30.
- The maximum distance for an operation cycle is 100 m without a pause.
- The maximum distance between the starts of two consecutive functions is 63.5 m.
- The distance is measured with the accuracy of 0.5 m. The minimum distance between different functions is 0.5 m even if the function switches were pressed within a shorter distance.
- The maximum length of a pause is 5 minutes.

3.18.2 U-Pilot switches



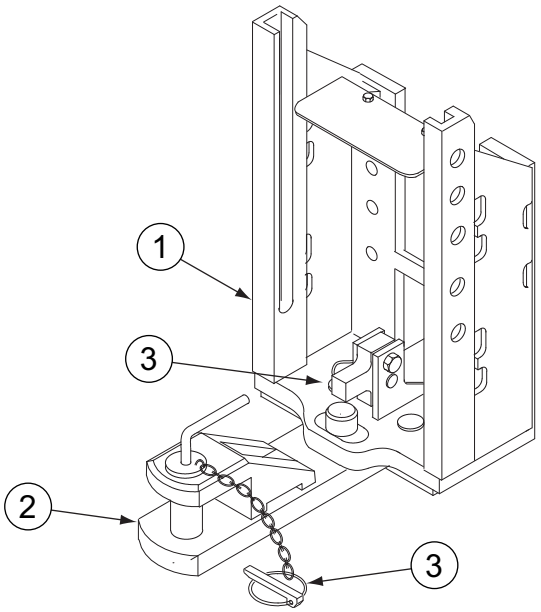
1. U-Pilot activation/recording switch
2. U-Pilot engage/pause button
3. U-Pilot stop button

The U-Pilot activation/recording switch has three positions (OFF/ON/REC):

3.22.3 Scharmüller towing device

The Scharmüller towing device consists of a towing device frame, an agricultural towing device and a locking.

WARNING: According to law, the operator has to ensure that all relevant precautions are taken (lockings secured etc.).



1. Towing device frame with a fixed hitch (Piton Fix)
2. Agricultural towing device
3. Locking

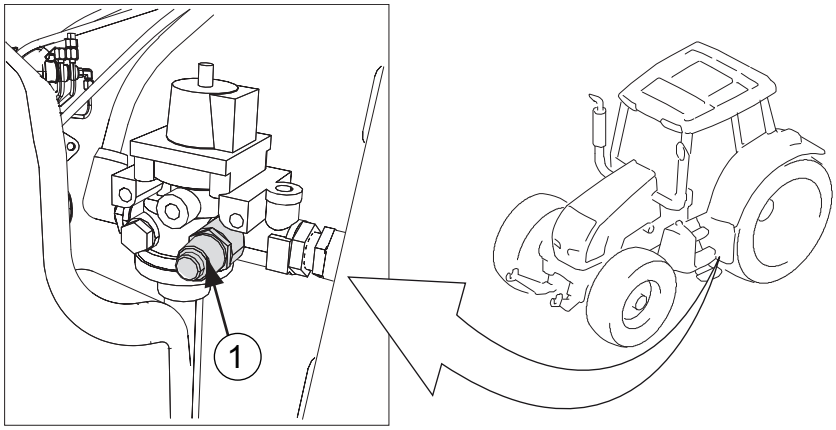
Locking to the trailer must be secured.

3.22.3.1 Adjusting the jaw height

The height of mechanical and automatic jaws is adjusted in the same way.

WARNING: You cannot change the jaw height if the lever is broken or dirty. The jaw must be locked and secured every time the height is changed.

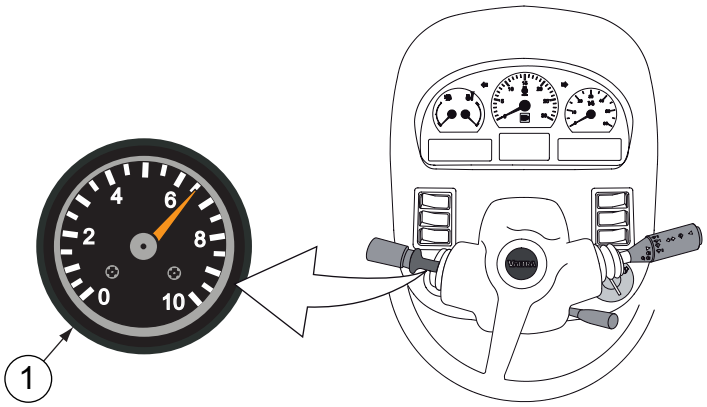
with outside compressed air, for example, when the compressor of the tractor is broken. In this case, the coupling must not be turned as far as it goes.



1. Air pressure coupling

IMPORTANT: Do not weld or drill the pressure container.

The pressure regulator is provided with a built-in pressure relief valve, which operates if the pressure rises to 12-14 bar. For example, a broken pressure regulator valve or a frozen or blocked filter can cause this situation.



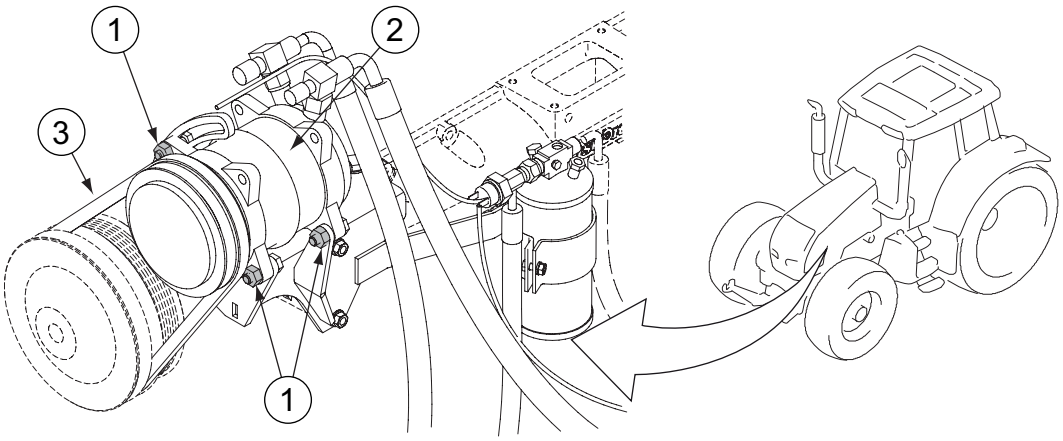
1. Air pressure system pressure gauge

WARNING: The pressure of the air pressure system must be at its maximum, about 7-8 bar, before driving a tractor with a trailer equipped with air pressure brakes.

When the ambient temperature is below +5°C, the antifreeze container must be filled with antifreeze liquid containing lubricant. The liquid streaming valve has to be in the open position. The container and streaming valve are situated on the top of the left axle housing.

4.7.3.11 Adjusting the air conditioning compressor belt

Adjust the air conditioning compressor belt, if needed.



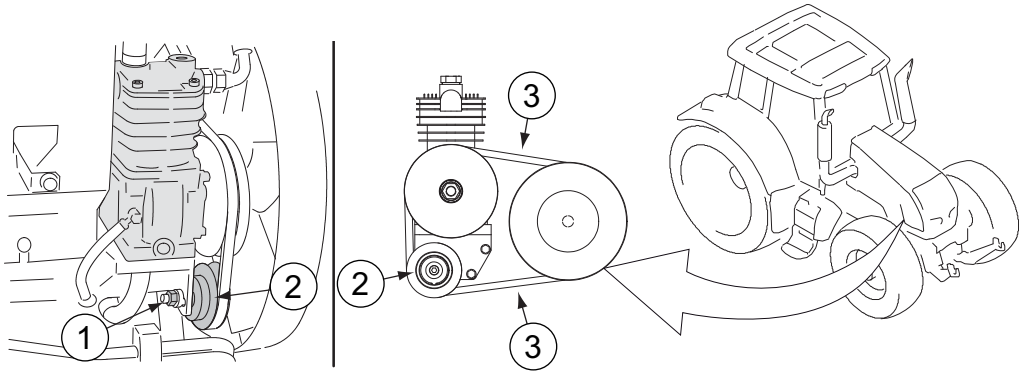
1. Attaching bolts
2. Compressor
3. Deflection (10 mm)

1. **Loosen the three attaching bolts.**
2. **Turn the compressor in its mountings.**
3. **Tighten the attaching bolts.**
4. **Check the deflection of the belt.**

   A deflection of approximately 10 mm is suitable for the tension of the belt.

4.7.3.12 Adjusting the air compressor belt

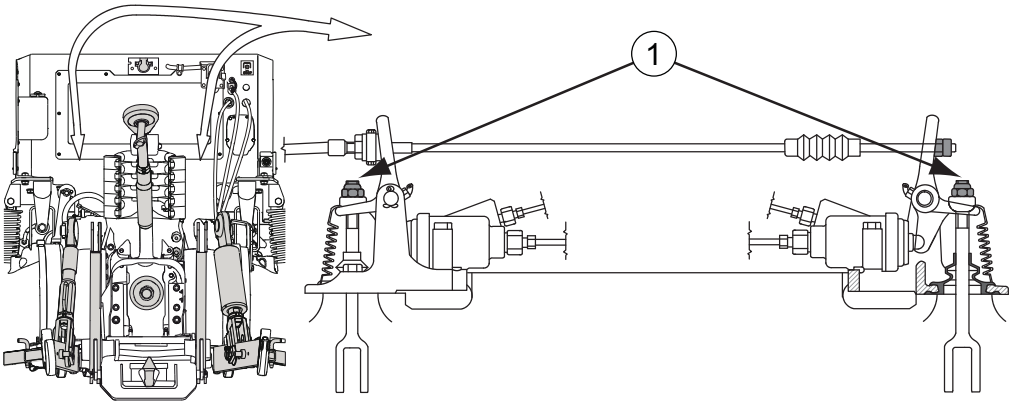
Adjust the air compressor belt, if needed.



1. Adjustment belt pulley
2. Belt pulley nut
3. Deflection (10 mm)

1. **Check the fixing bolts of the air compressor.**

2. **Tighten the brake adjusting nuts.**
   - Adjust the nuts with the torque wrench to 20 Nm.
   - Adjust the nuts without the torque wrench until they cannot be turned by hand.



1. Adjusting nut

3. **Slacken the nuts.**
   - If you are tightening the adjusting nuts with a torque wrench, slacken them 2.3 turns.
   - If you are tightening the adjusting nuts without a torque wrench, slacken them 1.5 turns.
4. **Check that the wheels can rotate freely.**
5. **Check the function of both brake pedals individually by driving.**

   Check that the brake action is the same on both wheels while driving with both pedals latched together.
6. **Check that the pedal free travel is the same on both wheels.**

   The pedal free travel should be ca. 35-45 mm. For the reverse drive system brakes, the brake pedal free travel should be 60-70 mm.

4.7.4.10 Checking the parking brake

Check the parking brake periodically.

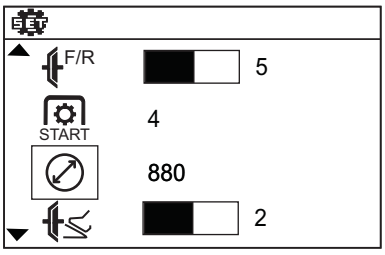
1. **Engage the parking brake.**
2. **Check that the brake is functioning.**
3. **Release the parking brake.**
4. **Check that the brakes were released.**
5. **Adjust the parking brake if necessary.**

3. **Press the right arrow button in the set menu to enter the transmission settings view.**

   NOTE: When the power shuttle lever is in parking brake position (P) you can enter the transmission settings view by pressing the preprogramming button.

4. **Move the navigation box to the tyre parameter position with the arrow buttons.**

   A short press moves the box in the selected direction one field at a time. A long press moves the box in the selected direction continuously.



5. **Press OK.**
6. **Change the tyre parameter value with the up or down arrow button.**
7. **Press OK to store the new value and to deactivate the selected field.**

   With a short press of the ESC button you can deactivate the selected field without saving the changes.

A long press of the ESC button returns to the previously active drive display.

4.8.1.2 Tyre parameters

Tyre	Parameter value
520/70R38	831
520/85R38	880
20.8R38	872
540/65R38	798
580/70R38	873
600/65R38	831
650/60R38	818
650/65R38	870
480/80R42	882
520/85R42	942
20.8R42	920
650/65R42	914
620/70R42	925
270/95R48	832
540/80R38 IND	880
650/65R42 IND	914
600/65-34 FOR	782
18.4-38/14 FOR	820
20.8-38/14 FOR	855
Table continued on next page	