NEW HOLLAND
AGRICULTURE

T6 DCT
Operator Guide

Specification Summary

T6 Dynamic Command

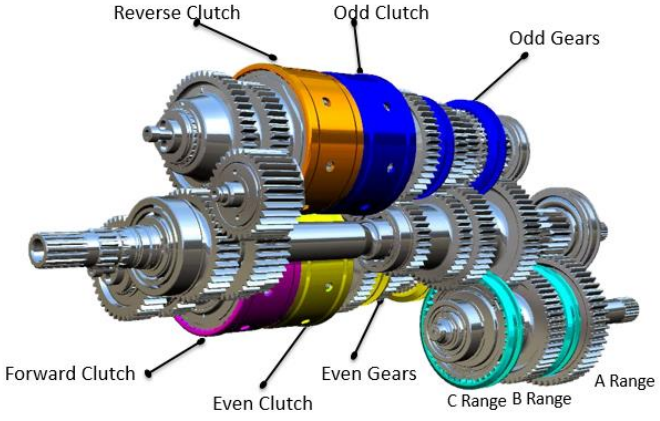
Engine
- Light weight 4 Cylinder NEF Engine
- Single turbo for fast response
- 600h service interval
- Large 230 litre Fuel tank
- HI-e SCR

Transmission
- Dynamic Command
- 8 Step Semi Powershift
- 40/40 ECO/50 KPH
- Jump on and Drive logic
- New Auto Features

Gearing options:
- 23 x 23 – 40Kph
- 24 x 24 – 50Kph/40Kph Eco
- Creeper available on both options

Hydraulics
- 80 lpm or 125 lpm
- Up to 7 remote valves

Three Point Linkage
- 7864kg capacity (rear)
- 3000 kg (front)
- Hydraulic top link option



Axles
- Rear capacity 7300 kg
- Front capacity 6000 kg
- Front suspension optional
- Force lubricated rear brakes

Cab
- 69 dB(A) To be Confirmed
- New generation of seats with automotive trim detail
- Up to 20 LED work lights
- SideWinder
- IntelliView IV display

Convenience
- HTS 1 and HTS 2
- Configurable remote valves
- ISOBUS Class 2 or 3
- Telematics

Tyres
- 650/65/38/20.8 R38

Dimensions
- 2642 mm wheelbase
- Typical weight 5500kg
- GVW 9500kg 10,500kg

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Getting Started

- **Step 1**: Ensure the shuttle lever is in the park position or neutral if shuttle has no park.

- **Step 2**: Depress clutch pedal. In order to start the engine the clutch pedal must be depressed.

- **Step 3**: Choose the required start gear by scrolling through the gears on the display.

- **Step 4**: Start driving- Select driving direction, using shuttle lever.

- **Step 5**: Changing gear. When using an advanced CommandGrip, by pushing the CommandGrip forward the gear will increase, by pulling back it will decrease a gear. When using a fixed CommandGrip, gear changing is selected by pressing either the hare or tortoise.

- **Step 6-** Enjoy the drive!

Intuitive Control Panel Layout

If the tractor has mechanical hydraulic remotes, the ICP will be built within the centre sidewinder armrest. If the tractor has electronic hydraulic remotes, the ICP will be on the side of the sidewinder armrest.

New Advanced Electro Hydraulic Joystick

The joystick now gives the operator the ability to increase or decrease the gears by pressing the orange (plus or minus) button. By pressing and holding the black centre button and pressing either the plus or minus button at the same time, the gear range will increase or decrease. This feature would significantly benefit a tractor with a front loader as they can operate the loader and desired gear/range at the same time.

The side of the joystick has four operation buttons. The black is a diverter which operates valves 3 and 4 while holding and moving the joystick. The grey operates an additional remote hydraulic service, the green a second additional valve and the pink is third additional valve (if fitted). These buttons can also be reconfigured for ISOBus use.

Advanced Armrest CommandGrip™

1. Electro-hydraulic remote (EHR) control
2. Rear lift arms
3. IntelliSteer™ activation/cancel
4. Headland Turn Sequence (HTS)
5. Power shuttle (forward and reverse)
6. Ground speed management adjustment
7. Gear selection
8. Auto function (field/road)

All black buttons can be reconfigured while using ISO Bus to activate a different function.

Auto Functions.

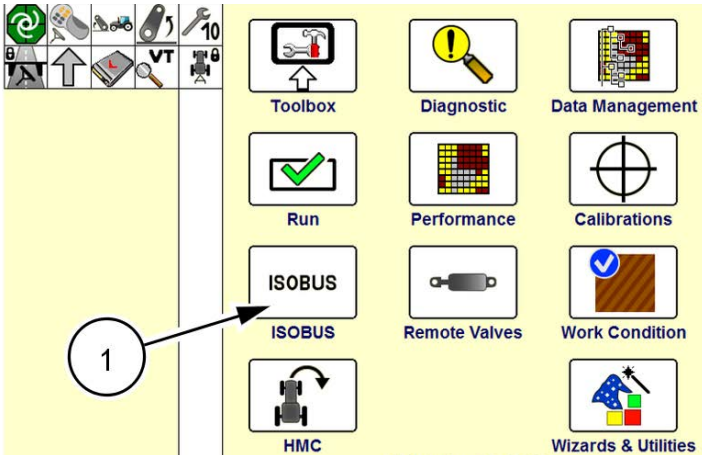
Engaging auto function permits automatic gear changing in forward direction. Two auto modes are available which are shown below:

Auto Field Mode – If the auto function button is pressed once the transmission will select Auto Field. The gear ratio currently selected will already be shown on the IntelliView™ IV screen or basic screen.. A range of +/- 2 gears from the current one or 5 gears in total will be shown .The range of gears can be adjusted by the up/down shift buttons.

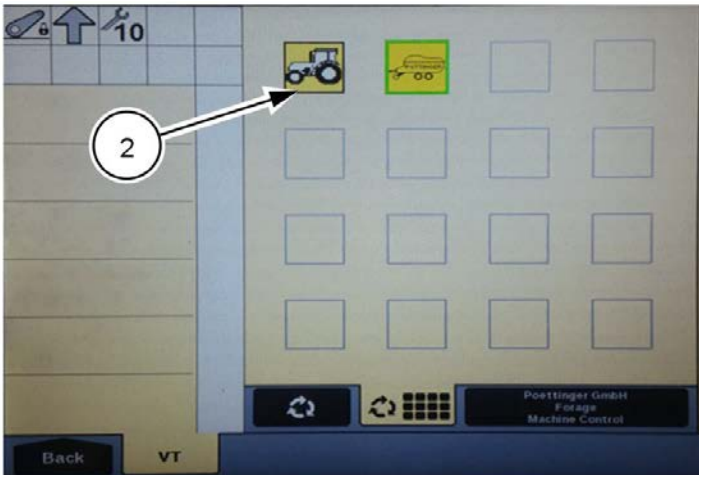
Auto Road Mode – If the auto function button is pressed once in range C, Auto Road mode will engage. The button must be pressed twice in range B to differentiate from field mode. The tractor will now increase or decrease gears itself depending on the forward speed and engine revs.

Reconfigurable CommandGrip™ Buttons for ISOBUS (Advanced armrest and inteliview 4 required)

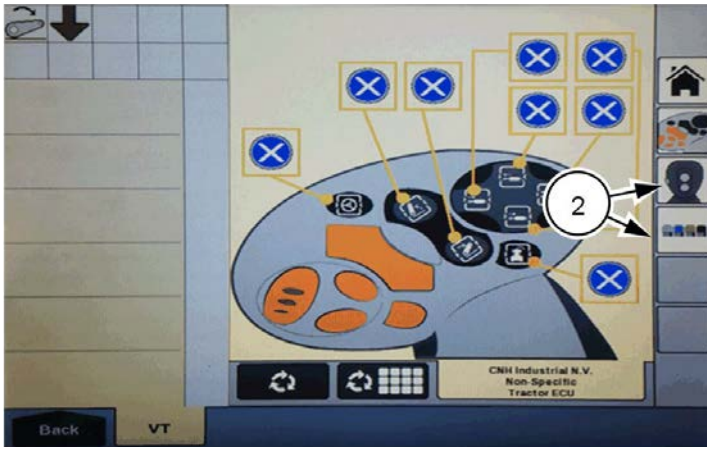
With the optional ISO Bus Class 2 or 3 function fitted on the tractor and a ISO Bus Class 2 or 3 compatible implement connected to the tractor, it is possible to assign tractor controls on the armrest to specific implement functions. Press the ISO Bus icon **(1)** on the entry screen.



Press the tractor icon **(2)** to enter the auxiliary inputs control assignment screen.

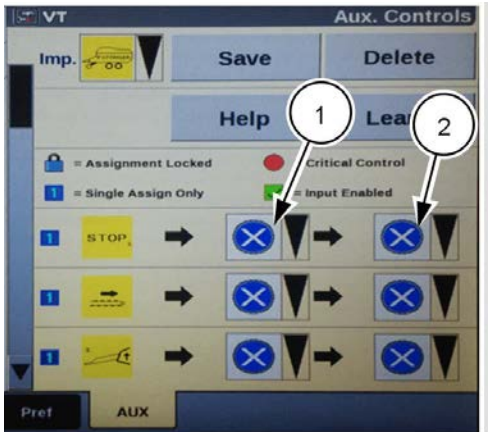


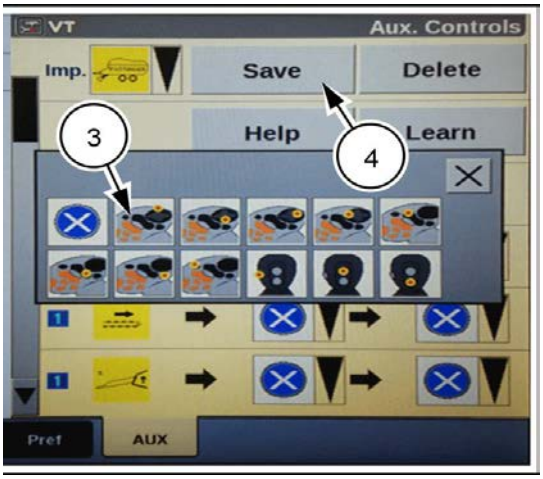
The screen shows the Multifunction handle (MFH) with all switches, which can be assigned to control a specific ISO Bus function. To see the switches located on the joystick or the EHR levers, press the appropriate icon **(2)** .



Reconfigurable CommandGrip™ Buttons for ISO Bus

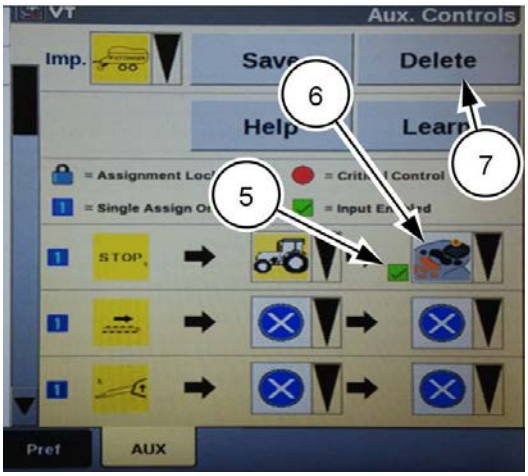
To assign implement functions to the ISO Bus compliant auxiliary inputs, proceed as follows starting from the entry screen: '**Toolbox**'- '**VT**'- '**AUX**'
The screen shows all functions of the implement which can be assigned to a tractor control. For the adjustment **(1)** always select the tractor symbol. Click on **(2)** to open the menu screen for MFH and joystick switches.

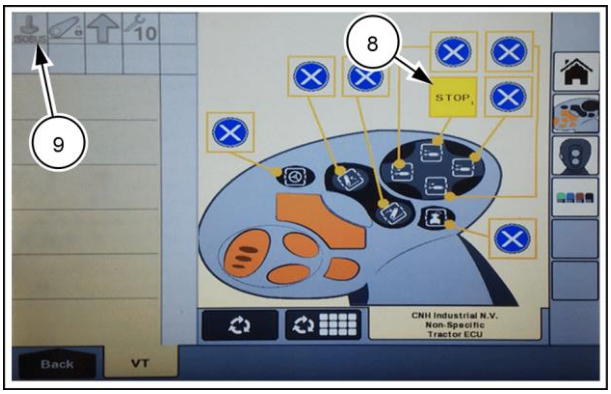




Select the desired icon **(3)** from the menu and save the assignment using button **(4)** .

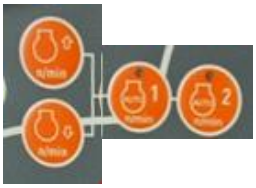
With the green icon **(5)** the assignment of the ISO BUS function to the MFH switch **(6)** is confirmed. To delete an assignment use the 'Delete' button **(7).**





The MFH screen shows the assigned switch **(8)**. Proceed with further switches in the same way. If at least one tractor control is assigned to the ISO Bus function, it is possible to use the 'ISOBUS' icon **(9)** on top left of the screen to assign further tractor controls.

Intuitive Control Panel Controls

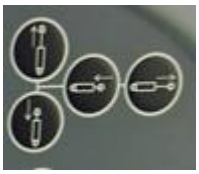


Constant engine speed: press button 1 or 2 and the current engine speed is saved and the constant speed function is activated. Fine adjustment with arrow keys

Headland Turning Sequence:

- Recording
- Automatic or sequential control

Shuttle aggressiveness- Changes shuttle sensitivity for forward to reverse.



Hydraulic top link/Rear remote with diverter controls (if fitted)

Joystick control selects which remotes are operated by the joystick

Front and rear arms raise/lower fine adjust

Front axle suspension. Locks suspension below 12km/h, above this speed it automatically reengages.

Auto PTO

Reversible engine fan- Blows fan in opposite direction to remove chaff/dust, were fitted.

Slip control activation

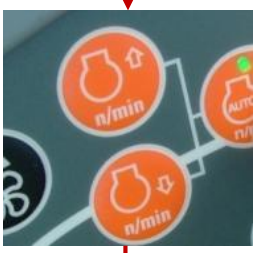
Traction management: automatic or permanent engagement of 4wd and diff-lock

Engine Speed Management

Using Intuitive Control Panel

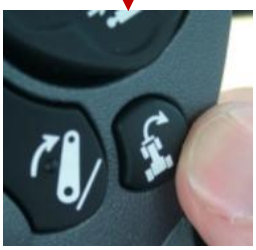
Press memory 1 ESM key pad

On light appears on the instrument cluster



Adjust engine speed using the arrowed key pads to set memory 1. (1 press =10rpm, press and hold=100rpm)

Press memory 2 ESM key pad and repeat the previous step to set the second speed



Pressing the HTS button on the controller will toggle between the set speeds

NOTE:
Adjusting the hand throttle will turn off ESM, or press either memory 1 or 2 key pad. On DCT tractors ESM would only be used for PTO or constant hydraulic output tasks.

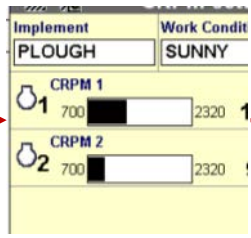
Engine Speed Management

Using IntelliView™ IV

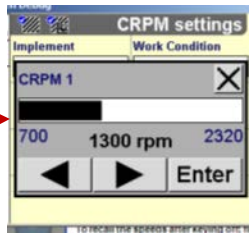
Press memory 1 ESM key pad

On light appears on the instrument cluster

From the home screen, use the tabs to select: Work Condition / Settings / CRPM

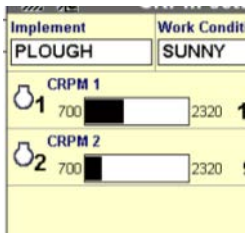


Create or select an existing implement



Select CRPM 1 and adjust desired speed. Repeat for CRPM 2

Pressing the HTS button on the controller will toggle between the set speeds



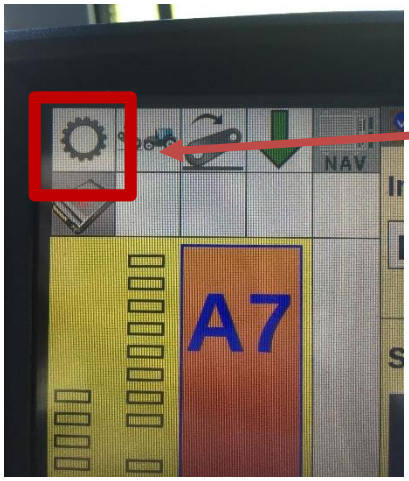
NOTE:

Speeds are stored against the implement name, recalling an implement will recall the required engine speeds. Speeds can still be adjusted using the key pads if required. Adjusting the hand throttle will turn off ESM or press either memory 1 or 2 key pad.

On DCT tractors ESM would only be used for PTO or constant hydraulic output tasks.

Memory Shuttle

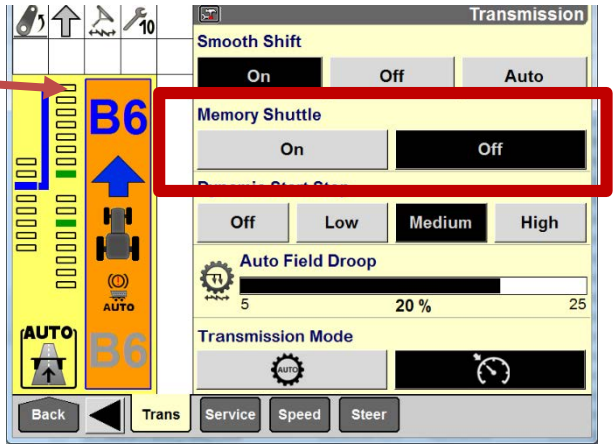
The new ‘memory shuttle’ feature allows the operator to have a desired gear selected and saved for forward or reverse which is not influenced by the gear for the opposite direction of travel. By turning ‘memory shuttle’ off, the reverse or forward gear will match the last gear used in forward or reverse.



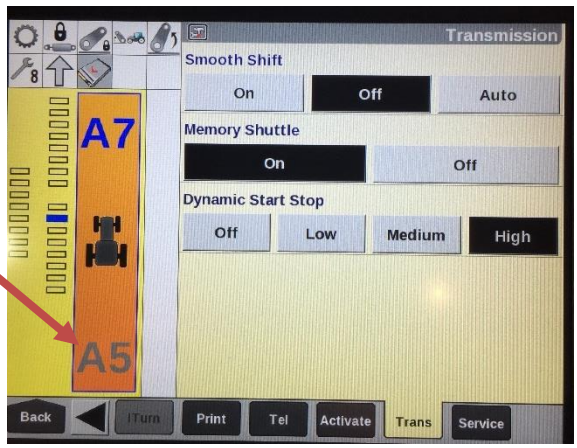
To access the ‘memory shuttle’ feature, simply press the transmission icon in the top left corner of the Intelliview screen. Alternatively if tractor has no Intelliview screen, the feature can be adjusted on the dash keypad by pressing and holding the home and menu/enter buttons.

In order to engage or disengage ‘memory shuttle’, select on or off from the transmission run screen.

The operator will clearly be able to see which gear is selected for forward or reverse by looking at the gear bar. If the ‘memory shuttle’ feature is off, the forward and reverse gear will match, in this case B6.

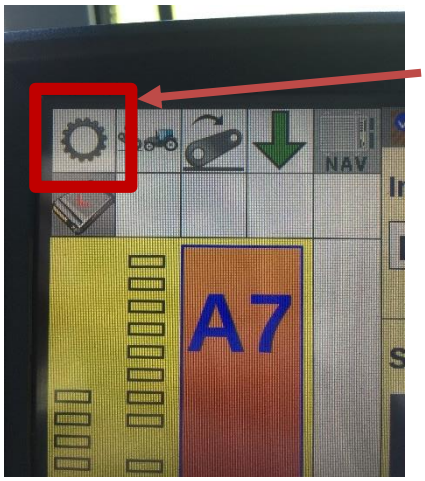


If the ‘memory shuttle’ feature is on, the forward and reverse gear will be independent from each other. In this case the tractor will be in A7 for forward and A5 for reverse. This feature saves this last gear used in forward or reverse. It will not change to match the forward or reverse gear, provided ‘memory shuttle’ is on. To select start off gear simply, select forward and upshift/downshift to the desired gear.

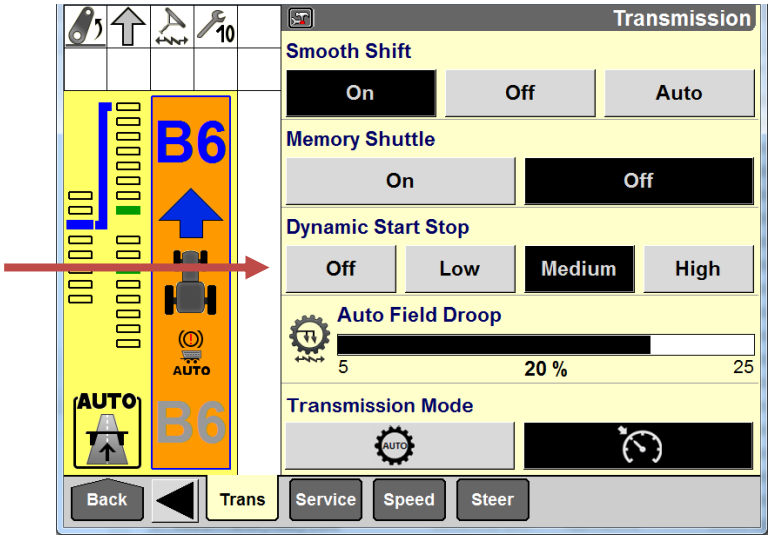


Brake to Clutch
(Dynamic Start Stop)

Dynamic start stop allows the operator to slow down or come to a complete stop while in gear without the need for pressing the clutch. This is particularly beneficial for loader, field and haulage applications. Its ease of use makes it simple for an operator to use.



To access the 'Dynamic Start Stop' feature, simply press the transmission icon in the top left corner of the Intelliview screen. Alternatively it can be accessed by selecting 'Toolbox' and then the 'Transmission' tab. If tractor has no Intelliview screen, the feature can be adjusted on the dash keypad by pressing and holding the home and menu/enter buttons and scrolling to Dynamic Start/Stop.

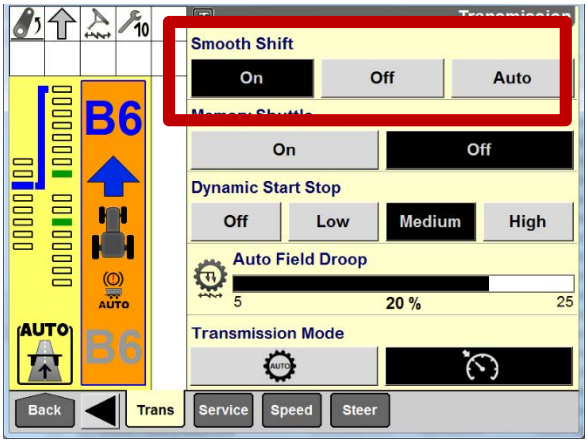


The 'Dynamic Start Stop' gives the operator four options;

- Off
- Low
- Medium
- High

The difference between low, medium and high is simply the force required on the brake pedal by the operator. For example selecting 'high' requires the operator to exert high force on the brake pedal to slow or stop the tractor. By selecting 'Off' the operator has to press the clutch pedal before the brake pedal when stopping in gear to prevent the tractor from stalling.

Smooth Shift



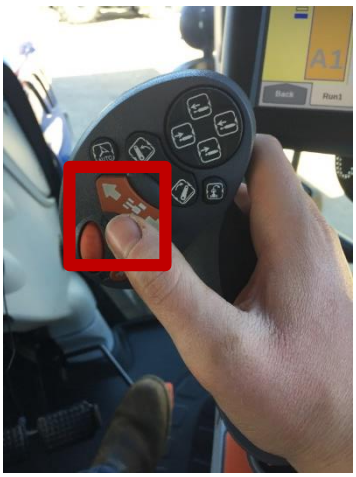
The ‘Smooth Shift’ feature allows the engine speed to adjust to the gear speed for smooth gear changing. To access the ‘Smooth Shift’ feature, simply press the transmission icon in the top left corner of the Intelliview screen. It can also be accessed by selecting ‘Work Condition’ and then the ‘Transmission’ tab. If tractor has no Intelliview screen, it can be adjusted on the dash keypad by pressing and holding the home and menu/enter buttons.

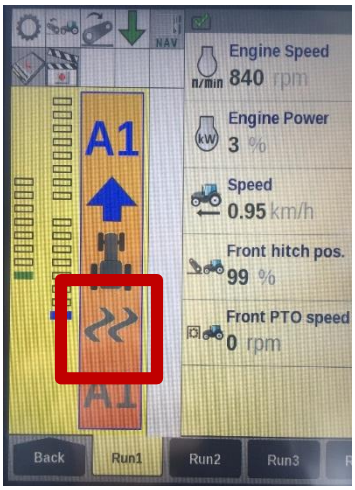
‘Smooth Shift’ gives the operator three options to choose from; ‘On’ , ‘Off’ and Auto. ‘Off’ disables the feature and engine rpm stays the same when shifting gears. When ‘On’ is selected, the system alters the engine r.p.m to match the gear speed offering increased smoothness when shifting gears. When ‘Auto’ is selected, the system controls the engine rpm the same as ‘On’ however, when the PTO is engaged, it will go to ‘Off’ automatically, therefore the engine rpm will not change allowing a seemly pto operation.

Anti-Jack Knife

The anti-jack knife is a safety feature used mainly for haulage work. It allows the trailer brakes to engage without having the tractor brakes engaged therefore preventing jack knifing. By pressing and holding the forward direction button when the tractor is moving , the anti-jack will be on standby. By pressing the brake at the same time, the anti jack knife will engage and the symbol will go from grey to green.

An example of when this feature would be used is travelling downhill with a loaded trailer connected and the trailers weight and momentum increase the tractors forward speed. By activating the anti-jack knife the trailers brakes will activate only therefore safely slowing down the tractor and trailer unit.





CustomSteer

The Custom Steer steering allows the operator to select a desired variable steering ratio based on the work application. The options include;

- 1:1 ratio for headlands or loader (1 steering wheel revolution turns from lock to lock).
- 3:1 ratio for wider implements (3 steering wheel revolutions turns from lock to lock.
- A custom user ratio from 1:1 to 4.5:1.

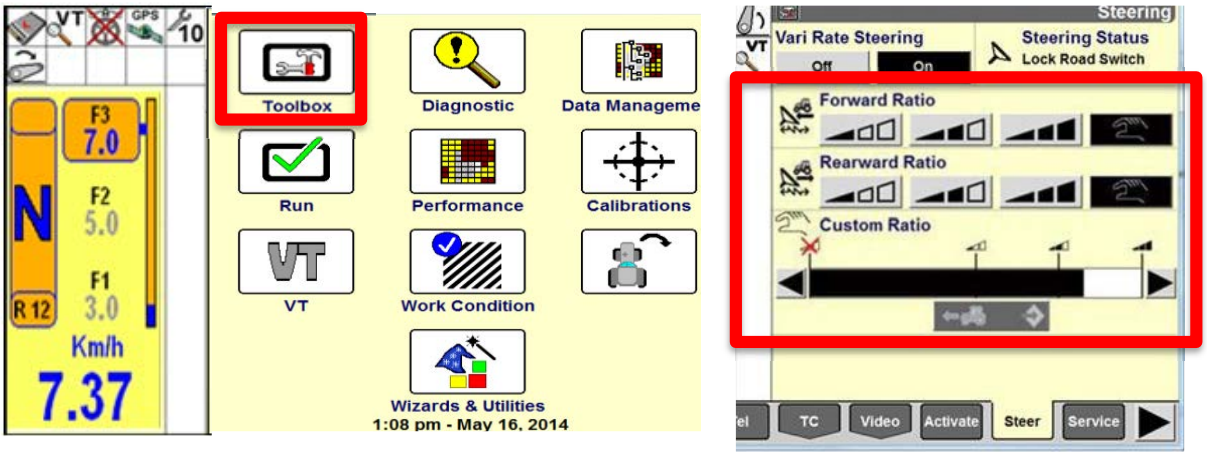
Full steering lock with one turn of steering wheel

Custom Steer is beneficial for the operator as it reduces costs, fatigue and increases comfort. It is particularly useful for loader work, field work (headland turns) and trailer manoeuvres.

B A

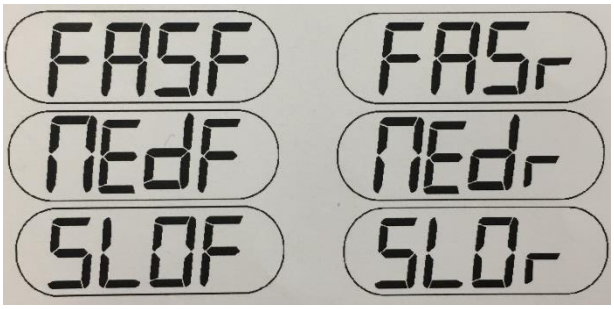
In order to engage the Custom Steer feature, firstly ensure the advanced steering control activation switch (A) is engaged. This will lock into 'Road Mode' every time the tractor is turned off. A green light displayed on the dash will indicate if it is activated. **This must be complete first for the Custom Steer to activate**. Then engage the Custom Steer switch (B) by pressing forward once, an orange light will then display on dash. CustomSteer is now engaged.

CustomSteer



To adjust the steering ratio, simply select “toolbox” from the option screen and then select the “steer” tab from the bottom of the screen. A ratio of 1:1, 2:1, 3:1 or a custom ratio can then be selected for forward and reverse.

If tractor has no Intelliview screen, the feature can be adjusted through the screen display on the dash. By pressing and holding the CustomSteer switch for more than 2 seconds they enter the options list. Here the operator can change the ratio from Fast (FASF), Medium (NEdF) and Slow (SLOr). By pressing and releasing the switch, the Customsteer option will change. By pressing and holding on the desired option for more than 2 seconds, that option becomes locked in.



Note; The steering ratio will progressively return to the standard ratio as forward speed increases to above 26 km/hr, i.e road transport.

- **Option of different steering ratios for forward and reverse.**

PTO Operation

PTO engage

PTO brake release front/rear

4 speed Rear PTO

Engine Speeds:

- 540 @ 1930 rpm
- 540E @ 1583 rpm
- 1000 @ 1886 rpm
- 1000E @ 1585 rpm

PTO Speed Selection

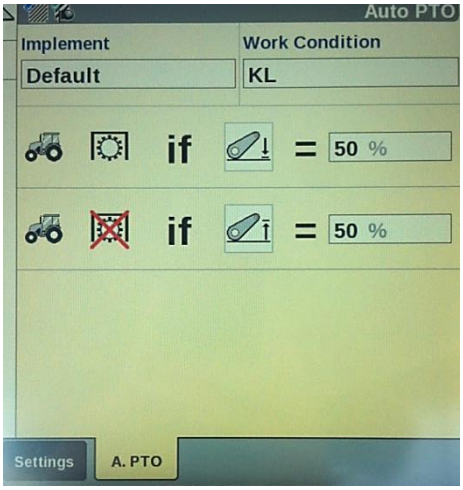
PTO Fender on/off

Auto PTO

For Front and Rear PTO

1. Set lifting height values for rear and front hitch, at which PTO shall switch off and on within the IntelliView™ IV monitor. (through work condition, settings)
2. Activate AUTO PTO switch on ICP while PTO is on

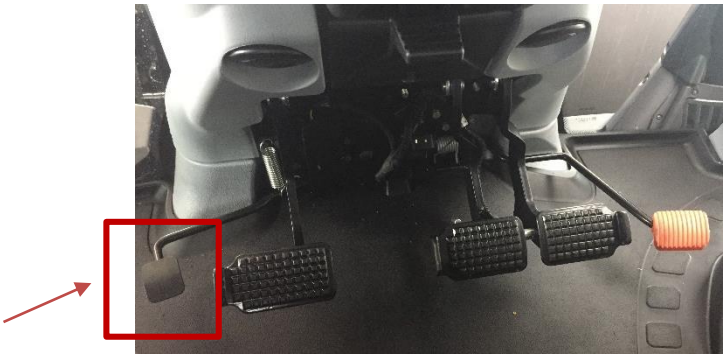
PTO Intension switch must be on (illuminated green) for PTO to remain running when operator leaves seat and for fender controls to function.



‘C’ Pillar Controls

1. Electronic battery isolator
2. Trailer brake test switch
3. ISO BUS class 3 activation / engagement
4. Hydraulic main switch
   Up: Remote valves active
   Centre: Remotes, rear hitch locked
   Down: Remotes + rear hitch active
5. Diagnostic plug
6. 9 pin ISO BUS connector
7. Heated wing mirror switch
8. Plough lights(up) and bonnet LED (down)
9. Left/Right outermost rear work light switch

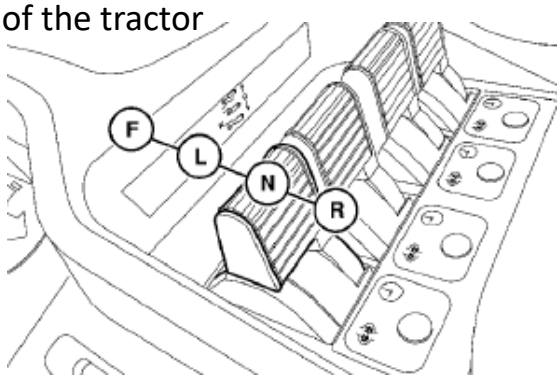
Exhaust Brake



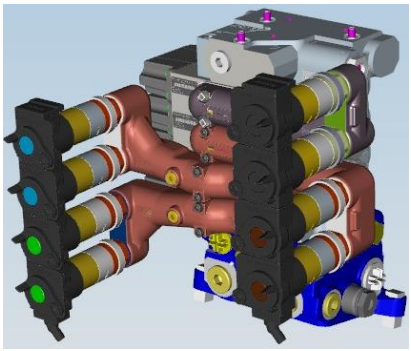
The exhaust brake is generally used in road transport to gradually slow the tractor without using the foot brakes. It is especially useful to reduce or maintain a controlled speed when descending a long hill with a heavy trailer or implement attached.
Note; When using the exhaust brake to control tractor speed do not allow the engine speed to exceed **2400 RPM**. Apply the foot brakes to slow the tractor. If the engine speed falls below **1200 RPM**, the exhaust brake is electronically released and normal engine performance is reinstated.

Hydraulic Remote Valves

View of the hydraulic remote slices from rear of the tractor



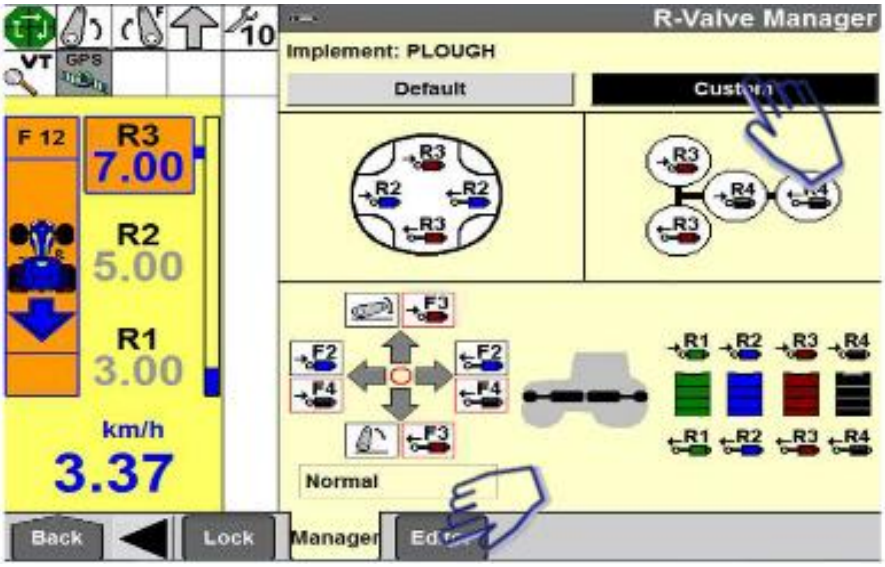
F – Float
L – Lower
N – Neutral
R – Raise



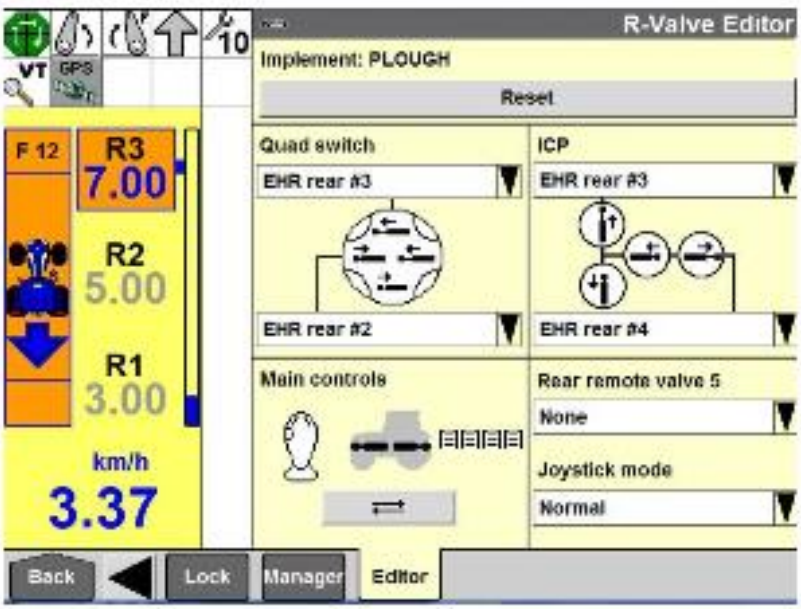
Control of rear and mid mounted remotes can be switched between joystick and paddle levers (using button shown on ICP)

4 Paddle levers to control up to 4 remote valves

Remote Valve Management



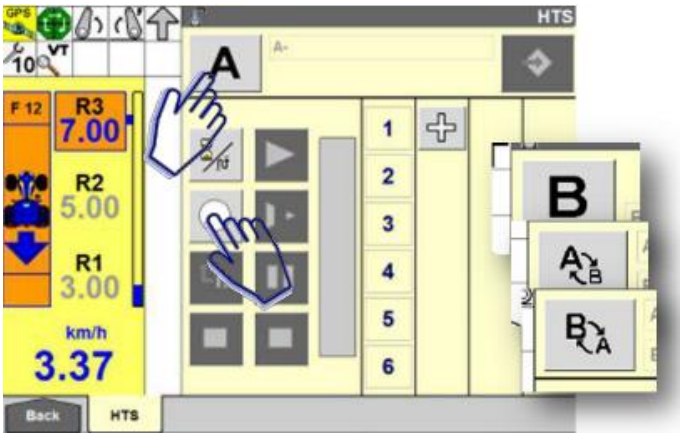
Personalise which remotes are operated from either the paddle levers on the armrest, the remote joystick or the remote buttons on the CommandGrip™ This can be done through the IntelliView™ IV screen as shown.



You can save custom settings against specific implement names depending on what implement is being used.

Headland Turn Sequence Management (HTS II)

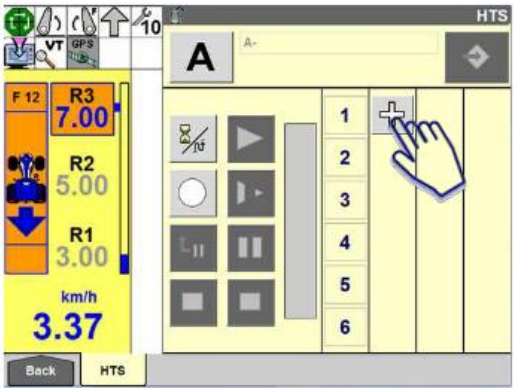
- Can store sequences against implement names (16 in total)
- Each implement can have two sequences (A and B)
- Trigger points can be selected for each action
- Sequences can be made in real time, stationary or created from a menu and edited any time



HTS can be recorded through the IntelliView™ IV screen by selecting sequence A or B then pressing the record button

HTS can also be recorded on the ICP. The HTS is then started and triggered via the HTS button on the CommandGrip™

HTS II Programming

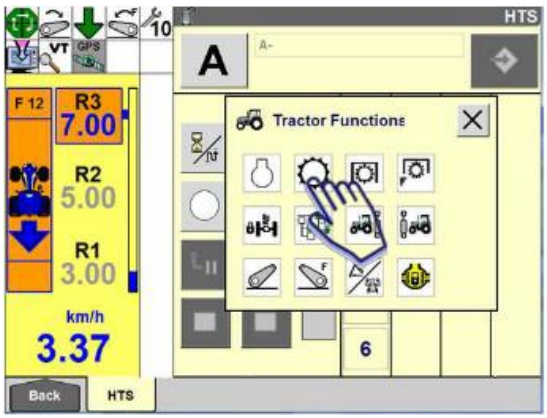


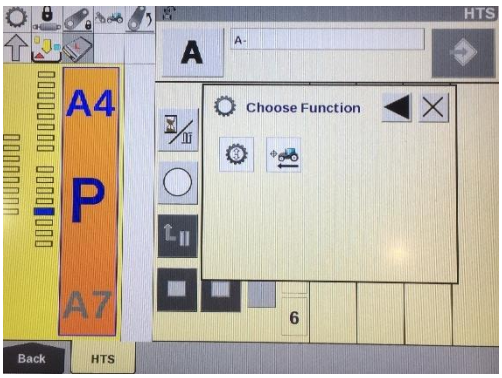
To create a sequence form the menu instead of recording:

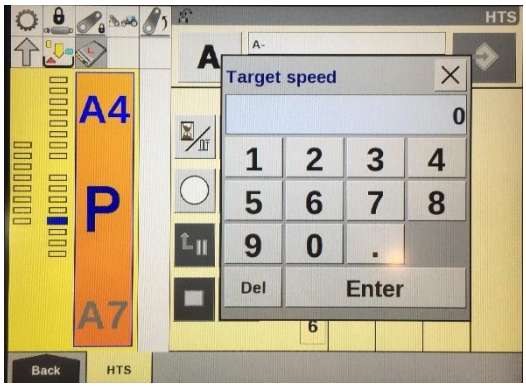
- Press + to open the selection window

Tractor functions are as shown:

- Engine
- Transmission
- PTO (F&R)
- Suspension
- Camera
- Remotes (Flow and Time)
- Linkage (F & R)
- Driveline (Diff & 4WD)
- Auto Guidance



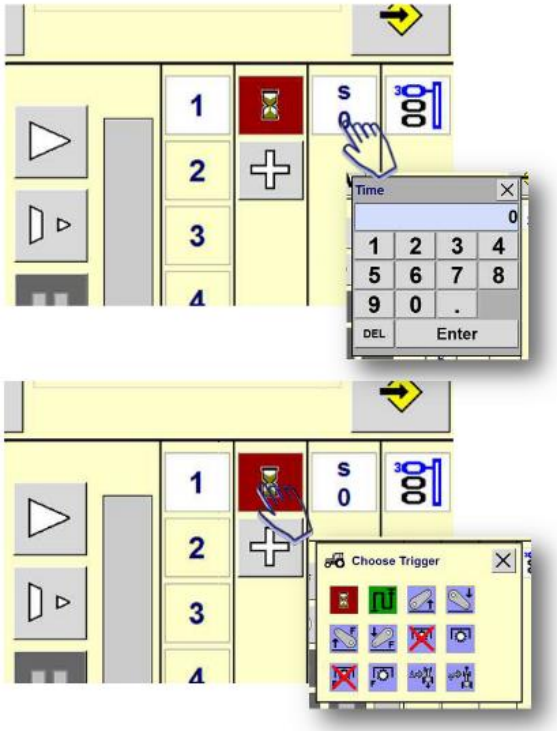




Example

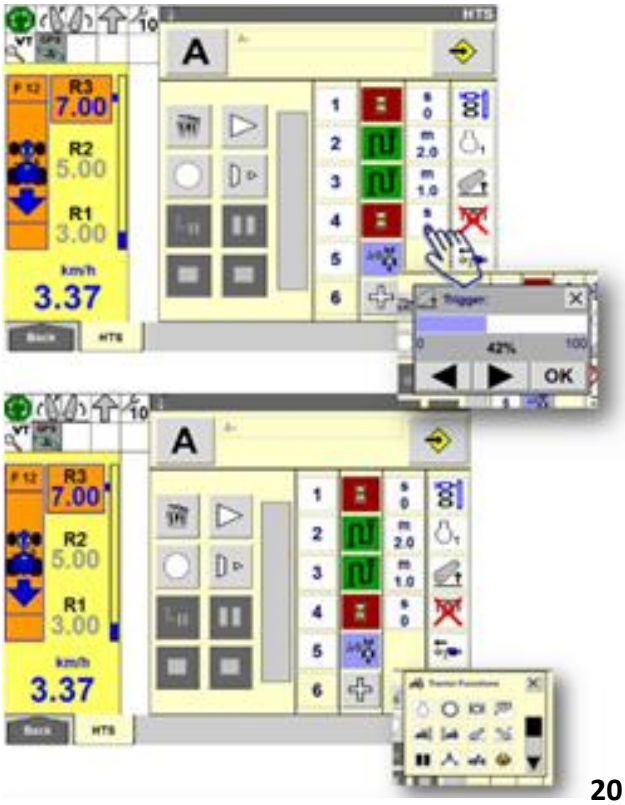
- Transmission is selected (window opens to select either a target speed or cruise
- Target speed is then entered for the sequence step.

HTS II Programming



- Press + to add the next action and to build up the sequence
- Default trigger point is time (indicated by hour glass and 0 seconds
- Pressing the seconds icon opens the window to edit the time
- Pressing the hour glass icon opens the window to change the trigger method Choose between:
  - Time
  - Distance
  - Hitch raise point (F & R)
  - PTO engage/disengage point (F & R)
  - Shuttle shift

To edit the value for a trigger point, example change linkage position for PTO disengage press on the current value to open the window.



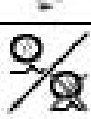
The action is changed by pressing on the actual symbol and choosing another icon from the list.

If the time for an action is set to 0 seconds after the previous action the two will be linked together and take place at the same time. When playback is active the trigger value for time or distance will count down until the action is triggered.

HTS II Symbols

Funotions

Symbol	Funotion	Symbol	Funotion
	Action Time		Reversible fan
	Pause		Flow rate
	Creeper target gear		Target gear
	Auto r.p.m. 1		Auto r.p.m. 2
	Constant r.p.m. 1 / 2 ON		Constant r.p.m. 1 / 2 OFF
	Minimum r.p.m.		CustomSteer auto mode ON
	CustomSteer auto mode OFF		CustomSteer manual mode Settings
	CustomSteer manual mode ON		CustomSteer manual mode OFF
	CustomSteer manual mode forward		CustomSteer manual mode reverse
	CustomSteer manual mode low setting		CustomSteer manual mode medium setting
	CustomSteer manual mode high setting		Steering rate adjustment
	Four Wheel Drive ON		Four Wheel Drive OFF
	Diff Lock ON		Diff Lock OFF
	Front axle suspension locked		Front axle suspension unlocked

Symbol	Function	Symbol	Function
	Rear PTO ON		Rear PTO OFF
	PTO break		Front PTO ON
	Front PTO OFF		Front hitch raise
	Front hitch lower		Front hitch float
	Rear hitch raise		Rear hitch lower
	Rear hitch fast drop		Electro–hydraulic remote control valve (EHR) extend
	EHR retract		EHR neutral
	EHR float		EHR motor mode float
	EHR motor mode retract		Front EHR extend
	Front EHR retract		Front EHR neutral
	Front EHR float		Front EHR motor mode float
	Front EHR motor mode retract		Retract top link
	Extend top link		Adjust tilt downleft (right-hand hydraulic lift rod)
	Adjust tilt downright (left-hand hydraulic lift rod)		Ride control

Triggers

Symbol	Description	Symbol	Description
	Time in seconds		Distance in meters
	Shuttling from reverse to forward		Shuttling from forward to reverse
	Rear PTO switched ON		Rear PTO switched OFF
	Front PTO switched ON		Front PTO switched OFF
	Rear hitch raise		Rear hitch lower
	Front hitch raise		Front hitch lower

Notes

NEW HOLLAND AGRICULTURE

April 2018