

QUICK START GUIDE A SERIES



HITECH 4

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VALTRA

YOUR WORKING MACHINE

VALTRA A SERIES HITECH

This guide has been created to help Valtra operators to quickly become familiar with their tractor. Please note that this is NOT an operator's manual. Before operating the tractor, it is important that you read the operator's manual with all safety points.

The A series Hitech models utilise a powerful 4-cylinder AGCO Power engine combined with new 16 + 16 gear 4-step powershift transmission, resulting in a reliable all-round tractor. Modern and spacious cab means ergonomic and silent working environment for driver, and ensures that your work can be done in the most efficient way.

YOUR WORKING MACHINE

YOUR

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CHASSIS

A5 HiTech4 is available in A105 and A115 models.

MODEL	A105	A115
Engine	Agco Power 4-cyl, 4.4 litre	
Output max, hp	105	115
Output max, kW	78	86
Torque max, Nm	435	455
Chassis	Medium	
Transmission	4WD, 16+16, HiTech4 power-shift with power shuttle. Optional creeper.	
PTO	2 or 3 speed PTO	
Lifting Power, ton	4.3 ton	
Pump capacity	98 l/min	
Wheelbase, mm	2430	





INSTRUMENT PANEL

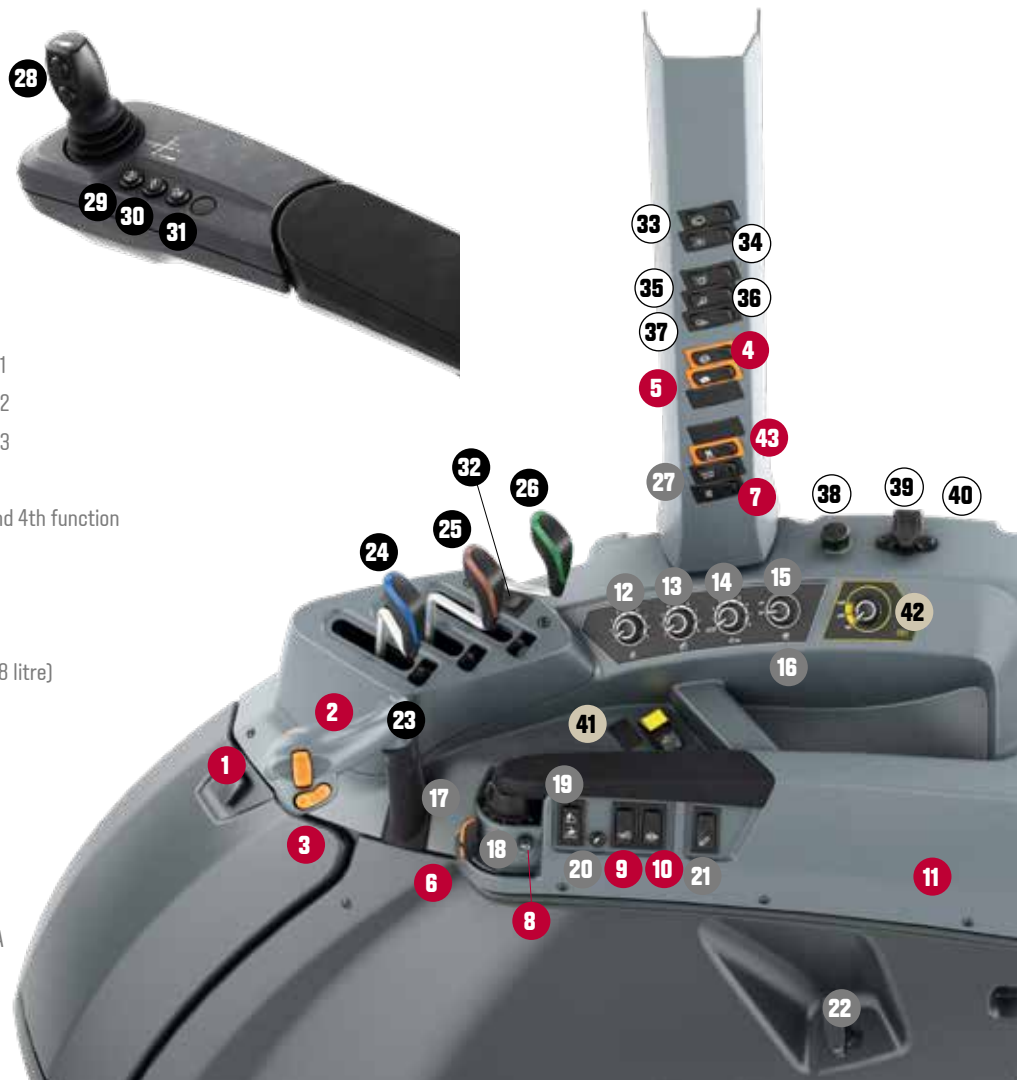


- 1. Instrument panel
- 2. Hazard light switch
- 3. Power shuttle lever
- 4. Ignition switch
- 5. Multifunction lever
- 6. Light switch
- 7. Adjustment lever of the steering wheel position
- 8. Control panel of the instrument panel display
- 9. Clutch pedal
- 10. Steering wheel tilt pedal
- 11. Latch for brake pedals
- 12. Brake pedals
- 13. Accelerator pedal

- 1. Range speed push button
- 2. HiShift button
- 3. Powershift push button
- 4. Switch for shifting automatics
- 5. Switch for creeper gear
- 6. Hand throttle
- 7. Test switch for trailer service brakes
- 8. Engine RPM memory button
- 9. Switch for four-wheel drive (4WD)
- 10. Switch for differential lock
- 11. Engine RPM memory button rear (optional)
- 12. Lowering speed selector
- 13. Max lifting height selector
- 14. Draft control selector
- 15. Drive balance control knob
- 16. Indicator light of the drive balance control
- 17. Work position marker
- 18. Work position control knob
- 19. AutoControl switch (lift/stop/lower)
- 20. Forced lowering button
- 21. Lifting/lowering switch

SIDE PANEL AND ARM CONTROLS

- 22. Trailer hitch release lever
- 23. Position locking of the valve control lever
- 24. Control lever for auxiliary hydraulic valve 1
- 25. Control lever for auxiliary hydraulic valve 2
- 26. Control lever for auxiliary hydraulic valve 3
- 27. Control stop switch (optional)
- 28. Joystick includes push buttons for 3rd and 4th function
- 29. Switch for front loader on/off
- 30. Front loader hydraulic implement locking
- 31. Front loader SoftDrive
- 32. Switch for combining hydraulic pumps (98 litre)
- 33. Rear window wiper and washer
- 34. Additional lower heater
- 35. Rotary beacon
- 36. Front working lights
- 37. Rear working lights
- 38. 2-pin current socket max 10A (optional)
- 39. 3-pin current socket max 5A and max 25A
- 40. Connection for optional RPM memory button
- 41. Rear PTO start / stop
- 42. PTO speed control knob
- 43. AutoTraction activation/deactivation button



TRANSMISSION

Valtra A series HiTech4-transmission has 16 + 16 gears in four working ranges.

Optional creeper available when the slowest speeds are required down to 150 m/h, making the transmission 32 + 32 gears with excellent overlapping over the gears. See the example of the available speeds.

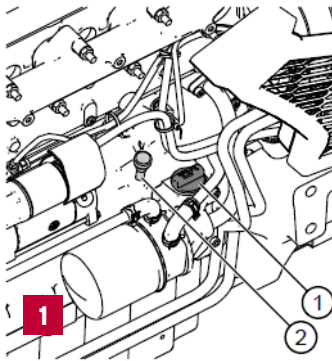
Tip You can change the driving direction without using the clutch pedal. Just use the power shuttle lever under the steering wheel. You can also use clutch pedal if you prefer.

Speed range and Powershift gear	Speed at 2200 rpm (km/h)	Speed with creeper gear engaged (km/h)
A1	2,07	0,13
A2	2,54	0,19
A3	3,14	0,23
A4	3,85	0,28
B1	5,09	0,37
B2	6,24	0,46
B3	7,71	0,56
B4	9,45	0,69
C1	10,64	0,78
C2	13,05	0,95
C3	16,14	1,18
C4	19,78	1,45
D1	25,21	1,84
D2	30,91	2,26
D3	38,23	2,79
D4	40	3,43

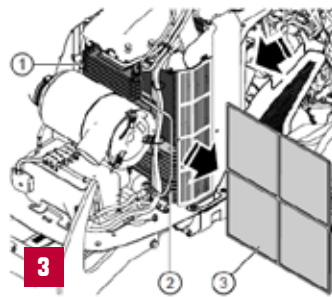
Rear tyres 16.9R38 (SRI =800 mm)

BEFORE DRIVING THE TRACTOR

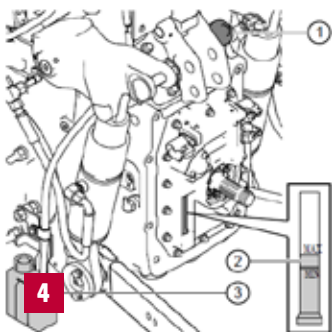
Before starting the tractor, please make sure that daily maintenance checks are done. Daily maintenance check points are:



- 1 Oil filler cap
- 2 Dipstick



- 1 Fuel cooler
- 2 Radiator and coolers
- 3 Cooler screen



- 1 Oil filling plug
- 2 Oil level gage
- 3 Leakage oil reservoir for the quick couplings

1. **Check the engine oil from dip stick**
 Engine oil stick is situated on the right side of the engine.
 Make sure that engine oil level is between the lower and upper mark.
 If necessary, add oil through the oil filler cap.
2. **Check coolant level**
 Make sure that the coolant level in the coolant expansion tank is above the fluid level mark for cold fluid. Coolant expansion tank is located under the engine hood
3. **Visual check: tyres, oil leaks, radiators.**
 Clean front grill and radiators if needed.
4. **Check oil level in the transmission and hydraulic system**
 The oil level must be between the minimum and maximum lines of the oil level gauge. Gauge is located at the rear of the tractor, next to PTO shaft.
 If the leakage oil reservoir for the quick couplings is full, remove the oil and discard it.
5. **Check Fuel and AdBlue levels**

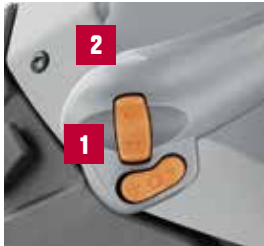
STARTING TO DRIVE

1. Push down the clutch pedal and start the engine.
2. Select the speed range and suitable gear. Remember to select a gear low enough to manage the start.
3. If you start to drive on a slope, push down the brake pedals to keep the tractor stopped.
4. Move the power shuttle lever to the forward or reverse position.
5. Release the clutch pedal.
6. Adjust the driving speed with the accelerator pedal and change gears when necessary (see next page).



CHANGING THE GEARS

In A5 series tractors you have 4 powershift gears in 4 ranges. Optionally you can have also super creeper gears which are used for very low speeds.



1.

Change the Powershift gear

- Push the plus side of the button to shift the gear up.
- Push the minus side of the button to shift the gear down.
- Keep the Powershift push button pushed down to change the gear several steps during the push.

2.

Push down the clutch pedal or the HiShift push button and keep the Powershift push button pushed down to continue the Powershift gear change to another speed range.

3.

Change the speed range

Push the plus side of the button to shift the speed range up. Push the minus side of the button to shift the speed range down.

4.

You can engage the creeper gear (optional) with the switch for creeper gear. Always stop the tractor before engaging/ disengaging the creeper.

PREPROGRAM THE POWERSHIFT GEAR AND SPEED RANGE

1. Select the Powershift gear and speed range.

2. Select the driving direction with the power shuttle but keep the tractor stopped and the clutch and brake pedals pushed down.

3. Push the preprogramming button.

- The selected Powershift gear and speed range are preprogrammed. The preprogrammed Powershift gear and speed range are shown on the instrument panel display.
- When you change the driving direction, the preprogrammed Powershift gear and speed engage automatically

4. To stop the preprogramming functionality, push and hold down the preprogramming button. The preprogrammed Powershift gear and speed range on the instrument panel display go out of view.



AUTO-SHIFT

The tractor has three shifting automatics modes: AUTO 1, AUTO 2 and Manual.

- **In the AUTO 1 mode**, the Powershift gears are changed automatically. But the engine speed limits for gear changes are lower, which decreases fuel consumption and emissions.
- **In the AUTO 2 mode**, the Powershift gears are changed automatically. The engine speed is high to give more power.
- **In the Manual mode**, you control the gear change manually with the Powershift push buttons.



1. To engage the manual mode of the shifting automatics, push down the side of the switch opposite the symbol.

2. To engage the Auto 1 mode, push the switch to the center position. The symbol AUTO 1 shows on the display. In this mode, the Powershift gear is changed automatically, but at a lower engine speed, which decreases the fuel consumption and emissions.

3. To engage the Auto 2 mode, push down the symbol side of the switch. The symbol AUTO 2 shows on the display.

HITeCH

Each speed range has four Powershift gears. You can change between the gears with the Powershift push button. It is not necessary to use the clutch pedal when you change the Powershift gear or speed range.

Easy shuttling with HiTech Power Shuttle lever or HiShift push button. No need for clutch.



AUTOTRACTION



AutoTraction is a standard option with A5 HiTech models. AutoTraction minimises the use of the clutch pedal as you can stop the tractor by using the brakes only.

AutoTraction disengages the clutch if:

- the two brake pedals are pushed
- the driving speed is less than 20 km/h
- the accelerator pedal and the clutch pedal or the HiShift button are not pushed
- the direction of the power shuttle lever is the same as the driving direction

When you sit on the driver's seat and engage the direction with the power shuttle lever, you can engage the traction again if you release the brake pedals or push the clutch pedal or the accelerator pedal. This lets you make a hill start if you adjust the brake force with the brake pedal and engage the traction with the clutch pedal or the accelerator pedal.



Autotraction can be activated or deactivated from right b-pillar switch

ENGINE RPM MEMORY

With the engine speed memory you can easily use a certain engine speed, for example in PTO-use. You can control the engine speed memory with the button on the right side panel.

Setting and using engine RPM memory

1. Choose required engine RPM with accelerator pedal or hand throttle.
2. Press the engine RPM memory button for 3 seconds. You will hear a sound and a symbol in instrument panel will light up.
3. Turn the RPM memory on and off by pressing the engine RPM memory button for 1 second.
4. To start the engine RPM memory again, push the engine RPM memory button for 1 second.



HYDRAULICS

ADJUSTING REAR VALVES

In A5 series tractors you have open centre hydraulics with up to three auxiliary valves. The maximum hydraulic flow is 98 l/min A105 and A115 models



1. Valves can be locked easily - for constant flow or in neutral.



2. Additionally you can select an option of two electronically controlled valves for front loader.



3. In models A105-A115 you get the maximum flow up to 98 l/min by combining the flow of two pumps by a rocker switch next to hydraulic levers.

Tip The tractor can be completed with a flow control valve. This valve will be controller from the rear and it regulates the amount of oil available from the brown valve. The remaining oil flow can be used at same time to power lift or for other services. With this device you can adjust the speed of a hydraulic motor or/and use two functions simultaneously. See number 2 on the REAR CONTROLS page.

REAR LINKAGE CONTROL

To activate the linkage with lift/stop/lower switch:

1. Push the lift/stop/lower switch first to the stop position and then to the lifting position to activate rear linkage
2. To move the lower links to the height set by the work position control knob, push down the bottom side. You can adjust lower links' position with control knob
3. Use the forced lowering button when you temporarily have to move the lower links below the limit set by the work position control knob.
4. To move the lower links to the height set by the lifting height selector, push down the top side of the lift/stop/lower switch.
5. When you attach implements, use the lifting/lowering switch to have a full control on the implement's movement.

You have to activate the linkage every time you set the power on or when you use the lifting/lowering switch or lifting/lowering push buttons on mudguards.

When you use the lifting/lowering push buttons on the mudguard, the lifting/lowering continues for as long as you push the button. The movement stops immediately when you release the button. Thus, you have stable control over the linkage movements.

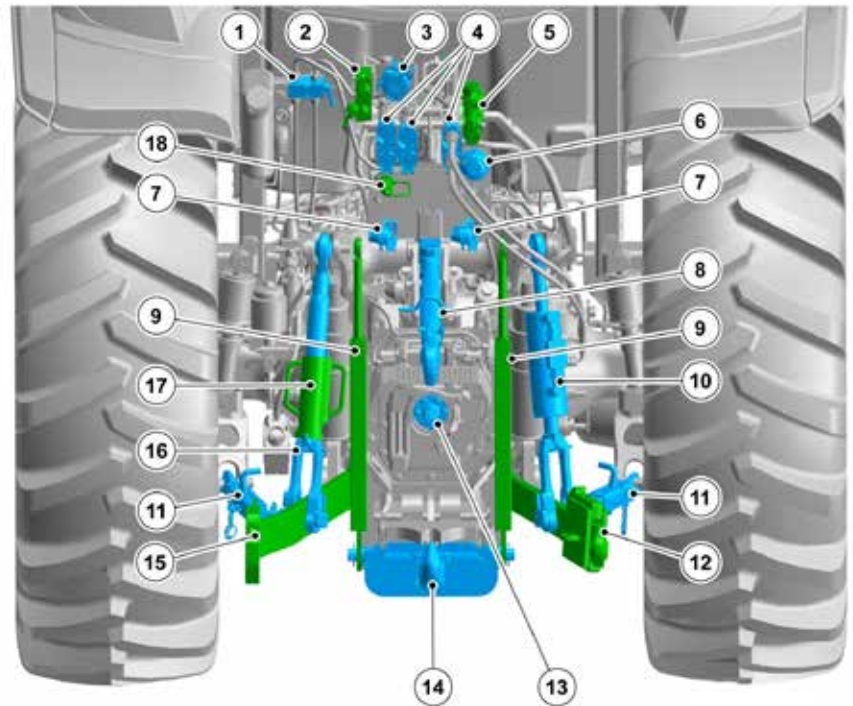
6. To lift the linkage, push the lifting push button.
7. To lower the linkage, push the lowering push button. The longer you push the lowering button, the faster the linkage lowers.

NOTE The external lifting/lowering push buttons do not work when the lift/stop/lower switch is in the transport position.



REAR CONTROLS AND CONNECTIONS

- | | |
|-----|--|
| 1. | Shut-off valve for the pick-up hitch (optional equipment) |
| 2. | Dual line system for hydraulic trailer brakes (optional equipment) |
| 3. | Socket for trailer Anti-lock Braking System (ABS) |
| 4. | Quick couplings for the auxiliary hydraulic system |
| 5. | Flow control valve (optional equipment) |
| 6. | Socket for the trailer lamps |
| 7. | Dual line system for the pneumatic trailer brakes (optional equipment) |
| 8. | Top link |
| 9. | Lift links for the pickup hitch |
| 10. | Hydraulically adjustable lift link (optional equipment) |
| 11. | Stabilizer |
| 12. | Telescopic ball end (optional equipment) |
| 13. | Rear PTO shaft |
| 14. | Pick-up hitch |
| 15. | Hook end (optional equipment) |
| 16. | Lift link for the lower link |
| 17. | Adjustment handle for the lift link |
| 18. | Free return coupling for the auxiliary hydraulic system |



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The pick-up hitch is optional with many alternatives.

REAR PTO

A series tractors can be equipped with 2-speed PTO or with 3-speed PTO according what is specified. The PTO speed can always be read on the performance monitor.

1. Rear PTO is turned on and off via rocker switch in right console.
2. The speed selection is done electrically from the right side panel.



PTO SWITCH USE IN VALTRA A SERIES MODELS

1. Start the rear PTO

You must be in the operator's seat to start the PTO operation with the internal PTO switch.

Select an applicable gear with the knob for speed control of the rear PTO.

Press and hold the rear PTO switch, and move it rearward to start the PTO operation.

To start the rear PTO with the external controls, push and hold the PTO ON/OFF button for 3 seconds.

2. Stop the rear PTO

Press and hold the rear PTO switch and move it forward to stop the PTO operation. Then release the switch.

3. Use the PTO brake

Press the rear PTO switch, and move it forward to set the PTO operation to OFF. Continue to hold the switch in the forward position for more than 2 seconds. After a time period of 2 seconds, the PTO brake engages to stop the movement of the rear PTO shaft. When you release the rear PTO switch, the PTO brake disengages.

IMPORTANT: Use the PTO brake only in an emergency when it is necessary to stop the PTO as quickly as possible. You can apply the PTO brake to quickly stop the PTO shaft when you set the PTO operation to OFF.

Note Stationary use of the PTO: If the PTO is in operation and you get up from the driver's seat, the operator presence sensor normally stops the PTO. To avoid this, push the PTO switch and hold it in the ON position for three seconds before leaving the seat (PTO must be in operation when doing this).



TIPS

TIPS FOR DRIVING VALTRA A5

HiShift – Changing gears without a clutch pedal. Each speed range has four Powershift gears. You can change between the gears with the Powershift push button. It is not necessary to use the clutch pedal when you change the Powershift gear or speed range. There's no need to move your leg!

Standard Auto-Traction - This feature has revolutionised tractor driving. With A5 tractors you only need to use the clutch pedal when starting the engine. Otherwise you only need brakes and drive pedal for controlling the tractor. The drive is declutched simply by pressing the brakes and clutched again by releasing them. The most intuitive and easy way to drive a tractor in the market!

Auto-shift - This feature lets the tractor manage the gear changes within a range.

Hydraulic flow as needed – A105 and A115 are fitted with double hydraulic pump. Whenever you need more hydraulic flow for implement operation or for a front loader, just combine the hydraulic flows from both pumps simply with a click of a switch.



PTO WORK

1. Push down the clutch pedal and start the engine.
2. Select the right PTO speed from right hand console.
3. Turn on PTO with a switch on right console
4. Set the speed you need with hand throttle or accelerator pedal. PTO speed can be read on the instrument panel.
5. Save engine revs into engine RPM memory
6. Set hand throttle to minimum (see Tip below).
7. Select the correct gear and start working.



Tip You can control your engine revs between idle and working using only the RPM memory button after it has been set.

Tip Remember that you can use AutoTraction for stop and go. It minimises the use of the clutch pedal as you can stop the tractor by using the brakes only.



FRONT LOADER WORK WITH ELECTRONIC CONTROLS

1. Push down the clutch pedal and start the engine.
2. Switch on the front loader.
3. Switch on SoftDrive if needed.
4. Combine the hydraulic flow from two pumps to increase the hydraulic flow.
5. To attach and release implements, use hydraulic implement lock. Push down the button for hydraulic implement locking and the joystick upper button (selecto 3) and at the same time move the joystick to the left.

Tip Remember the AutoTraction and power shuttle start features and minimise your clutch pedal use.



FIELD WORK

1. Push down the clutch pedal and start the engine.
2. Select range A, B, or C.
3. Switch 4WD and Differential Lock to ON position.
4. Activate Auto1 or Auto2 shifting automatics depending your task.
5. Select driving direction using the shuttle lever.
6. Press the accelerator pedal or the hand throttle.





TRANSPORT WORK



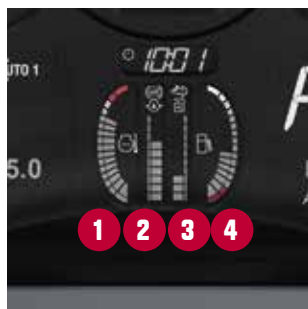
1. Push down the clutch pedal and start the engine.
2. Select range C or D.
3. Switch 4WD to OFF when driving on the road.
4. Activate Auto1 or Auto2 shifting automatics depending your task.
5. Select driving direction using the shuttle lever and press accelerator pedal.

DASHBOARD



- | | |
|----------------------------|----------------------------|
| 1. Turn signal for trailer | 6. Turn signal for trailer |
| 2. Left turn signal | 7. Left display |
| 3. Tachometer | 8. Clock |
| 4. High beam | 9. Monitoring gauges |
| 5. Right turn signal | 10. Right display |

MONITORING GAUGES



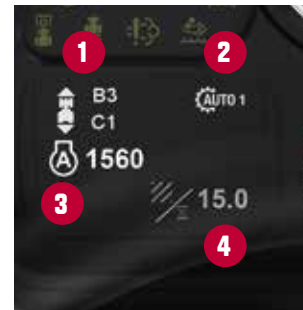
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|-------------------------------|
| 1. Engine coolant temperature |
| 2. Engine oil pressure |
| 3. AdBlue/DEF level |
| 4. Fuel level |

RIGHT DISPLAY



- | |
|--|
| 1. The neutral or the parking brake symbol or the selected range and Powershift gear |
| 2. Creeper gear |
| 3. Driving speed |
| 4. Selected rear PTO speed |
| 5. Value of the engine speed or rear PTO speed |
| 6. Selected rear PTO mode |

LEFT DISPLAY



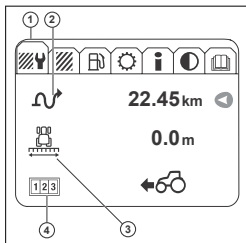
- | |
|--|
| 1. Preprogrammed speed range and Powershift gear for forward and reverse driving direction |
| 2. Shifting automatics setting |
| 3. RPM cruise setting |
| 4. Measured trigger values |



During normal operation of the tractor, the setup and information screen shows information about engine speed, transmission mode and work time. Through this display, you can also change different setting values and see more information about the tractor and its operation.

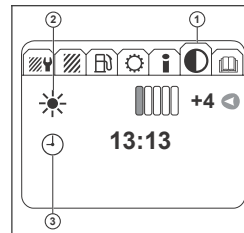
You can see the measured trigger values with up and down arrow buttons.

LEFT DISPLAY



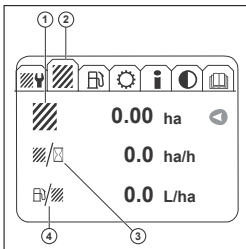
Work area settings view

1. Work area settings tab
2. Driving distance with a trigger engaged
3. Implement width
4. Trigger selection



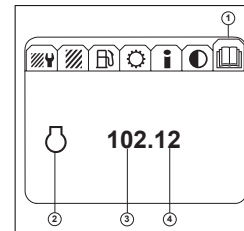
Brightness and time view

1. Brightness and time tab
2. Brightness of the instrument panel
3. Time



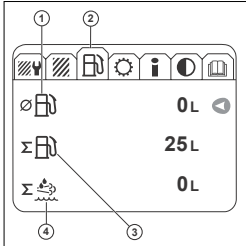
Work area view

1. Total work area in hectare since start of work
2. Work area tab
3. Average area in hectare for an hour of work
4. Average fuel used in one hectare



Error codes view

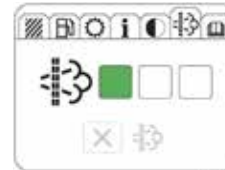
1. Error code tab
2. Icon of the error code source
3. Severity
4. Error code



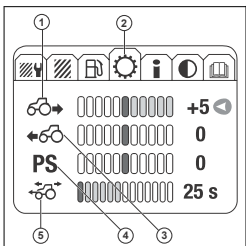
Fuel consumption view

1. Immediate fuel consumption
2. Fuel consumption tab
3. Total fuel consumption since engine start
4. Total AdBlue/DEF consumption

Stage V has a new window for regeneration control

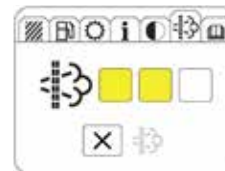


Green lights =OK, It is not necessary to manually regenerate the DPF.

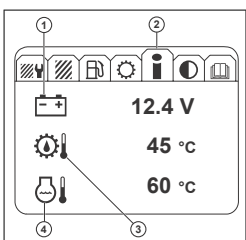


Transmission view

1. Engagement speed of the power shuttle for forward and reverse driving direction
2. Transmission tab
3. Engagement speed of the power shuttle for reverse driving direction
4. Engagement speed of the Powershift gear
5. Engagement time of the four-wheel drive

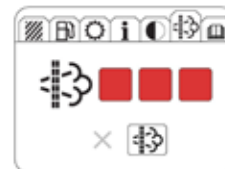


Yellow lights = The DPF is blocked with soot. Because of the low engine load, the exhaust gas does not increase to the correct temperature to burn the soot. increase the load of the engine. The DPF symbol on the instrument panel comes on. An audible alarm operates at intervals of 30 minutes.



Information view

1. Battery voltage
2. Information tab
3. Transmission oil temperature
4. Engine coolant temperature



Red lights = The DPF is blocked with soot. The engine operates with decreased power. An audible alarm operates at intervals of 5 minutes. it is mandatory to manually enable a regeneration.



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YOUR WORKING MACHINE